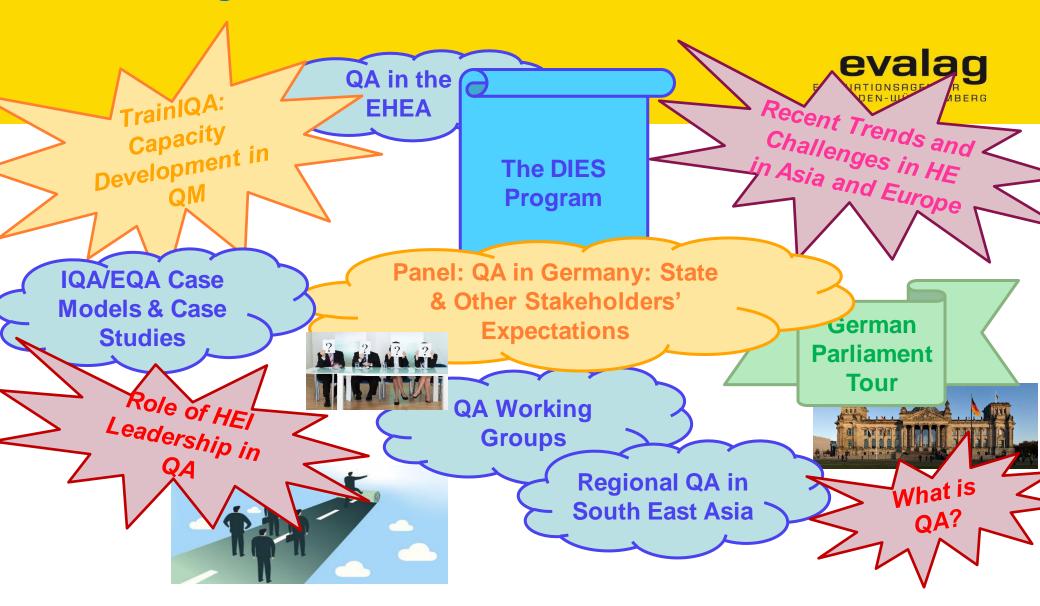
This Meeting So Far ...



... What else can be said? ... Nothing at all? ... Or just talk about the future ...



The Future of Quality Assurance: Higher Education Institutions On Their Way Towards Organisational Identities?

Prof. Dr. Dr. Theodor Leiber

evalag (Evaluation Agency Baden-Württemberg), Mannheim, Germany

ASEAN-QA High Level Visit

University of Potsdam 7-11 November 2016, Potsdam, Germany

© Theodor Leiber – <u>leiber@evalag.de</u> / <u>w ww.evalag.de</u>



About

- Mission and Role of HE in Society Education as a Human Right and Public Good
- HEI <u>Governance</u> Level QA as a Key to Governance of Specific Expert Organisations:
 Universities on their Way Towards Organisational Identities
- HEI QA System Core Functions Generic QA Must-Haves and QA Add-Ons
- QA, What For? Major Intended and Non-intended Effects of QA
- HE(I) QA Effects, Positive and Negative Typical Merits and Failures of HE(I) QA
- Conclusions Principles and Policies for QA in HEIs
 (Supporting Organisational Development/Self-Governance/Organisational Identities)





Education is a universal human right:

"Everyone has the right to education. [...] Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit."

And: "Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms."

(United Nations 2008, Art. 26, paragraph 1)



- Era of permanent technological innovation; requires permanent knowledge development, lifelong learning, knowledge sharing on global scale
- HEIs (and other education institutions) more important than ever as high achievers in globalized knowledge societies and economies: fundamental to permanent flow of people, knowledge, information, technology, products and financial capital (cf. Marginson 2006); decisive for competitiveness of national states as producers of innovative research and technology

"One of the essential pillars of the knowledge society is education." (Afgan & Carvalho 2010, p. 41)

Education for All (e.g., critical thinking, intellectual and moral development; knowledge-based employability); profiled innovative research; economic, social and ecological sustainability; evidence-based organizational development and political decision-making

(cf. Anderson 2008; Hamlin 2016; Innerarity 2012; Lingenfelter 2012; Välimaa & Hoffman 2008; van Weert 2006)



Value of QA: Four Pivotal Roles

- Sustaining and enhancing the quality of HE
 (accountability/ responsibility/ competition/ autonomy functions)
- Maintaining the academic values of HE (most controversial!?! really?)
 (autonomy function)
- Buffering against the politicizing of HE (autonomy function)
- Serving public interest and need (competition & autonomy function)

Recognized
Responsibility Protection Promotes
Institutional-accountability High-level
Increased-earning-potential
Protection-from-fraudulent-diploma
Ensures-quality Promoting-excellence-in-distance-education
Accountability Quality
Consistent
Accuracy
Accuracy
Validates Academic-standards
Improvement
Reputable
Reliable Educational-accountability
Institutional-Integrity Trustworthiness
High-standards
Confidence
Adherence
Escales

Cf. (Eaton 2003)



Education – Relations between (wo)man and the world, to other people, to himself Quality – academic values – public interest

Value of QA: Four Pivotal Goals – Life education and vocational training

- Personality development (self-competence; social competence)
 (cf. Leiber 2016c)
- Scientific or artistic qualification (expert c.; methodological c.)
- Qualification to take up a qualified employment (professional c.; expert c.)
- Qualification for societal engagement (social c.; self-c.)



