Quality in E-Learning

Moving from controll to culture

Winter School „E-Learning in the Environmental and Geoscience“
Berlin, 14 - Jan - 2008

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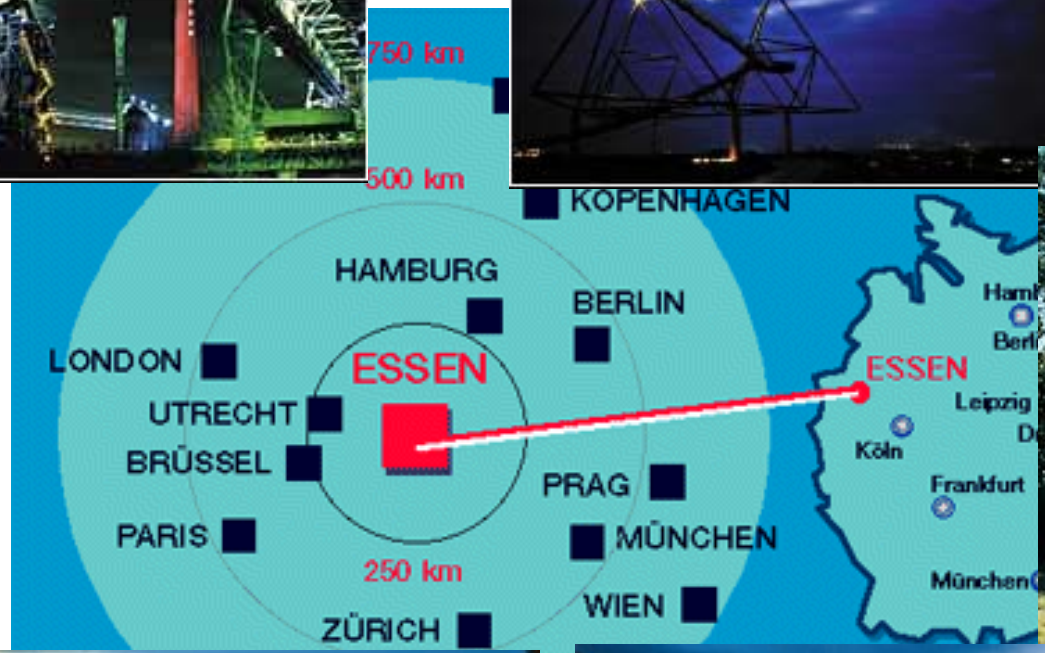
University of Duisburg-Essen…



E-Learning-Related Quality Research

Projects @ Business Information Systems

- E-Learning for Integrated Watershed Management (Tansania)
- Organic.Edunet
- The European Foundation for Quality in E-Learning (www.qualityfoundation.org)
- European Quality Observatory (www.eqo.info)
- TRIANGLE: The European Quality in E-Learning Project
- The National E-Learning Quality Initiative Germany (www.qed-info.de)
- Quality and Didactic Standards Development (German Standards Body, CEN/ISSS, ISO/IEC JTC1 SC36)
- Quality Mark for E-Learning in Germany

Quality on the line

Institutional Support Benchmarks

- A documented technology plan that includes electronic security measures (i.e., password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information.

Course Development Benchmarks

- Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes—not the availability of existing technology—determine the technology being used to deliver course content.

Teaching/Learning Benchmarks

- Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/or e-mail.

Course Structure Benchmarks

- Before starting an online program, students are advised about the program to determine (1) if they possess the self-motivation and commitment to learn at a distance and (2) if they have access to the minimal technology required by the course design.

Student Support Benchmarks

- Students receive information about programs, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support services.

Faculty Support Benchmarks

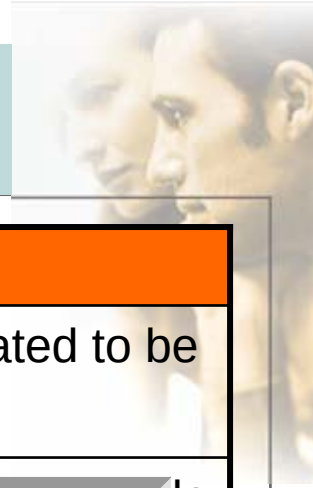
- Technical assistance in course development is available to faculty, who are encouraged to use it.

Evaluation and Assessment Benchmarks

- The program's educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards.

