

EACEA Project IMPALA

11th European Quality Assurance Forum
Ljubljana, Slovenia, 17-19 November 2016

WS 3: Friday, 11:15-12:45

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Impact Analysis of Quality Assurance in Higher Education: Theory, Practice and Policy Perspectives in Discussion

Theodor Leiber & Blazhe Todorovski



FINNISH EDUCATION EVALUATION CENTRE

Workshop-Agenda – Friday, 18 November 2016

| | |
|--------------------------|---|
| 11:15-11:25 (10 min.) | Theodor Leiber (evalag) & Blazhe Todorovski (ESU): <i>The Workshop Agenda</i> <i>Introduction to General Problems of Impact Analysis of QA</i> <i>(motivation; needs; basic concepts)</i> |
| 11:25-11:55 (20 min.) | Working Groups <i>QA and Its Impact Analysis: QA Agencies' and HEIs' Perspectives</i> |
| 11:55-12:00 (5 min.) | Theodor Leiber & Blazhe Todorovski <i>The EC-cofunded IMPALA Project and Its Methodology</i> |
| 12:00-12:20 (20 min.) | <i>Preliminary Results From IMPALA Case Studies (not contained herein)</i> |
| 12:20-12:45 (25 min.) | Discussion of the Plenum/Summary of Workshop and Outlook <i>Reports From WGs</i> <i>SWOT Analysis of Impact Analysis of QA in HEIs</i> <i>Role of Impact Evaluation of QA in HE Policy</i> |

Why Impact Evaluation of (External) QA in HEIs?

Education as a Human Right and Public Good

- 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, self-determination of quality life; 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)

Why Impact Evaluation of (External) QA in HEIs?

- Ergo: **systematic evidence-based QA** of HEI performances of **central importance**
- Ergo: **impact evaluation of QA** (as interventions) **required** (Deming cycle p-d-c-a)



Why Impact Evaluation of (External) QA in HEIs?

- More than two decades of (external) **QA**, further **ex-/intensification**
- (Some) HEIs complain about **high evaluation workload** and **evaluation costs** and **need effective and efficient QA** procedures (e.g., massification; economy measures in HE; national and global competition)
- (Some) governments complain about **high evaluation costs**

BUT

- Rather **few ex-post** impact analyses of **EQA**
- **No simultaneous impact analyses** (accompanying EQA)
- **Students, teachers, QA staff not considered** [focus on institutional leadership opinions (and peer assessments)]
- **Need for competence development** in **impact analysis** and **meta-evaluation** in **QA agencies** and **HEIs** (e.g., autonomous internal QA)



(see, e.g., Harvey & Williams 2010; Lillis 2012; Newton 2013; Shah 2012; Stensaker et al. 2011)

Impact Evaluation of QA: Basic Concepts

Working Definition of Causality

- Cause-effect (or causal) relationship: compared to the cause-event(s), the effect-event(s) occur(s) later in time; and, everything else being equal (*ceteris paribus*), the effect-event(s) would not have occurred in the same way without the said cause-event(s)
- Most plausible working definition of causality:
“C may be considered a cause of E if (and only if) it raises the probability of [the occurrence of] E [under ceteris paribus conditions]”
(Gerring, 2005, p. 169).
- Definition comprises two fundamental ideas: (1) event identified as a cause “makes a difference”; (2) causal relations of empirical world typically cannot be adequately modeled by strictly deterministic mono-causal relations – one cause determines one and only one effect – but only by multi-factorial probabilistic relationships (or causal networks) between causes and their effects (probabilistic causation)

Impact Evaluation of QA: Basic Concepts

Types of Effects: Outputs, Outcomes, Impacts

- For present purposes and in accordance with widespread usage, **short-term, mid-term and long-term effects** are differentiated; they are called **outputs, outcomes and impacts**, respectively, and are all subsumed under the umbrella term “effect”.

This is in opposition to the fact that many use “impact” as an umbrella term (as in “impact evaluation”, “impact analysis” etc.), thus undermining the conceptually preferable alternative. However, this dispute about use of concepts, which ultimately is merely a matter of definition, cannot be resolved here.



Impact Evaluation of QA: Basic Concepts

Causal Social Mechanisms



- Epistemological idea of causal networks or **“causal social mechanism”** (Gross 2009; Hedström & Ylikoski, 2010; Little, 2011; Little, 2015a; Steel, 2011) is **“that we explain not by evoking universal laws, or by identifying statistically relevant factors, but by specifying [causal] mechanisms that show how phenomena are brought about”** (Hedström, 2005, p. 24).
- “complexes of interacting individuals, [bodies and institutions] usually classified into specific social categories that generate causal relationships between aggregate-level variables. A mechanism will be said to be from the variable X to the variable Y if it is a mechanism through which X influences Y ” (Steel, 2004, p. 59). It is “the [social] pathway or process by which an effect is produced or a purpose is accomplished” (Gerring, 2007, p. 178).

