

Impact Analysis of External Quality Assurance of HEIs and Internal Quality Assurance of Agencies

Epistemological, Methodological and Pragmatic Perspectives

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"Assessing Impact – Using External Reviews and Evaluations for Internal Learning"

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General Outline

- PART I:
To which end(s) do we carry out, and what is Impact Analysis of External Quality Assurance of Higher Education Institutions
- PART II:
What is the relevance of Impact Analysis (of EQA of HEIs) for Internal Quality Assurance of QA agencies? How is IQA related to the end(s) of IA?

Outline PART I

- (Selected) Motivations for IA of EQA of HEIs
- IMPALA Conception
- Areas of IA of EQA of HEIs
- Principles of Theory-based IA
- General Design for IAs of EQA of HEIs
- Examples of (Causal) Social Mechanisms
- Ideas on Data Acquisition for IAs of EQA of HEIs

Outline PART II

- What may be the benefits of IA and its methodology for the (I)QA of QAAs?

(Selected) Motivations for IA of EQA of HEIs

After more than 20 years of EQA of HEIs ...

- **Resolving the lack of systematic IA** of (E)QA of HEIs,
i.e., **establish applicable systematic models of IA** of (E)QA of HEIs
 - o e.g., **simultaneous IA**
 - o e.g., **cause-effect** hypotheses
- **Systematic/comprehensive incorporation of the student perspective**
- **Systematic/comprehensive incorporation of the lecturer/teacher experience**
- **Contribution to cost/benefit analysis**

Thesis: In a mediated and somehow “diffusive“ manner (“complex mechanisms“)
all of these are of relevance for IQA of QAAs.

1 Short description of the project²

IMPALA –

Impact Analysis of External Quality Assurance Processes of Higher Education Institutions.

Pluralistic Methodology and Application of a Formative Transdisciplinary Impact
Evaluation

In most European countries external quality assurance (EQA) in higher education has been applied for more than ten years. However, there is only little knowledge about the impact of these EQA procedures on higher education institutions (HEIs). The IMPALA project aims at closing this gap by developing and applying a methodology to assess the impact of EQA procedures. The developed methodology should be sufficiently flexible to be adjusted to different kinds of EQA procedures.

The project will be carried out in a partnership of three QA agencies together with HEIs in three steps:

1. **Development of the methodology**
2. **Impact analysis of EQA processes in HEIs** (cooperating with the agencies)
3. **Analysis, dissemination, and exploitation of results**

| | |
|-------------------------------------|--|
| Main project partners: | evalag (Mannheim, Germany), leading partner AQU (Barcelona, Spain) FINHEEC (Helsinki, Finland) |
| Associated project partners: | HEI partners , associated with each agency partner, willing to carry out an EQA procedure (e.g., quality audit, institutional accreditation, programme accreditation) starting in spring 2013 Prof. Bjørn Stensaker PhD Faculty of Educational Sciences, University of Oslo, Norway & NIFU (The Nordic Institute for Innovation, Research and Education), Oslo, Norway ENQA (European Association for Quality Assurance in Higher Education, Brussels, Belgium) |

The HEI partner of **evalag** is the University of Münster (Westfälische Wilhelms-Universität (WWU) Münster, Germany).

The HEI partners of AQU are the Universitat Autònoma de Barcelona, the Universitat Rovira I Virgili (Tarragona) and the Universitat Ramon Llull, Barcelona (all Spain).

The HEI partner of FINHEEC is Jyväskylä University of Applied Sciences (Jyväskylä, Finland).

Development of the methodology

The partnership will develop a methodological framework to evaluate the impact of EQA on HEIs. Centrepiece of the methodology should be the causal connection of EQA procedures and (organisational) changes in HEIs. As a matter of principle (justified by fundamental considerations of contemporary philosophy of science) the approach is committed to 'mixed methods', i.e., qualitative as well as quantitative methods will be used according to their relevance and applicability. Therefore, the impact analysis methodology could use several examinations in time (before the procedure, immediately after the procedure and a year after the procedure) and different methodological elements (such as questionnaires to HEI members and in-depth interviews).