www.ihep.com

Sloan C: The Five Pillars

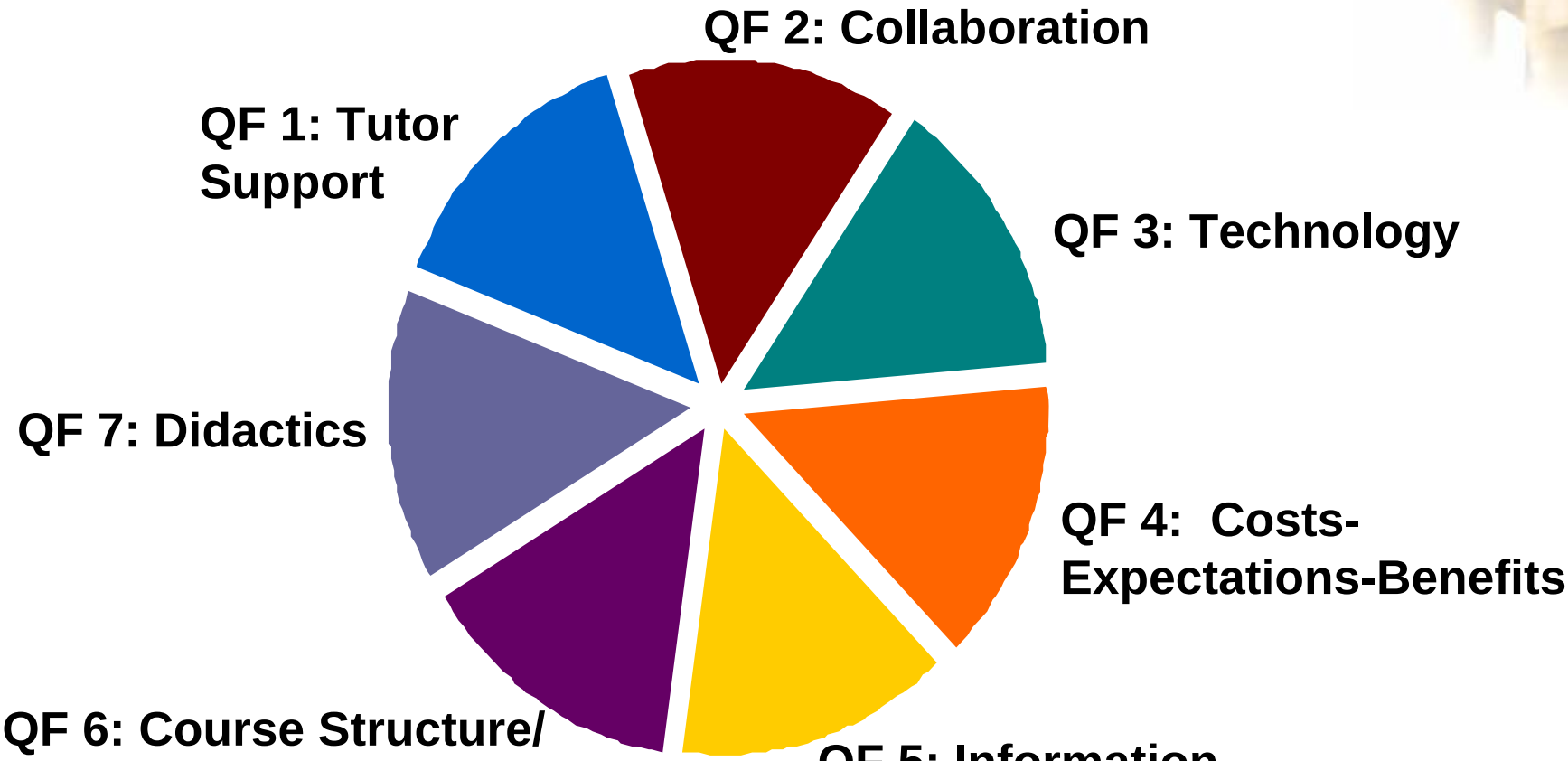


Pillar	Goal
LEARNING EFFECTIVENESS	The quality of learning online is demonstrated to be at least as good as the institutional norm
COST E… AND IN… COMMI…	…le
ACCES…	
FACUL… SATISF…	
STUDE… SATISFACTION	…learning online, including interaction with instructors and peers, learning outcomes that match expectations, services, and orientation

Student Satisfaction: Students are successful in learning online and are typically pleased with their experiences.

- o Discussion and interaction with instructors and peers is satisfactory
- o Actual learning experiences match expectations
- o Satisfaction with services (advising, registration, access to materials) is at least as good as on the traditional campus
- o Orientation for how to learn online is satisfactory
- o Outcomes are useful for career, professional and academic development

Model of Users Quality Preferences



Target Groups: Quality Preferences

The Individualist

(N=328)

Content-Oriented

- Content related QP
- Individualised Learning Scenarios
- Course Material: Didactics
- Self-directed Learning
- Presence Courses, Interaction- and Communication

The Result-Oriented

(N=235)

Independent & Goal-Oriented

- Individualization: Stand Offers
- Work Integrated Learning
- Instrumental Purpose orientation
- Learn- and Media Literacy
- Presence Courses, Interaction- and Communication

The Pragmatic

(N=293)

Need Oriented

- Individualized offers
- Tutor Support **factual**
- Non-Financial Costs
- Information & Advise
- Personalisation of LE
- Didactic Requirements

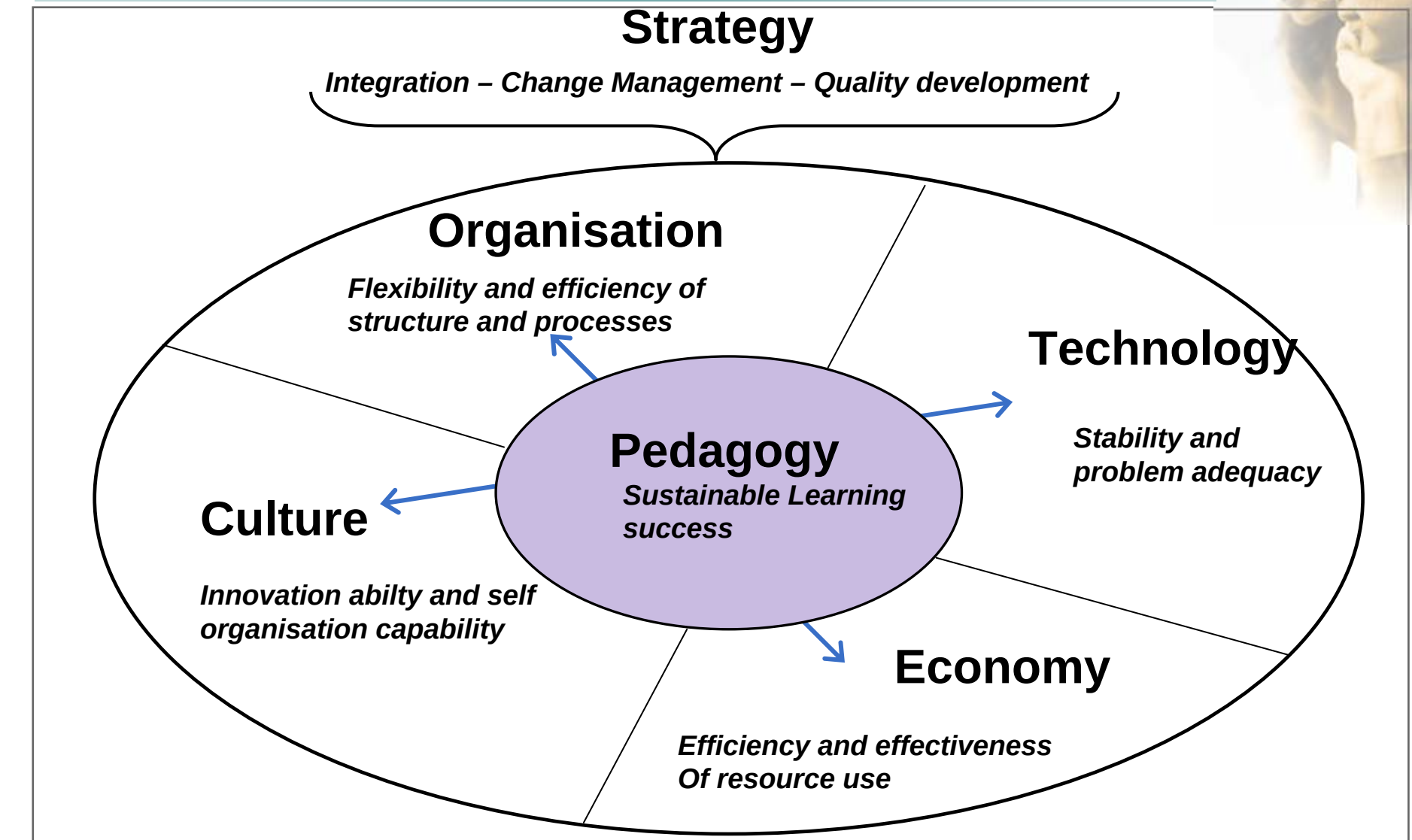
The Avant-Gardist

(N=392)