QA as a Key to Governance of Specific Expert Organisations: Universities on their Way Towards Organisational Identities



- Four core dimensions of any academic organisation (Birnbaum 1988)
 - > Collegial features
 - Bureaucratic features
 - Political features
 - Anarchical tendencies

Mixtures of features may differ between instituitions

National traditions and regulations, institutional histories affect blending of dimensions

QA as a Key to Governance of Specific Expert Organisations: Universities on their Way Towards Organisational Identities



- Characteristics of HEIs as 'specific organisations' (Cohen et al. 1972; 1976; Musselin 2007) and expert organisation with multiple missions
 - ➤ Goals are problematic, i.e., "inconsistent and ill-defined preferences" appear frequently (Cohen et al. 1972, p. 1)
 - Multiplicity of goals & organisational complexity of HEIs; inherent dynamics of organisational goals; competence deficits in academic self-organisation
 - Ergo: difficult for HEI decision-makers to act on organisational goals in concert
 - Functional loose coupling of both learning and teaching activities and research activities
 - Low level of coordination and cooperation in L&T and research activities (in particular intrauniversity) – subject-specific, department-specific, different individual autonomy profiles

QA as a Key to Governance of Specific Expert Organisations: Universities on their Way Towards Organisational Identities



- Both L&T and research are unclear technologies
 - L&T and research are complex processes which are difficult to grasp, partly because of intrinsic reasons (it is complex), partly because of construction (academics maintain opacity and academic work is still not sufficently studied)
 In particular, causal relationships between tasks and results are ambigious (distributed multiple causation, and partially opaque learning processes and teaching processes)
- Fluid participation, i.e., shifting involvement in decision making

Hypothesis: None of these four drawbacks (which also have their positive sides) can be completely solved!

"Ms. Jennings, have you seen my 'Oganization is the Key to Success' poster?"

Hypothesis: <u>Gradual improvement on these is required in many places</u> and seems impossible without QA.

QA as a Key to Governance of Specific Expert Organisations: Universities on their Way Towards Organisational Identities



Improvements for specific expert organisations

- > Seems necessary to improve goal-setting and decision-making
 - E.g., by developing competences in organisational development & QA
- Seems necessary to make coupling 'less loose'
 - Because of (case-dependent) requirements for L&T as joint task; inter- and transdisciplinary study programs and curricula; ECTS-based mobility; researchrelated L&T; etc. → some governance-based coordination and cooperation required, based on evidence-based QA
- Seems desirable to avoid constructed part of unclear technologies
 - E.g., by intensified didactic and pedagogical research based on evidence-based QA of L&T processes
- Seems necessary to make participation 'less fluid'
 - Because of requirements of more systematic and integrative self-governance/ autonomy → more (bounded) rationality of decision-making required based on evidence-based QA

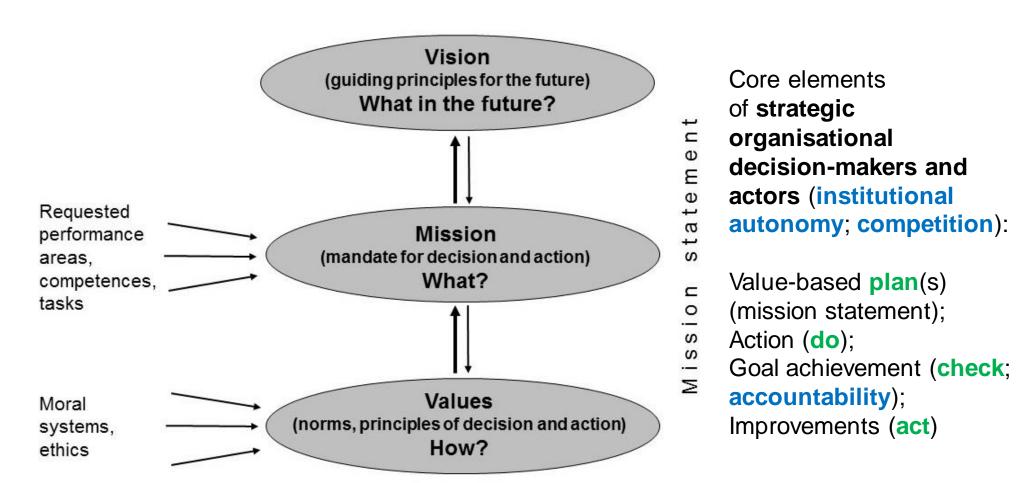
QA as a Key to Governance of Specific Expert Organisations: Universities on their Way Towards Organisational Identities