Impact analysis of EQA processes in HEIs

To apply the methodology, each partner agency will carry out an EQA procedure (such as, e.g., a quality audit, an institutional evaluation, or a programme accreditation) at some HEI(s). The procedure should be carried out with a group of peer experts on the basis of a self-evaluation report by the institution and should comprise one site visit. Within the whole procedure, the HEI will commit to a work plan based on the recommendations of the procedure.

In parallel, the agency carries out the simultaneous impact analysis with a baseline study before the preparation of the self-evaluation report by the HEI, a midline study at an appropriate phase³ of the whole EQA procedure and an endline study.⁴ Each study will be performed according to the developed methodology with in-depth interviews of relevant key persons in the HEI and with online questionnaires to all university members (staff and students).

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Analysis, dissemination and exploitation of results

The project partners will organize an ENQA seminar for discussing the methodology developed. Also, a theoretical paper on the methodology of impact analysis of EQA procedures of HEIs will be published.

Furthermore, the partners will analyse the results of the impact analyses and present them at a European conference which will be organised by one of the project partners in collaboration with ENQA. Additionally, a summarizing publication on the methodology and on the project results will be produced.

The project will be accompanied by an academic adviser, who will assist the project partners in developing the methodology and analysing the results.

In addition, the project will be attended by ENQA, who will support the project partners in the dissemination and exploitation of results as well as in the quality management of IMPALA.

Immediate elements of innovation of the project are

- Development and application of a **comprehensive methodology of impact analysis of EQA procedures of HEIs**
- **Simultaneity of the impact analysis** with baseline study and before-after comparison, i.e., midline and endline study (quasi-experimental design)
- **Completeness of the online surveys**
- Systematic and **complete inclusion of university staff**
- Systematic and **complete inclusion of students** (e.g., their participation in and perception of EQA and its outcomes and impacts)
- Providing new perspectives to the functioning of HEIs (e.g., improve the understanding of the relationship between QA and organisational change; improve the ability to measure effects of EQA procedures on different time scales)

Areas of **IMP**act **Ana**lyses of **EQA** of HEIs

(also, cf. ENQA WG Impact)

Impact of EQA of HEIs ...

- ... on institutional management of HEIs (IQA of HEIs)
 - ... on the quality of the educational processes
 - ... on national legislation, regulations frameworks, and policies
 - ... on risk management (e.g., prevention of “weak offers” in HE system)
 - ... on public confidence (in HE system)
 - ... on the European dimension of HE
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- **but: IQA of QAAs is not a proper impact area of EQA**
(for the sake of epistemic and conceptual clarity) → cf. PART II

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(4) Principles of Theory-based Impact Analysis

- **Devising the causal chain**
- **Understanding the context**
- **Counterfactual and factual analysis**
- **Mixed methods approach**

Cf. (Leiber 2012, pp. 5 f.; White 2009, p. 7 ff.)

General Design for IAs of EQA of HEIs

- True experimental design – practically unfeasible
- Comparison with control groups – practically unfeasible
- **BEFORE-AFTER COMPARISON (“reflexive control”) – a.c.d.s.**
 - Process tracing – a.c.d.s.
 - **Assessment and estimation of the effects of EQA by participants (“shadow control”) – a.c.d.s.**
 - **Assessment and estimation of the effects of EQA by experts – a.c.d.s.**

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Exemplary Structure of a (Causal) Social Mechanism

- Merton: endogeneous and self-reinforcing process can bring about a collective outcome that is unintended by all the individuals involved (self-fulfilling prophecy)
- Merton's canonical example: run on a bank
- Even an initially sound bank may go bankrupt if enough depositors withdraw their money in the (initially) false belief that the bank is insolvent

Cf. (Hedström & Ylikoski 2010, p. 61 f.; Merton 1968)

Exemplary Structure of a (Causal) Social Mechanism

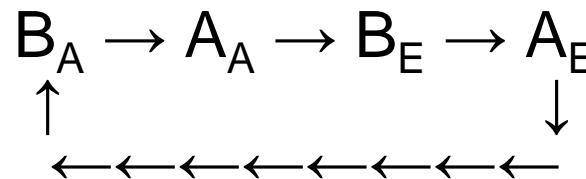
| Effects | Effects | Effects | Effects | Effects | Effects |
|----------------------|--|---------------------------------------|---|--|--------------------------------|
| Causes | Causes | Causes | Causes | Causes | Causes |
| Rumour of insolvency | Some/more depositors get in fear of loss | Some/more depositors withdraw savings | Withdrawals symbolize (hypothetical) weakness of bank | Withdrawals strengthen belief of others in bank's financial difficulties | Rumour of insolvency increases |
| | | | Withdrawals partly weaken bank | | |