Interaction-Oriented

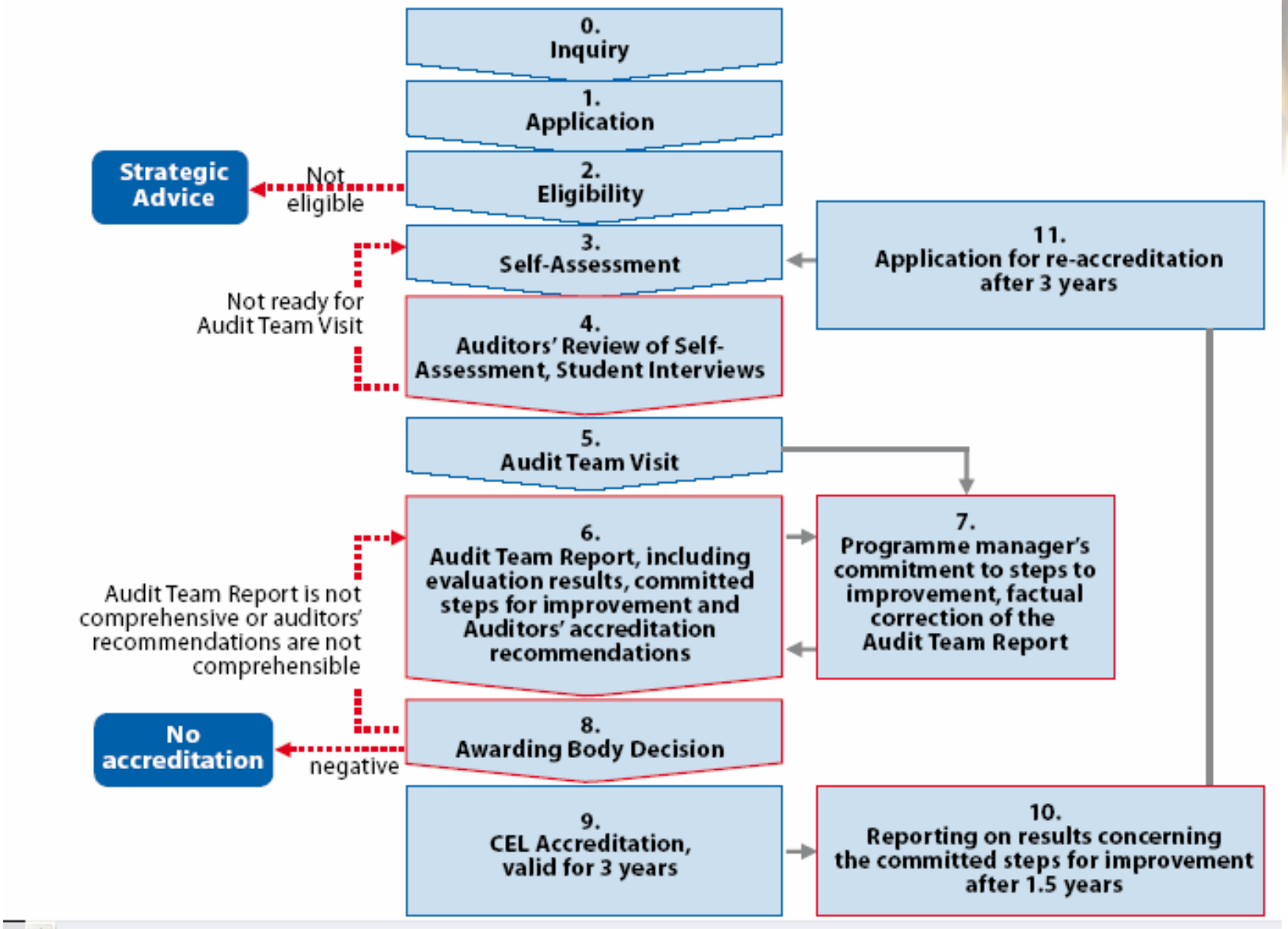
- Discussion/ Communication
- Tutor Support **learner oriented**
- (↑) Media/ Technology vanguard
- Virtual Learning Groups
- Information & Advise
- Rich Didactic Concept

E-Learning as Sustainable Innovation

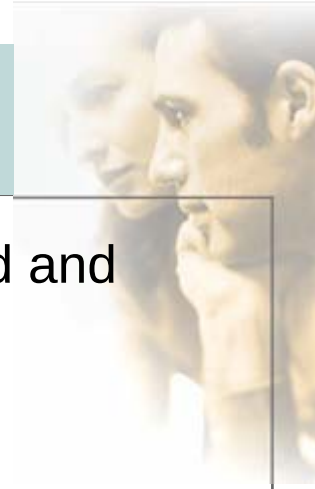


Swiss Center for Innovations in Learning, 2003

CEL (EFMD & SCIL) Accreditation Scheme

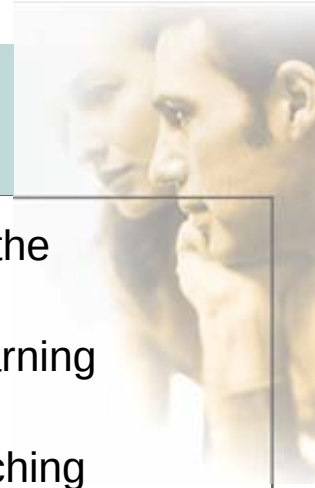


Programme Profile



- Pr1 The objectives of the programme are explicitly enumerated and consistent with and integrated
- into an overall strategy of institutional development and quality improvement.
- Pr2 The target group of the programme is clearly defined.
- Pr3 The staff which designs, manages, runs and evaluates the programme is appropriately qualified
- for carrying out their responsibilities. This involves mainly the programme managers, authors, etutors,
- e-moderators, and quality managers.
- Pr4 The students/participants are provided with the relevant programme information prior to the start
- of the programme

Pedagogy



- PE1 The programme's learning objectives are clearly defined and conform to the respective professional pedagogical standards.
- PE2 The pedagogical and strategic (added) value of technology-enhanced learning within the programme is explained.
- PE3 The structure of the programme allows for a diversity of learning and teaching methods.
- PE4 Student/participant interaction with the teaching staff, other students/participants and/or interactive learning software is an essential characteristic of the programme and is facilitated through a variety of ways.
- PE5 Content making use of technology-enhanced learning is integrated into the programme's curriculum and assessment system.
- PE6 There are principles / guidelines regarding the minimum standards for course development and design as well as for the use of third-party contents.
- PE7 Instructional materials (e. g. educational software) are reviewed periodically to ensure they meet the programme's objectives and standards.
- PE8 Feedback on both the student/participant assignments and questions is constructive and provided in a timely manner.
- PE9 The relationship between the learning objectives, assignments and assessments follows a coherent framework.
- PE10 Assessments follow the respective professional standards and are valid to the learning objectives.