- Governance model of the 'specific organisation' HEI
 - ➤ HEIs can become/are strategic decision-makers & organisational actors incl. quality development on the basis of an organisational identity (QA serves responsible self-governance)
 - ➤ Organisational identity (an institution's self-understanding): implementing interwoven features/ abilities of accountability (responsibility), competition and autonomy characterised by reasons why institution exists, what its (general) goals are (mission); how it strives for its goals, what its values are as a basis of decision-making and action-taking (values); where the institution hopes these purposes will lead and what it wants to be or become in the future (vision) (Leiber 2016a; Kosmützky & Krücken 2015)

QA as a Key to Governance of Specific Expert Organisations: Universities on their Way Towards Organisational Identities



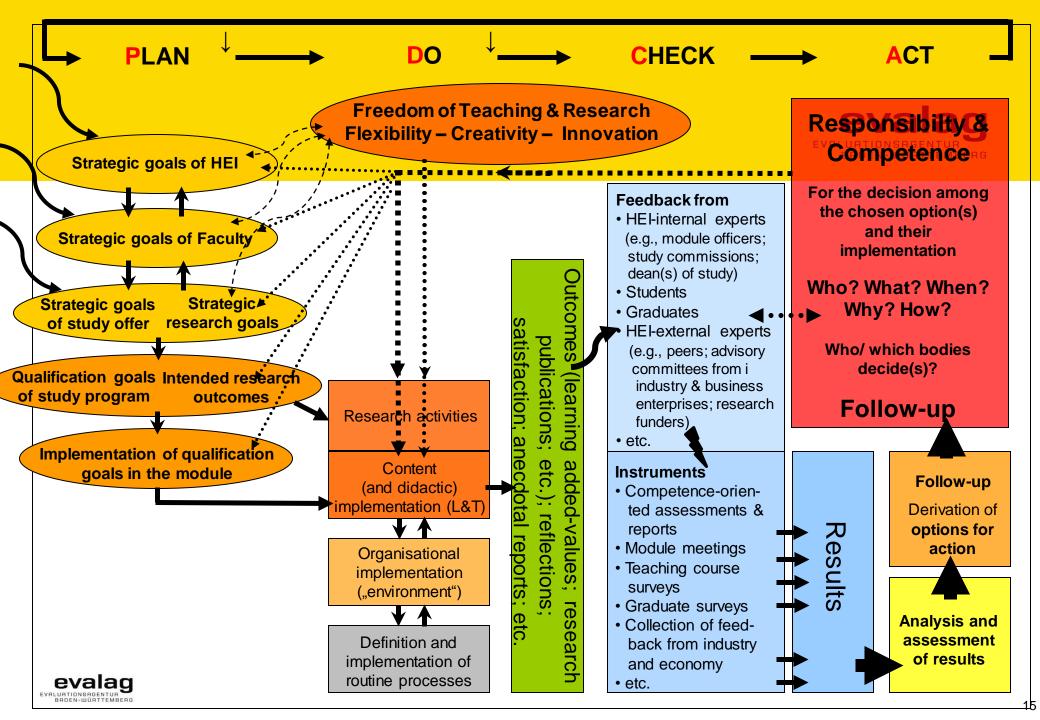


(cf. Leiber 2016a)



Generic QA Must-Haves (self-governing competences) ...

- IQA ("from program to institution") consisting of individuals, bodies, structures, processes, institutions, etc. which IMPLEMENT PDCA-CYCLES (generic, indispensable) (Deming cycles, upward-spirals with respect to quality development)
- IQA & EQA in balance, HEI-specific (build on existing competences and structures!)
- Strategic governance (vmv), HEI-specific (develop existing profile)
- QA <u>criteria</u> and <u>standards</u> (more generic)
- QA in L&T ("from teaching to learning"); Research; Promotion of Young Scientists; Third Mission; Administration; etc. (more generic)
- Systematic <u>evaluation procedures</u> (more generic)
- QA <u>impact evaluation</u> (more generic)
- Focus on <u>leadership competences</u> (more generic)





QA criteria and standards (exemplary choice)

- Evaluation standards

 (e.g., German Society of Evaluation/DeGEval; American Society of Evaluation; ...
- European Standards and Guidelines for QA in HE (ESG)
- ASEAN Guiding Principles for QA and ...
- Accreditation rules and standards

 (e.g., Akkreditierungsrat; American Association for Accreditation in HE;
- National Qualifications Frameworks
- Performance indicators and core datasets for research; L&T (?); ...
- HE Laws
- Evaluation regulations of individual universities
- etc.pp.







Procedures (step by step instructions)





Systematic evaluation procedures – methodological elements

- Clearly defined subjects, goals and criteria of evaluation (e.g., programs; qualification goals; research aims; etc.)
- Implementation by experts (e.g., teachers; researchers; evaluators)
- Precisely defined and transparent assessment criteria (definition of relevant qualities)
- Systematic and comprehensive acquisition of empirical data (e.g., data monitoring; surveys; interviews; etc.)
- Systematic analysis and assessment of data
 (e.g., peer review; focus group discussions; SWOT analyses; hypotheses about goal (non-)achievement; impact analyses; etc.)
- Participation of stakeholders (e.g., students; academic staff; leadership; HE policy; HE researchers; employers; parents; etc.)