Impact Evaluation of QA: Basic Concepts

Complexity and Indispensability of Impact Studies

- Basic and big obstacle to impact analysis (causal analysis) of QA in HEIs: there **complexity** of the problem: QA interventions, as a rule, do have **complex and manifold cross-effects** on different subsystems on the micro-, meso- and macro-level of HEIs (e.g., sets of intentional states of individuals; sets of psychological states of groups; organizational and institutional structures and processes). In particular, QA interventions in HEIs in total have **many different aims and purposes**, and they are in **competition and interplay** with various other causes such as changing environment; other QA procedures; changes in HEI organization; policy measures; etc. (also cf. Beerkens, 2015; Stensaker & Leiber, 2015). Therefore, e.g., **non-intended and undesirable effects and long-term effects** may occur, and, normally, none of these is easily grasped at all. In summary, it is generally very difficult to adequately model the corresponding complicated (probabilistic) cause-effect, interaction, or cross-impact network.



Impact Evaluation of QA: Basic Concepts

Complexity and Indispensability of Impact Studies

- Nevertheless, organization and understanding of any educational planning and reform, and, in the end, any social life would be impossible without causal mechanisms and attendant regularities (Phillips & Burbules, 2000, p. 92).

“Causation is one of the most important and contentious issues in social science. Any aspiration for a better social world, whether they concern the alleviation of inequities or the promotion of wealth, must explicitly or implicitly rely on beliefs about the causes and effects of government policies, social institutions, norms, or other phenomena that fall within the purview of social science” (Steel, 2011, p. 288).



Working Group(s) – 18 November 2016, 11:25-11:55 h

QA and Its Impact Analysis from the Perspective of HEIs and QA Agencies: Methodological Approaches, Experiences and Expectations

Guiding Questions all WGs (à ca. 7 minutes working time):

What is your motivation for impact analyses (of QA) in HE? About which effects of which activity, procedure or instrument would you like to learn more? Why?

Which experience do you have with impact analyses in HE? Which methods and procedures seem to be relevant in your view? Which strengths, weaknesses, opportunities and threats do you see?

How should HEIs and QA agencies deal with impact analyses of QA? Should impact analyses be carried out on a regular level (e.g., guided by regulations)? Who should be responsible, HEI-internally and HEI-externally? Which role in HEI policy do you see for QA impact analysis?

Could you imagine to carry out a methodological impact analysis? If so, please characterise your potential undertaking (e.g., methodology; procedure; intended goals; risk management).

EC-cofunded IMPALA Project and Its Methodology

- **How?** (Methodology)
- The European **IMPALA Project**
 - Partners, Case Studies and Goals
 - Research Design
 - Preliminary Results

How Impact Evaluation of (External) QA in HEIs?

- **Before-after comparison design** (and *ex-post analysis*)
Allows to 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)
Allow to 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.)
Allow to analyse goals, processes, structures, preferences, actions and institutional & programme change
- **Counterfactual self-estimation of participants** (Mueller et al. 2013)
Allows to analyse change of personal variables (intentional states) related to preferences, decisions and actions (relevant to institutional & programme change)
- **Document analyses/observations**
Allow to analyse goals, processes, structures, actions and institutional & programme change



How Impact Evaluation of (External) QA in HEIs?

5 main impact areas

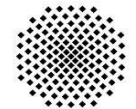
- **Learning and teaching**
- Research
- Third Mission
- Internationalisation of HE
- Inter- and transdisciplinarity of HE
- **Institutional management**
- Nationales HE and QA system
- **Satisfaction with QA processes**