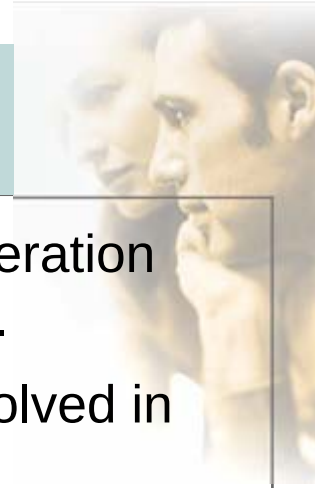
Economics

- E1 The institution should demonstrate that the level of overall resourcing is appropriate to achieve the programme objectives.
- E2 There is a balance between the running and the advancement of the programme, especially with regard to the technology-enhanced learning components within it.

Technology

- T1 The choice of technologies is based on their appropriateness for the pedagogical concept and takes into account both the students/participants and teaching staff.
- T2 There is an IT-strategy with regard to the implementation of technology-enhanced learning which describes the technology currently used, its maintenance and considerations for future advancement.
- T3 The reliability of the technology-delivery system is monitored and documented. Service-level agreements for hardware and software reliability are in place and operational.
- T4 Educational Technology delivery follows best practice recommendations concerning usability and accessibility.
- T5 The technology applied allows for the future reuse of content and information and supports sustainable development.

Organisation

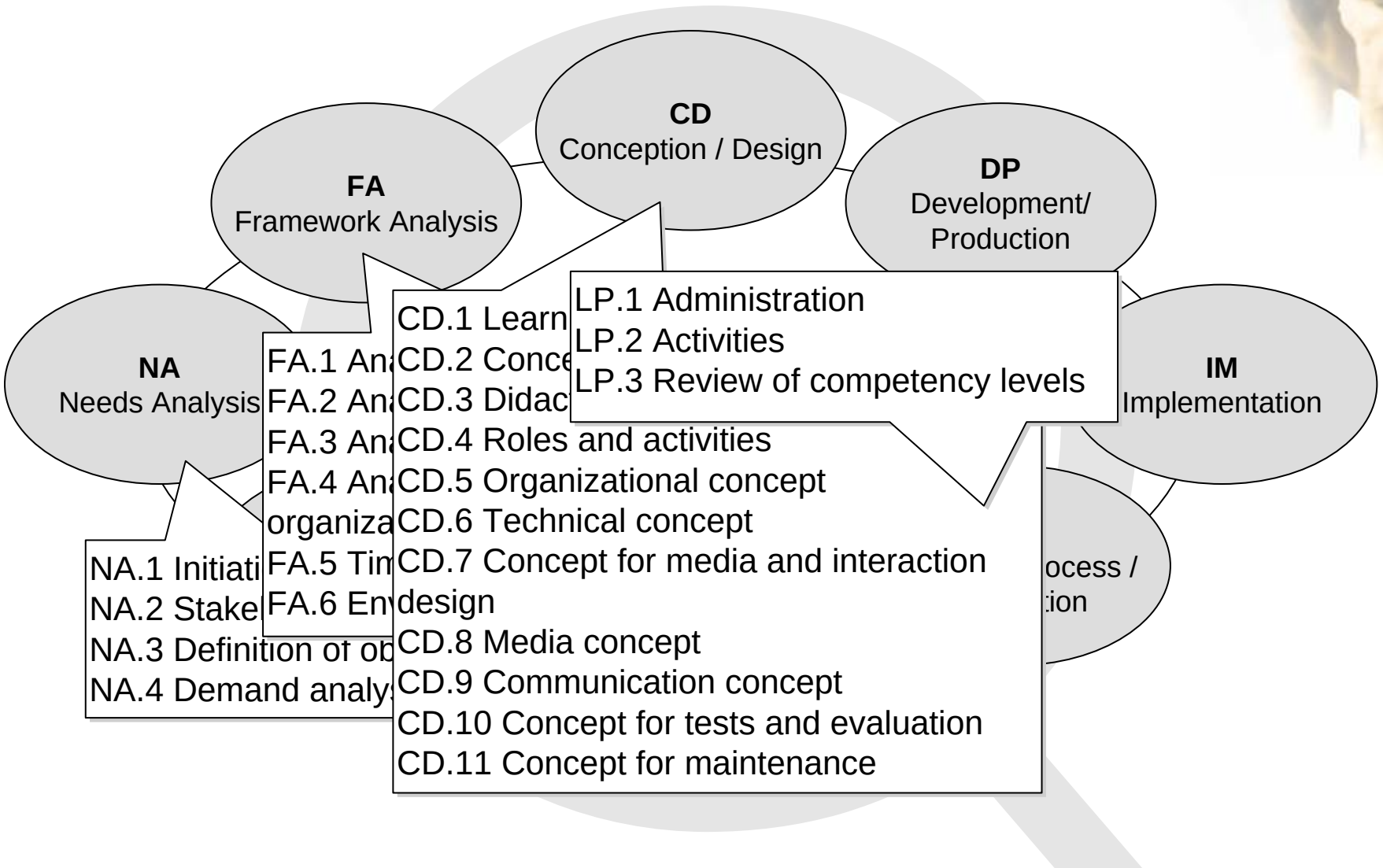


- O1 The institution is able to demonstrate the existence and operation of the necessary infrastructure and support for the programme.
- O2 There is a competency development policy for the staff involved in the design and running of the courses, especially those with technology-enhanced learning components.
- O3 The definition of the work processes for implementing the programme's technology-enhanced learning components is transparent for those involved in the programme's implementation.
- O4 The institution conducts a programme of continuous quality evaluation directed towards programme improvement
- O5 The institution is responsive to student/participant complaints concerning the courses, especially those with technology-enhanced learning components.

Culture

- C1 There are clear and demanding expectations towards the students/participants and teaching staff, as a major pillar of the programme's learning culture.
- C2 The philosophy of change, innovation and co-operation within the institution, especially with regard to technology-enhanced learning, is stated.
- C3 Consideration has been given to issues of workload, compensation, ownership of intellectual property resulting from the programme, and their impact on the staff's commitment and participation.
- C4 Commitment of the institution's leading management to support the programme's objectives and implementation, especially with regard to the technology-enhanced learning components within it.