Systematic evaluation procedures – procedural elements

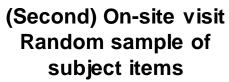
Task clarification, admission & contract



Creation of selfevaluation report against standards



(First) On-site visit





Random samples of subject items



Evaluation report incl. recommendations & decision (possibly with conditions)



ca. 18 to 24 months repeat every 5-7 years







QA Impact Evaluation

Before-after comparison design (and ex-post analysis)
 Analyse if and when and how an effect has been achieved



- Causal mechanism hypotheses (cf., e.g., Leiber et al. 2015; Little 2015; Stensaker & Leiber 2015)
 Analyse how effects are achieved
- Assessments of intervention effects by participants, key informants, experts
 (e.g., via standardised surveys and structured interviews with different target groups such as
 academic staff, students, QA staff, leadership etc.)
 Analyse goals, processes, structures, preferences, actions and institutional & program
 change
- Counterfactual self-estimation of participants (Mueller et al. 2013)
 Analyse change of personal variables (intentional states) related to preferences, decisions and actions (relevant to institutional & programme change)
- Document analyses/observations
 Analyse goals, processes, structures, actions and institutional & program change



With the support of the Lifelong Learning Programme of the European Union.

Generic QA Must-Haves ...



QA Impact Evaluation

5 main impact areas

- Learning and teaching
- Research
- Third Mission
- Internationalisation of HE
- Inter- and transdisciplinarity of HE
- Institutional management
- Nationales HE and QA system
- Satisfaction with QA processes

Stakeholders

- Students
- Academic staff in learning and teaching
- Peers
- Employers
- QA agencies
- Study programme managers
- HEI managers
- Governments
- Society
- International community



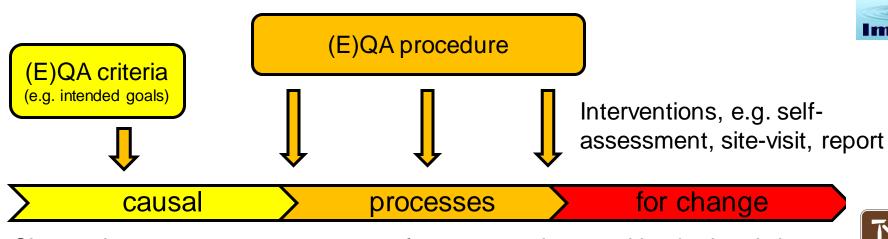


With the support of the Lifelong Learning Programme of the European Union.

Generic QA Must-Haves ...

evalag EVALUATIONS AGENTUR BADEN - WÜRTTEMBERG

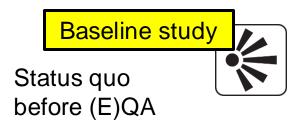
QA Impact Evaluation (IMPALA Research Design)



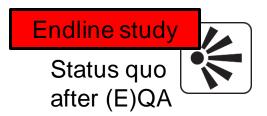
Change in processes, structures, preferences, actions and institutional change



Ex-post inspection



Status quo inbetween, after some (E)QA activity





(The Top 5) Leadership Competences As Seen By Trained HEI Leaders

Develop visions and strategies for the organization

Get staff attached to the objectives of the organization

Get people to cooperate

Get results

Secure organizational survival

Cf. (Aasen & Stensaker 2007, p. 377)

Accordingly, the empirical ideal of HEI leadership is **not about "managerialism"**, "**control people"**, "**do administration"** but there is a "**strong emphasis on the academic dimension and the distributed practice inherent in university governance"** (Aasen & Stensaker 2007, p. 378).



(The Top 8) Acquired Leadership Competences By HEI Leader Training

Well-developed personal network

Cf. (Aasen & Stensaker 2007, p. 375)

More professionalism in how a leader fulfills tasks

Increased knowledge of how a leader functions

Better understanding of how my HEI works

Improved confidence in myself as a leader

Improved knowledge of strategic thinking and development

Improved knowledge about formal responsibilities and duties as a leader

Better know-how in how to solve conflicts and social problems





The Top 8, or 28, or ... Leadership Competences

More (?): **Top 8 Leadership Competencies**: Ronald E. Riggio Ph.D., https://www.psychologytoday.com/blog/cutting-edge-leadership/201404/the-top-10-leadership-competencies

More (?): **28 Leadership Core Competencies in Five Groups**United States Department of Agriculture Farm Service Agency, Washington, DC, USA, http://www.fsa.usda.gov/Internet/FSA_File/leadership_core_competencies.pdf



... and QA Add-Ons

(Overlapping) Dimensions of QA modelling in HEIs

– Which methods, procedures, instruments?

Which monitoring systems, reporting systems, performance indicators are used? What is the relation of used qualitative and quantitative indicators? How are results interpreted?

How are reference standards built?

- Which scope?

Which performance areas, key processes, support processes are included?

– Which functionality/intensity?