Cf. (Hedström & Ylikoski 2010, p. 61 f.; Merton 1968)

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Exemplary Structure of a (Causal) Social Mechanism

- Basic / generalized structure of **Merton's mechanism**
 - Beliefs of Alter(s) B_A lead to decision to perform a certain action A_A
 - A_A influence Ego's belief B_E about the value of performing the act in such a way that Ego also decides to act: A_E
 - Ego's action A_E strengthens belief of others in the value of performing the act etc.



Cf. (Hedström & Ylikoski 2010, p. 62)

Cause-Effect Matrix – a Preliminary Excerpt Exemplar

| Causes of EQA | EQA Causes (= EQAM) | Levels of effects / causes of EQAM | | | | |
|---|------------------------|---------------------------------------|---|-------------------------------------|--|-----|
| | | Impact area | L2 | L3 | L4 | L5 |
| Government decisions | | Quality of educational process | Definition of expected learning outcomes/ study plans/ curricular development | Improved curricula and study plans | Improved curricular flexibility | ... |
| Incentives / rewards | | | | | Smaller classes | ... |
| Expectations / requirements of stakeholders | | | | | Improved teaching materials | ... |
| Expectations / requirements of wider public | | | | | Mentoring programmes | ... |
| ... | | | | Focus on learning outcomes | Taking into account the views of employers | ... |
| ... | | | | Focus on competency based curricula | Taking into account market requirements | ... |

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Momentary / Preliminary Ideas about Social Mechanism(s) of EQA of HEIs

- E.g., **social mechanism of "Quality of educational process"**
 - not yet analysed theoretically (e.g., statistically, causally, ...)
 - much more complicated than Merton's mechanism for sure
 - to be developed: online surveys, intensive interviews, "interesting" hypothetical mechanisms, statistical modelling
 - ...
- **IMPALA** is meant to **approach and "solve"** such problems

Some Exemplary/Preliminary Ideas on Data Acquisition for IAs of EQA of HEIs

- **Methodological core: survey questions for data acquisition**
(**exemplars of first approximation!**)

What is your function/role in the HEI? [open answers, and/or multiple choice]

What is your function/role in the EQA process? [do.]

What is your motivation for taking part in that EQA (sub-)process? [do.]

What do you expect from a certain measure of the EQA process [to be chosen from the set of applied EQA measures]? [do.]

Multiple choice options are coming from, e.g., model types of action (and decision) and organisational models of HEIs.

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Ideas on Data Acquisition for IAs of EQA of HEIs

How are decisions carried out in your area? [o.a., and/or m.c.]

How are decisions carried out in the HEI as a whole? [do.]

How is the HEI organised in your area? [open answers, and or multiple choice]

How is the HEI organised in other sub-systems [to be chosen from pre-analysis]? [do.]

If you think that governance/decision processes/organisational structures should be improved, then name ...

... the shortcomings. [o.a. and/or m.c.]

... your options for improvement. [o.a. and/or m.c.]

...

Multiple choice options are coming from, e.g., model types of action (and decision) and organisational models of HEIs.

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Did you observe the event E_n [to be chosen from the set of intended effects of the EQA procedure applied]?

If your answer is 'yes': Which event C_m [to be chosen from the set of applied EQA measures = causes], in your opinion, has led to the event E_n ?

Such questions might be supplemented by questions which prove the probabilistic weight of different hypothetical causes held responsible for the effect E_n , e.g.:

Which event C_m , in your opinion, has led to the event E_n to the extent of x%?