ISO Reference Framework (ISO/IEC 19796)



Process-Oriented Quality Description

ID	Category	Process Name	Description	Relations
3.2	Conception / Design	Concept of the contents	Concept of learning and teaching contents	1.1 Demand analysis 2.2 Qualifications

Sub process(es)	Content selection Content Design
Objective	1. Learner Demand: The goal is to provide contents adapted to the needs and demand of the learner. 2. Adaptation: Each course shall provide different content presentation formats and entry points based on the user experience.
Method	1. A prototype of the content shall be provided to a group of learners' representatives. In a consensus process, the contents shall be prioritized and agreed on. 2. For each course, classify groups of learners according to their learning type. Adapt presentation format and methods according to these learning types.
Result	1. Documentation of planned and agreed contents 2. Periodically, evaluate learning performance of different learners (test groups).
Actors	Curriculum designer, didactic experts, institution accreditation authority, teacher, learners' representatives
Metrics / Criteria	The content are measured based on their relevance, importance, exemplaricity, …
Standards	Higher Education Standards
Annotation / Example	

Choose Processes

Describe Quality Requirements

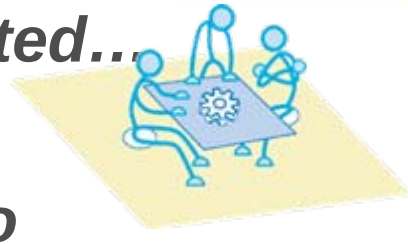
Define Methods, Results, Criteria

Involve all actors


Serendipity and the prepared mind?!
Linking Quality and Innovation
How can Quality Management Contribute?

UNESCO: August 14th, 2007

…Knowledge acquisition and sharing will increasingly be technology mediated…



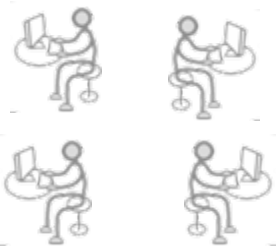
…From knowledge acquisition to key competence development…

…Learners will create, validate and disseminate content, teachers will be facilitators, coaches...

E-Learning - Changing Faces of HE

From Distribution…

Learning Management Systems



Materials online

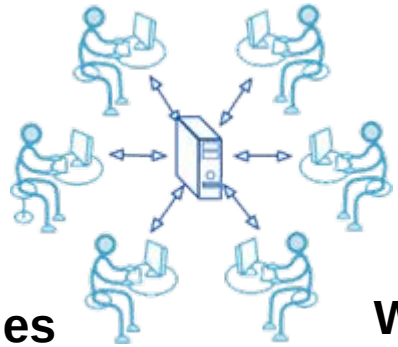
Information

Presentation

Transmissive Learning

Expansive Learning

Communication



Collaboration

Weblogs

E-Portfolios

Communities

WiKis

…to Collaboration and Reflection

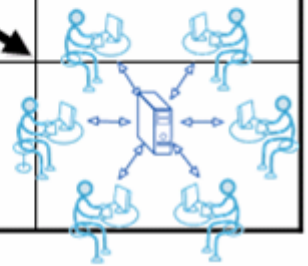
Two E-Learning Worlds

Standard Content

Students are learning with k

Individual Learning

ning unity

Degree of pedagogical Innovation	Degree of technical Innovation: Low — Traditional Media	Medium — Common LMS	High — Web 2.0
Low old objectives, old methods			
Medium old objectives, new methods			
High new objectives, new methods			

No fixed Content/ Curriculum

(Schulmeister 2005)

Quality For/ Through E-Learning

Quality through E-Learning

Organisational Change, Empowerment, Access to Education, Participation in the Information Society, Improving Digital Literacy

Quality for E-Learning

Quality Criteria, Strategies and Approaches, Improving the E-Learning Provision

Are you using Google?

Google™ Colombia

Perpetual Beta = Continuous Innovation

Innovation Through Quality

Quality in Education

Different Processes/ Levels (Input, Process, Outcomes, etc.)

Different Proce

Different meanings

Different Actors (Learners, Professionals, Institutional Actors, Government) have different Intentions, Goals, are in different Situations

D ent meanings/ understandings: excellence, conformance, value for money, user oriented, etc. (Harvey/Green 2000)
→ Quality in Learning as Co-Production ←

E-Learning Quality: Diversity

Cultural Diversity

Different Educational Leitmotivs (Nagel 2004)

- Scandinavian Countries: Students are viewed as young citizens, education is the obligation of the state
- In Anglo-Saxon countries students are viewed as customers and investors, education becomes a more individual duty
- In southern Europe students are seen as family members, education is a family matter