What is the degree of interweaving and interaction of QA measures with university processes?

How are informal and formal instruments and processes used? In what way are follow-up measures implemented?



... and QA Add-Ons

(Overlapping) Dimensions of QA modelling in HEIs

– Which institutional anchoring?

On which organisational levels, through which bodies, by which individuals is QA implemented?

Who is responsible for QA?

How heterogeneous is QA?

– Which embedding in strategy building & governance mode?

What is the degree of embeddedness of QA measures/ instruments in the university's strategy formation?

How are QA goals coupled to the strategic development of the HEI?

How are the results/ effects of QA used in university (governance)?



Generic QA Must-Haves and QA Add-Ons

In summary, no "one-size-fits-all"

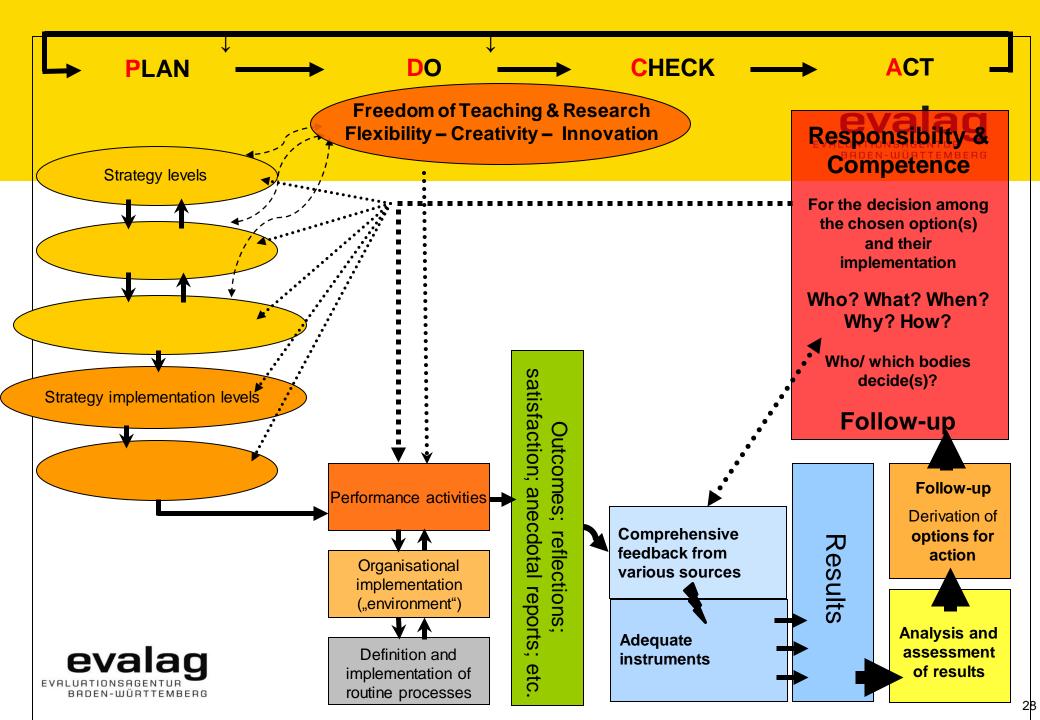
also cf. EUA's European Quality Culture survey (Loukkola & Zhang 2010, p. 28)

9% of respondents applied ready-made QA model (such as ISO, EFQM, QAF)

27% had tailor-made QA system

64% had HEI-specific QA system (following national QA frameworks and guidelines)

There is no blueprint for a functioning QA system, but many different examples of how HEIs have implemented the requirements of systematic QA. Every HEI, based on its tried and tested elements of QA, must find suitable solutions to fill existing gaps. Particularly for smaller HEIs, which have only small personnel capacities in QA, it is a challenge to carry out an inventory of their QA and to promote the development of a tailor-made or HEI-specific QA system. (evalag)



Whatever QA procedure you use and QA system you have ...



Generic QA Must-Haves (self-governing competences) ...

Basic functions of QA assessments

- Knowledge function
 (social science information about structures, effects, efficiency etc.)
- Controlling function (checking compliance with normatively prescribed setpoints)
- Dialogue function
 (stimulation of self-communication and communication processes)
- Legitimatory function
 (basis for decisions and accountability, ex-ante or ex-post)

see (Hornbostel 2010, 294-295)

Principles and Policies for QA in HEIs (Supporting Organisational Development/ Self-Governance/Organisational Identities)



 HEIs should develop Q-culture IQA (institutional focus) which is essential for reflected self-governance based on organisational identity (ethical and epistemological requirement)

```
e.g., EUA's Q-Culture project: (cf. "to cultivate": care for; maintain; foster; nurse; grow; refine; ...)
```

"shared values, beliefs, expectations and committments toward quality" – values, mission, vision – and

"a structural/managerial element with defined processes that enhance quality and aim at coordinating efforts" (EUA 2006, p. 10)

example: QM system heiQUALITY at the University of Heidelberg (http://www.uni-heidelberg.de/universitaet/qualitaetsentwicklung/heiquality/center.html)