- **What is the relevance of IA (of EQA of HEIs) for IQA of QAAs?**
- **What may be the benefits of IA and its methodology for the (I)QA of QAAs?**

ESG correlations with **Impact of EQA** (i.e., with the effects of the work of QAAs):

- **ESG 2.6 Follow-up procedures:**

“QA processes which contain recommendations for action or which require a subsequent action plan, should have a predetermined **follow-up procedure** which is implemented consistently.“

ESG correlations with **Impact of EQA:**

- **ESG 2.8 System-wide analysis:**

“QAAs should produce from time to time summary reports describing and **analysing the general findings** of their reviews, evaluations, assessments etc.“

“... **Agencies** should consider including a **research and development function** within their activities, to help them **extract maximum benefit from their work.**“

- **ESG 3.8 Accountability procedures:**

“Agencies should have in place **procedures for their own accountability.**“

“These procedures are expected to include the following: (1) A published policy for the assurance of the quality of the agency itself ... (2) ... the agency has in place **IQA procedures** which include an **internal feedback mechanism** (i.e., means to collect feedback from its own staff and council/board); an **internal reflection mechanism** (i.e., means to react to internal and external recommendations for improvement); and an **EXTERNAL FEEDBACK MECHANISM** (i.e., means to collect **feedback from experts and reviewed institutions for future development**) in order to inform and underpin its own development and improvement. ...“

MISSING: (scientific) FEEDBACK FROM IMPACT ANALYSIS!

German Council of Science and Humanities (Wissenschaftsrat – WR)

(member of the Alliance of Scientific Organizations; in regular exchange with the European Councils for Science and Technology; provides advice to the German federal government and the state (Länder) governments on the structure and development of higher education and research):

- **“Recommendations for Accreditation as a Means of Quality Assurance”**

„Secondly, a detailed **research on the effects and impacts of accreditation or [external] quality assurance does only exist in initial stages** as yet, in Germany and internationally. ... The Science Council proposes to **accompany** future reform projects of larger scope from the start **with an impact research** in order to enable readjustment on an empirical footing.”

Drs. 2259-12, 151 pages, Bremen, 25 May 2012 (translation by the author)

Some forthcoming events related to IA of EQA of HEIs:

- **EAIR 34th Annual Forum 2012**
Stavanger University, Norway (5-8 September 2012)
“The Social Contract of Higher Education“
Track 7: “Institutional research: Measuring effectiveness in higher education“
- **15th Annual Meeting of the DeGEval – Evaluation Society**
Potsdam University, Germany (19-21 September 2012)
“Evaluation - Evidence - Effects“
- **7th EQAF 2012**
Tallinn University, Estonia (22-24 November 2012)
“How Does Quality Assurance Make a Difference?“
- ...

Benefits of IA (of EQA of HEIs) for (I)QA of QAAs?

- “... agencies should follow-up on whether their procedures have an effect within the evaluated institutions. ...”

(Comet Señal et al. 2008, p. 7).

- **otherwise** it would be **absurd** to continue carrying out EQA

→ **Thesis: IA is a very important and indispensable part of the pdca-cycle of IQA of QAA**

IA contributes to ...

- ... “enlightenment“ / pragmatic rationalisation of EQA procedure and activities of QAA
 - ... “measurement“ of quality/effectivity of “products“ (i.e., EQA procedures / methods) of QAA
 - ... “measurement“ of efficiency of „products“
 - ... accountability of QAA
 - ... transparency of EQA procedure and activities of QAA
 - ... competitiveness of QAA
 - ... building of trust and quality culture in HEI-QAA-stakeholder system
 - ... professional skills
 - ... finances
 - ... organisation and administration

Summarizing I

Proposed methodology of impact analysis is based upon four major pillars:

- Approach of **microfoundation** of causal explanation/mechanism in the social sciences (social mechanisms; structural individualism; middle-range theories / ‘hypothetical system-laws’)
- **Organisation and action theories of institutional change** (e.g., evolutionary or decision-based; hierarchical or quasi-democratic)
- Different **models of causal mechanisms**
- Conception of **complete data acquisitions** from all HEI members

Summarizing II

- The proposed IA methodology will **improve** our theoretical understanding (**know-why**).
- Its **application** will **deepen** our practical knowledge (**know-how**) about EQA induced changes in HEIs.
 - learn more about HEIs' networks – vertices and nodes – of motivation, decision, institutions, action, responsibility etc.
 - be enabled to identify means for **improving the impacts of the work** (effectivity, efficiency, science-based approaches) **of QA agencies** – and this is an **essential part of IQA** of QAAs
 - ...

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Thank you very much for your attention!