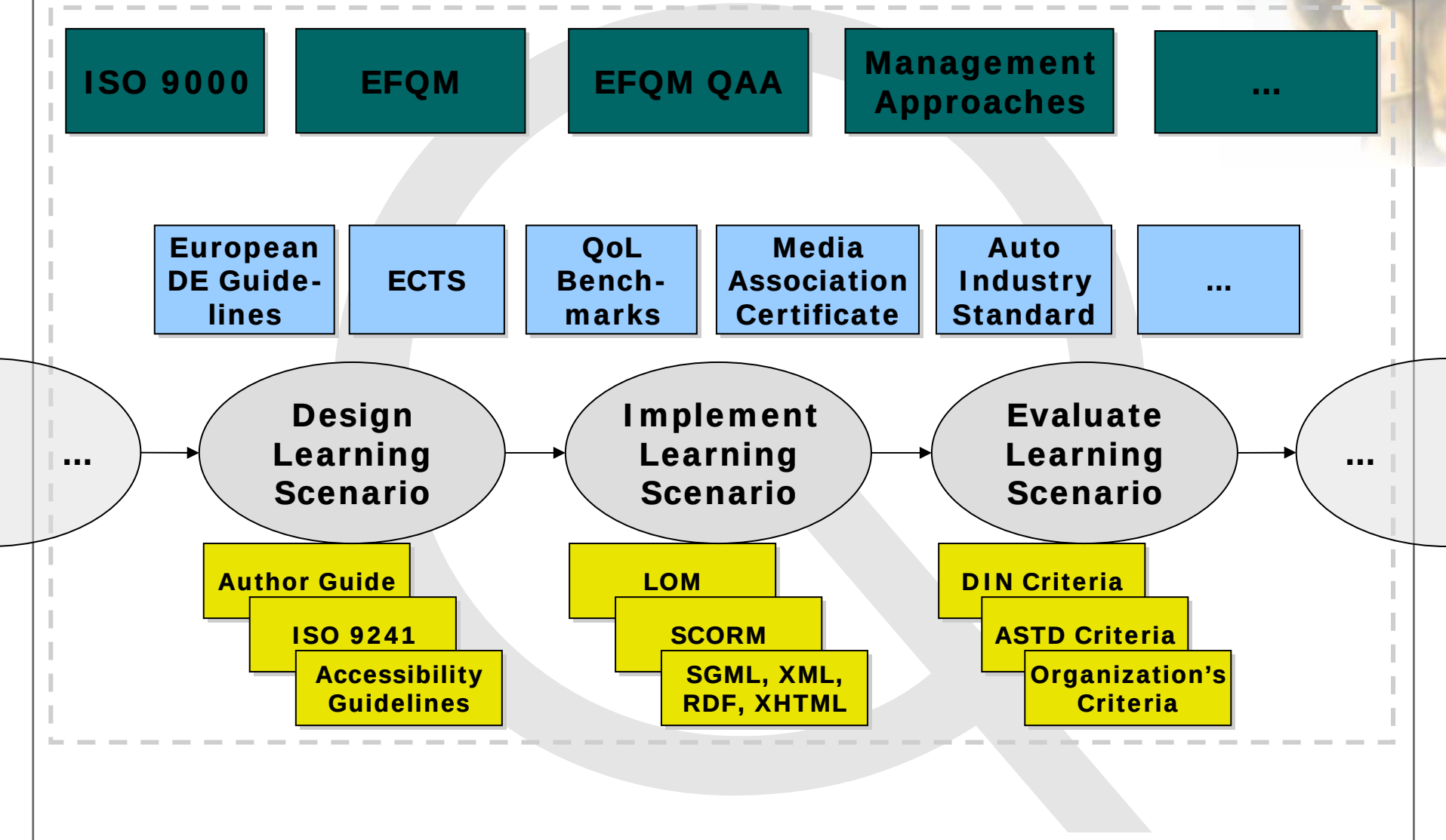
Educational Systems

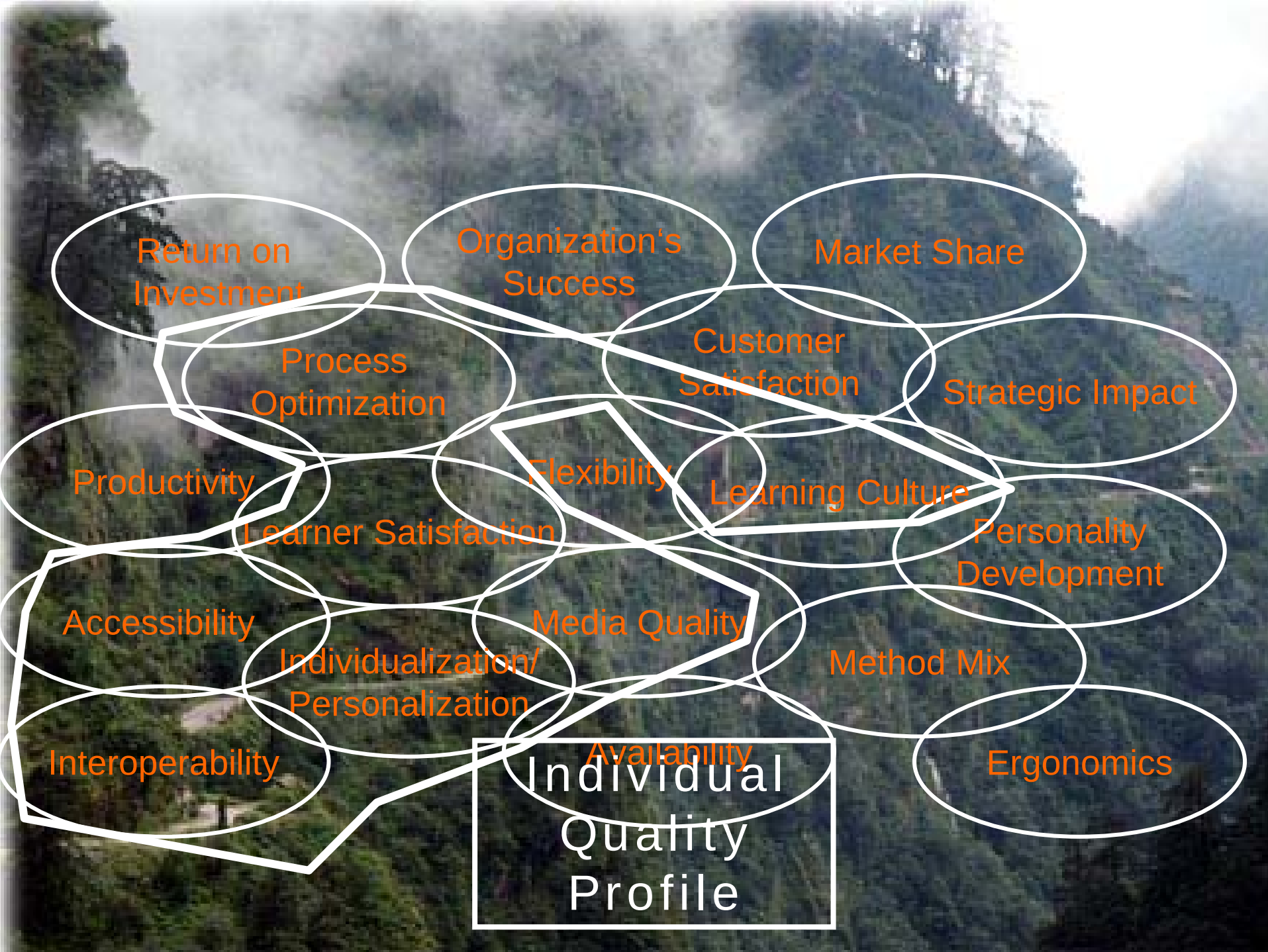
- Different School Systems (Duration, Preferred Learning Mode, etc.)
- Vocational Education
- University Education

Learning Infrastructures

- Different Platforms
- Different Tools
- Different Technologies
- Different Access Possibilities

Diversity of Quality Approaches




Return on Investment
Organization's Success
Market Share
Process Optimization
Customer Satisfaction
Strategic Impact
Productivity
Flexibility
Learning Culture
Learner Satisfaction
Personality Development
Accessibility
Media Quality
Individualization/ Personalization
Method Mix
Interoperability
Availability
Ergonomics
Individual Quality Profile