Principles and Policies for QA in HEIs (Supporting Organisational Development/Self-Governance/Organisational Identities)



IQA and (flexible) EQA should be balanced (methodological requirement)



- Q-culture IQA should include focus on improvements in performance (not just absolute performance) (ethical & epistemological requirement)
- QA should identify relevant performance indicators, quantitative & qualitative; core data sets (methodological requirement)
- QA should build on reliable data and analytics, where appropriate (performance data management; L&T analytics; research analytics; etc.) (HEC 2016; Liebowitz 2017; Slade & Prinsloo 2013) (methodological & epistemological requirement)
- L&T QA should improve on (didactic) qualification of teachers; curriculum development; motivation & engagement of students; learning outcomes; attractiveness of L&T environments (ethical and epistemological requirement)

Principles and Policies for QA in HEIs (Supporting Organisational Development/Self-Governance/Organisational Identities)



- QA must build on proper evaluation processes (including impact evaluation) and should be research oriented (methodological and epistemological requirement)
- QA should be risk-based (e.g., balance external needs, demands with internal vmv & resources; financial reserve formation; focus on academic fraud and corruption; reactivity towards innovations in L&T, research, Third Mission; etc.) (ethical & epistemological requirement)
- QA should support benchmarking exercises (epistemological & methodological requirement)
- QA should improve stakeholder participation & support vision of co-creative community of stakeholders (ethical & epistemological & methodological requirement)



Principles and Policies for QA in HEIs (Supporting Organisational Development/Self-Governance/Organisational Identities)



- QA should take into account internationalisation & global competition (ethical, methodological, epistemological requirement)
- QA should comprise all HEI achievement areas (in particular L&T, research, Third Mission) (ethical, methodological, epistemological requirement)
- QA should not burden academics with unjustified reporting & administrative tasks (ethical requirement)
- HEI system QA should "accord parity of esteem across the system for diverse institutional profiles in order to facilitate public comparability, democratic decision-making and institutional benchmarking" (Hazelkorn 2012, p. 355) (ethical and epistemological requirement)



The University would have to be the [public] place, where nothing is beyond question.

evalag

EVALUATIONSAGENTUR

BADEN-WÜRTTEMBERG

(Derrida 2001, p. 14)

We are what we do repeatedly. Excellence is, therefore, not an act, but a habit.

(Aristotle)



Everyone thinks of changing the world, but no one thinks of changing himself.





Aasen, P. & Stensaker, B. (2007) Balancing Trust and Technocracy? Leadership Training in Higher Education. International Journal of Educational Management, 21(5), pp. 371-383.

Afgan, N. H. & Carvalho, M. G. (2010) The Knowledge Society: A Sustainability Paradigm. Cadmus, 1(1), pp. 28-41.

Akkreditierungsrat (2013) Rules for the Accreditation of Study Programs and for System Accreditation [in German], DRS AR 20/2013 (Bonn, Akkreditierungsrat). Available at: http://www.akkreditierungsrat.de/fileadmin/Seiteninhalte/AR/Beschluesse/AR_Regeln_Studiengaenge_aktuell.pdf (accessed: 27 June 2016).

Allio, R. J. (2012) Leaders and Leadership – Many Theories, But What Advice is Reliable? Strategy and Leadership, 41(1), pp. 1-14.

Anderson, R. E. (2008) Implications of the Information and Knowledge Society for Education. In: J. Voogt & G. Knezek (Eds.) *International Handbook of Information Technology in Primary and Secondary Education.* New York: Springer, pp. 5-22.

Arntzen, E. (2016) The Changing Role of Deans in Higher Education – From Leader to Manager. *Universal Journal of Educational Research*, 4(9), pp. 2068-2075.

Astin, A. W. & Lising Antonio, A. (2012) Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education. Lanham: Rowman and Littlefield Publishers.

Birnbaum, R. (1988) How Colleges Work. The Cybernetics of Academic Organization and Leadership. San Francisco: Jossey-Bass.

Bollaert, L. (2014) Quality Assurance in Europe (2005-2015). From Internal and Institutional to External and International. Journal of the European Higher Education Area, 3, pp. 1-24.

CHEA (2010) The Value of Accreditation. Washington: Council for Higher Education Accreditation. Available at: http://www.chea.org/pdf/Value%20of%20US%20Accreditation%2006.29.2010 buttons.pdf (access: 24 June 2016).

Cohen, M. D., March, J. G. & Olsen, J. P. (1972) A Garbage Can Model of Organisational Choice. Administrative Science Quarterly, 17, pp. 1-25.

Cohen, M. D., March, J. G. & Olsen, J. P. (1976) People, Problems, Solutions, and the Ambiguity of Relevance. In: J. G. March & J. P. Olsen (Eds.) *Ambiguity and Choice in Organisations*. Bergen: Universitetsforlaget, pp. 24-37.

Derrida, J. (2001) Die unbedingte Universität. Frankfurt am Main: Suhrkamp.