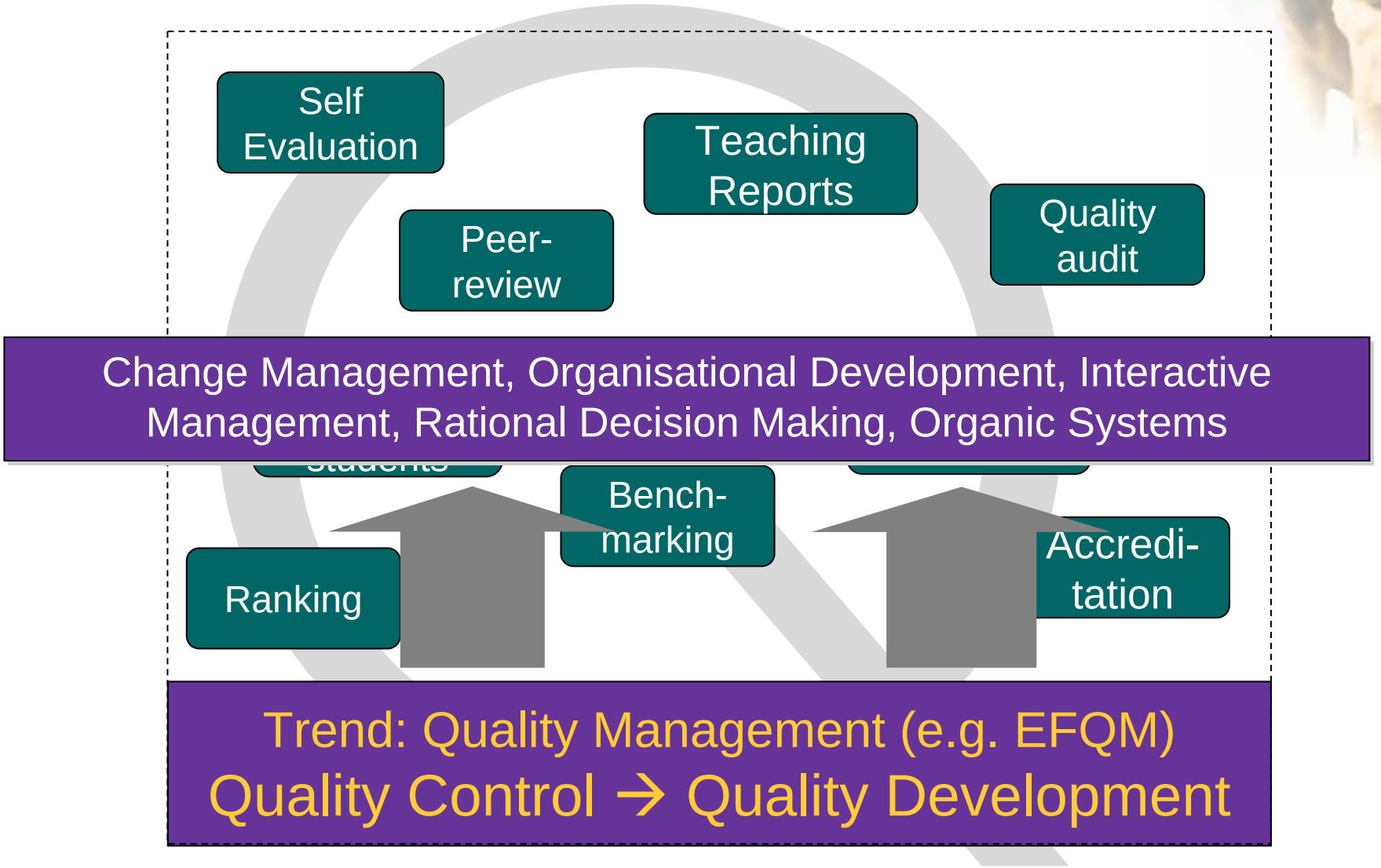
Organisations: E-Learning Quality

- Asian Association of Open Universities (AAOU) operates the AAOU Quality Assurance Framework
- International Council for Open and Distance Learning (ICDE)
- International Centre for Distance Learning (ICDDL)
- Norwegian Association for Distance Education (NADE)
- TQM Model or ISO certification
- European Association for Quality Assurance in Higher Education (ENQA) (2005: Standards and Guidelines for Quality Assurance in the European Higher Education Area)

A broadly accepted Quality Assurance and Accreditation system in eLearning within HE is missing.

(UNIQUE Report, July 2007)

Methods: Quality in HE



Quality Culture & Professionalisation

Quality Culture

Quality Management

Process models
Management
QM-Handbooks
Instruments &
Rules

Communication
Participation
Trust

Quality Committment

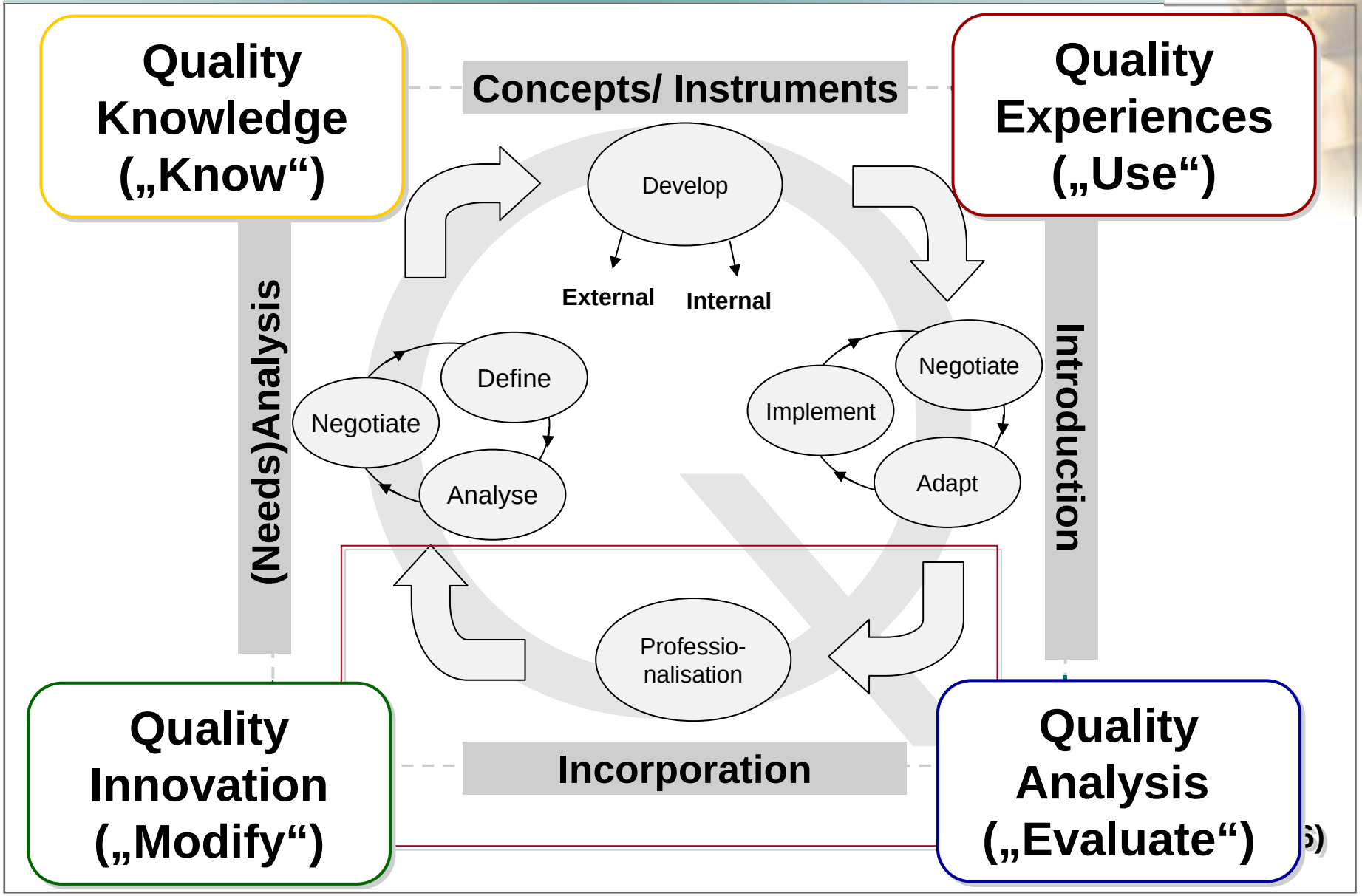
Competences
Attitudes
Values
Individual &
Collective

Top-Down ← → Bottom-Up

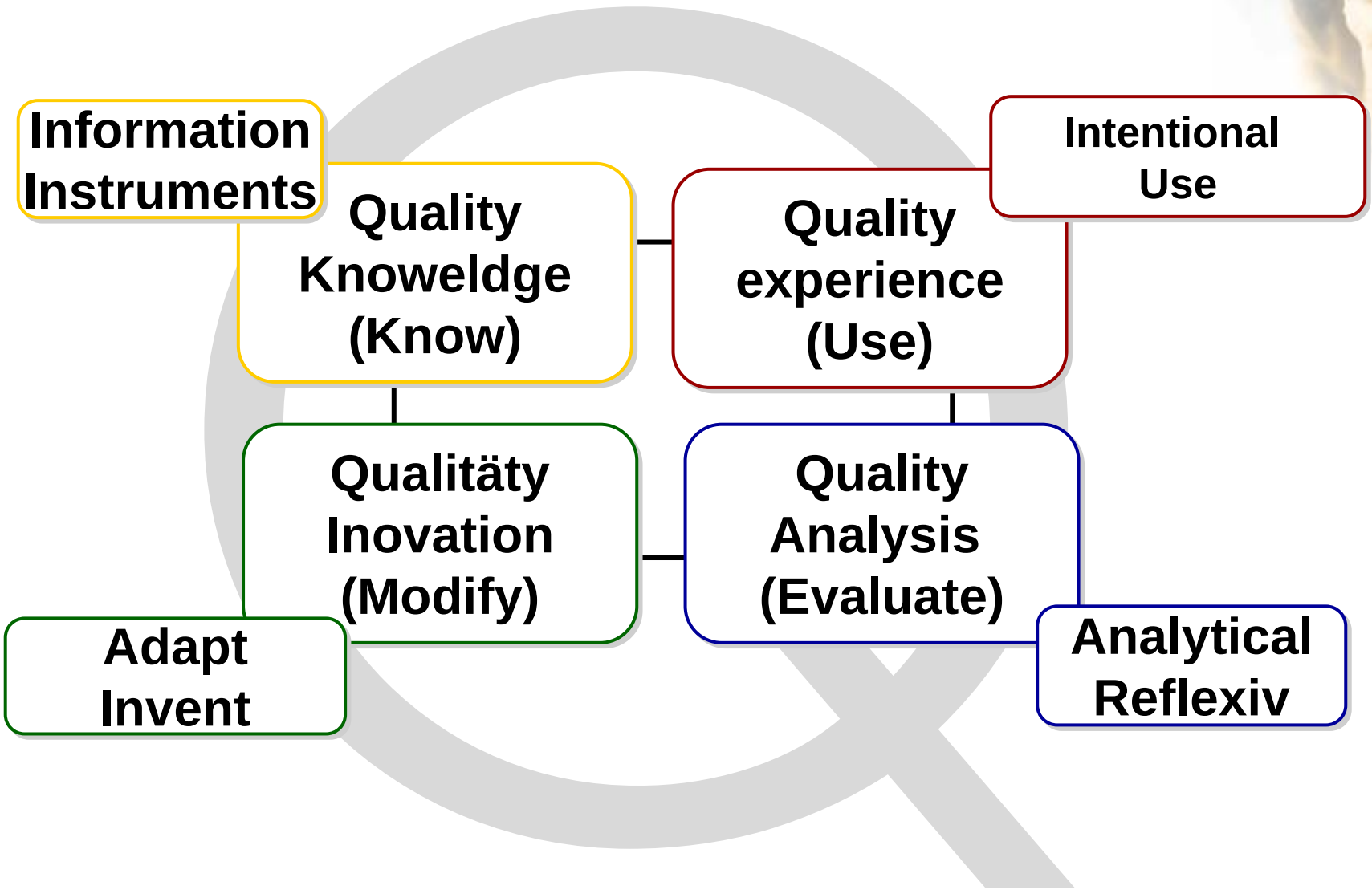
Quality Development → Enabling individual and organisational growth through competence development and professionalisation.

(based on European University Association 2006)

Literacy for Quality Development



Quality Competencies



EFQUEL: Quality Through Dialogue

European Quality Observatory
(www.eqo.info)

European Quality Forum
(~ 400 members)

European Quality
Service Portal

Federation of
Quality Awards

European Quality Mailinglist
(~680 Members)

eQuality Award
(Jan 2007)

UNIQUE: Quaity Mark for E-Learning in HE

UNIQUE: A Quality Mark for HE

Peer-Review: Community & Benchlearning

Adoption of E-Learning in HE as a Process

UNIQUE

Institutional Quality Mark for HE

Quality of Ressources, Processes, Institution/ Context

Holistic approach

European Foundation for Quality in eLearning

www.qualityfoundation.org - info@qualityfoundation.org

European foundation for quality in e-learning

Building leadership on e-learning quality through dialogue and innovation

European Foundation for Quality in eLearning

Thank you very much!

…sign up for quality…

http://www.qualityfoundation.org

http://www.ulf-ehlers.de

http://www.lernqualitaet.de

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