Dörpinghaus, A., Poenitsch, A. & Wigger, L. (2013) *Introduction into the Theory of Education* [in German]. Darmstadt: Wissenschaftliche Buchgesellschaft.

Eaton, J. S., 2016, Accreditation and competency-based education, Competency-based Education, 2016/1, pp. 12-16.



ECA (2013) Learning Outcomes in Quality Assurance and Accreditation. Principles, Recommendations and Practice. Brussels: European Consortium for Accreditation in Higher Education.

Elliott, C. (2015) The Impact of AACSB Accreditation: A Multiple Case Study of Canadian University Business Schools. *Canadian Journal of Administrative Sciences*, 30(3), pp. 203-218.

Erkkilä, T. & Piironen, O. (2014) Shifting Fundaments of European Higher Education Governance: Competition, Ranking, Autonomy and Accountability. *Comparative Education*, 50(2), pp. 177-191.

ENQA (2009): Standards and Guidelines for Quality Assurance in the European Higher Education Area. Helsinki: European Association for Quality Assurance in Higher Education. Available at http://www.enqa.eu/pubs.lasso (access: 07 June 2016).

EUA (2006) Quality Culture in European Universities: A Bottom-up Approach. Report on the three rounds of the quality culture project 2002-2006. Brussels: European University Association.

Hamlin, R. G. (2016) Evidence-Based Organisational Change and Development: Role of Professional Partnership and Replication Research. In: C. Hughes & M. W. Gosney (Eds.) *Bridging the Scholar-Practitioner Gap in Human Resources Development.* Hershey: Business Science Reference, pp. 120-142.

Harvey, L. & Green, D. (1993) Defining Quality. Assessment and Evaluation in Higher Education, 18(1), pp. 9-34.

Hazelkorn, E. (2012) European "Transparency Instruments": Driving the Modernisation of European Higher Education. In: A. Curaj et al. (Eds.) European Higher Education at the Crossroads: Between the Bologna Process and National Reforms. Dordrecht: Springer, pp. 339-360.

HEC [Higher Education Commission] (2016) From Bricks to Clicks. The Potential of Data and Analytics in Higher Education. London: Higher Education Commission.

Hornbostel, S. (2010) (Forschungs-)Evaluation. In: D. Simon, A. Knie & S. Hornbostel (Hg.) *Handbuch Wissenschaftspolitik*. Wiesbaden: VS Verlag für Sozialwissenschaften, 293-309.

Hughes & M. W. Gosney (Eds.) *Bridging the Scholar-Practitioner Gap in Human Resources Development.* Hershey: Business Science Reference, pp. 120-142.

Innerarity, D. (2012) Power and Knowledge: The Politics of the Knowledge Society. European Journal of Social Theory, 16(1), pp. 3-16.

Istileulova, Y. & Peljhan, D. (2015) Institutional Change as a Result of International Accreditation: Business Schools of Lithuania after the Iron Curtain. *Economic and Business Review*, 17(3), pp. 291-312.



João Rosa, M. & Amaral, A. (2014) Quality Assurance in Higher Education: Contemporary Debates. Cham: Springer.

Kant, I., 2012, Grundlegung zur Metaphysik der Sitten (Hamburg, Meiner).

Kosmützky, A. & Krücken, G. (2015) Sameness and Difference. Analysing Institutional and Organisational Specificities of Universities through Mission Statements. *International Studies of Management and Organisation*, 45(2), pp. 137–149.

Leiber, T., Stensaker, B. & Harvey, L. (2015) Impact Evaluation of Quality Assurance in Higher Education: Methodology and Causal Designs. Quality in Higher Education, 21(3), pp. 288-311.

Leiber, T. (2016a) Mission Statements and Strategic Positioning of Higher Education Institutions. A Case Study of 29 German Universities. In: R. Pritchard, A. Pausits & J. Williams (Eds.) *Positioning Higher Education Institutions. From Here to There*. Dordrecht: Sense Publishers, pp. 99-124.

Leiber, T. (2016b) Exploratory Evaluation of Development Programs in Learning and Teaching. The Example of Teaching Quality Pact Projects. In: S. Harris-Huemmert, L. Mitterauer, P. Pohlenz (Eds.) Wie wirken Evaluationen in Hochschulen? - Erwünschte und unerwünschte Effekte. Bielefeld: UniversitätsVerlagWebler, pp. 37-57.

Leiber, T. (2016c) Impact Evaluation of Quality Management in Higher Education. A Contribution to Sustainable Quality Development of the Knowledge and Learning Society. Qualität in der Wissenschaft (QiW). Zeitschrift für Qualitätsentwicklung in Forschung, Studium und Administration 2016/1, pp. 3-12.

Leiber, T. (2016d) Persönlichkeitsentwicklung als elementares Bildungsziel. Methodische Optionen der Umsetzung und Bewertung im Hochschulbereich. die hochschullehre. Interdisziplinäre Zeitschrift für Studium und Lehre 2 (in press).

Liebowitz, J. (2017) Thoughts on Recent Trends and Future Research Perspectives in Big Data and Analytics in Higher Education. In: B. K. Daniel (Ed.) *Big Data and Learning Analytics in Higher Education: Current Theory and Practice*. Cham: Springer, pp. 7-1.

Lingenfelter, P. E. (2012) The Knowledge Economy: Challenges and Opportunities for American Higher Education. In: D. G. Oblinger (Ed.) *Game Changers. Education and Information Technologies*. Educause, pp. 9-23. Available at: http://net.educause.edu/ir/library/pdf/pub72031.pdf (accessed 7 September 2015).

Little, D. (2015) Guiding and Modeling Quality Improvement in Higher Education Institutions, Quality in Higher Education, 21(3), pp. 312-327.

Loukkola, T. (2012) A Snapshot on the Internal Quality Assurance in EHEA. In: A. Curai, P. Scott, L. Vlasceanu & L. Wilson (Eds.) *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms*. Dordrecht: Springer, pp. 303-316.

Loukkola, T. & Zhang, T. (2010) Examining Quality Culture: Part I – Quality Assurance Processes in Higher Education Institutions. Brussels: European University Association.



Marginson, S. (2006) Dynamics of National and Global Competition in Higher Education. *Higher Education*, 52(1), pp. 1-39.

Marginson, S. (2009): The Knowledge Economy and Higher Education: A System for Regulating the Value of Knowledge. In: Higher Education Management and Policy, 21(1), pp. 1-15. Available at: http://dx.doi.org/10.1787/hemp-v21-art3-en (accessed 7 September 2015).

Mueller, C. E., Gaus, H. & Rech, J. (2013) The counterfactual self-estimation of program participants: Impact assessment without control groups or pretests. *American Journal of Evaluation*, published online October 03, 2013, pp. 1-18.

Musselin, C. (2007) Are Universities Specific Organisations? In G. Krücken, A. Kosmützky & M. Torka (Eds.) *Towards a Multiversity? Universities between Global Trends and National Traditions*. Bielefeld: transcript, pp. 63-84.

Meyer, K. (2011) Education [in German]. Berlin: de Gruyter.

Pajunen, K. (2008) The Nature of Organizational Mechanisms. Organization Studies, 29(11), pp. 1449-1468.

Pietzonka, M. (2014) Design of Study Programs in the Context of Bologna. The Implementation of the Study Program Reform and the Effectiveness of Accreditation [in German]. Wiesbaden: Springer VS.

Pietzonka, M. (2015) Limitations and Possibilities of Study Program Accreditation as an Instrument of Quality Management – Evaluation of the German Accreditation System [in German]. In: O. Vettori, G. Salmhofer, L. Mitterauer & K. Ledermüller (Eds.) A Question of Effectiveness? Quality Management as a Driving Force for Change at Universities [in German]. Bielefeld: Universitätsverlag Webler, pp. 83-102.

Pink, D. (2009) Drive. The Surprising Truth About What Motivates Us. New York: Riverhead.

Slade, S. & Prinsloo, P. (2013) Learning Analytics: Ethical Issues and Dilemmas. *American Behavioral Scientist*, XX(X), pp. 1-20 (doi: 10.1177/0002764213479366).

Simon, H. A. (1991) Bounded Rationality and Organizational Learning. Organization Science, 2(1), pp. 125-134

Stensaker, B. & Leiber, T. (2015) Assessing the Organisational Impact of External Quality Assurance: Hypothesising Key Dimensions and Mechanisms. Quality in Higher Education, 21(3), pp. 328-342

Suchanek, J., Pietzonka, M. Künzel, R. & Fütterer, T. (2012a) *Bologna (aus)gewertet. Eine empirische Analyse der Studienstrukturreform*. Göttingen: Vandenhoek und Ruprecht.

Suchanek, J., Pietzonka, M., Künzel, R. & Fütterer, T. (2012b) The Effect of Accreditation on the (Bologna) Reform of Study Programs in Germany [in German]. In: J. Kohler, P. Pohlenz & U. Schmidt (Eds.) *Handbuch Qualität in Studium und Lehre*. Berlin: DUZ Verlags- und Medienhaus, pp.1-30.

United Nations (2008) *Universal Declaration of Human Rights*. Available at: http://www.ohchr.org/EN/UDHR/Documents/UDHR Translations/eng.pdf (accessed: 14 December 2015).



University Alliance (2014) How Do We Ensure Quality in an Expanding Higher Education System? London: University Alliance.

Välimaa, J. & Hoffman, D. (2008) Knowledge Society Discourse and Higher Education. Higher Education, 56(3), pp. 265-285.

van Weert, T. J. (2006): Education of the Twenty-First Century: New Professionalism in Lifelong Learning, Knowledge Development and Knowledge Sharing. *Education in Information Technologies*, 11(3-4), pp. 217-237.

Wissenschaftsrat (2012) Recommendations for Accreditation as Instrument of Quality Assurance [in German]. Köln: Wissenschaftsrat. Available at: http://www.wissenschaftsrat.de/download/archiv/2259-12.pdf (access 27 June 2016).