Stakeholders

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



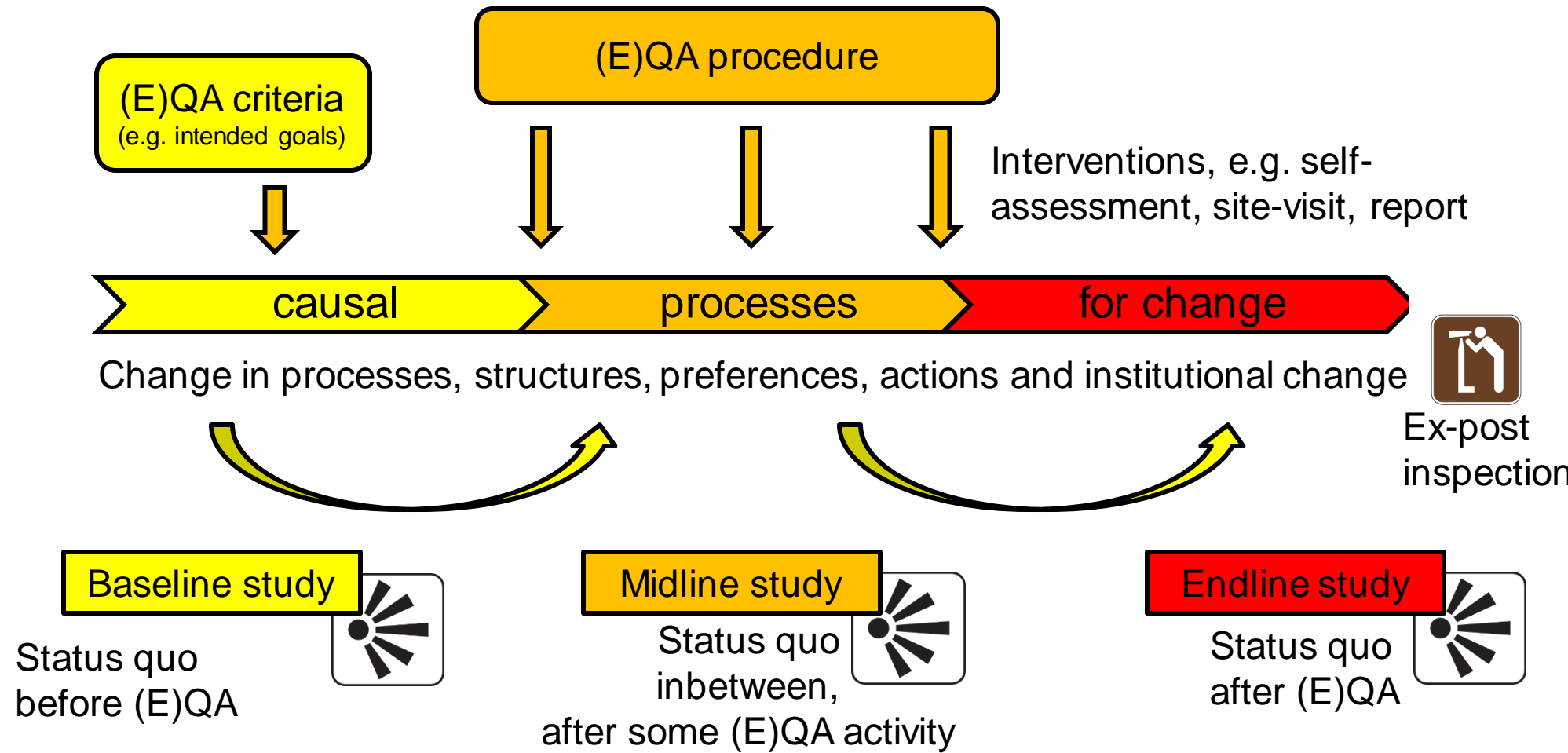
IMPALA – Partners, case studies and goals



Universität Stuttgart

| | |
|-----------------------------------|--|
| 11 institutional project partners | 4 QA agencies, 4 HEIs, further (external) experts |
| Different EQA procedures | Institutional & program evaluation, EUR-ACE program accreditation, program pre-accreditation, evaluation of program review |
| Participating stakeholders | HEI governance/staff, HEI QA, students, HEI researchers, QA agencies, (HEI policy experts) |
| Project duration | 36 months |
| Main project events | 5 internal project meetings; 2 European/international conferences; 4 international workshops; publications (10 papers/ QHE special issue; planned final publication) |
| Erasmus policy priorities | Governance, Quality Assurance |

IMPALA research design



IMPALA research design

(E)QA procedure

Baseline study

Before procedure

- Online questionnaires
- Structured interviews
- Document analysis/ observations

Midline studies

During procedure

- Online questionnaires
- Structured interviews
- Document analysis/ observations

Endline study

After procedure

- Online questionnaires
- Structured interviews
- Document analysis/ observations

Comparison of base-, mid- and endline of single case study

Comparison of different baseline studies

Comparison of different baseline studies

Comparison of different baseline studies

IMPALA online questionnaires

- **Questionnaire items – generic**
 - Course types in study programmes
 - QA instruments used in programmes
 - Alignment of examinations and learning objectives
 - Frequency of development discussions of study programmes
 - Observability of QA effects and quality improvements
 - Transparency of responsibilities
 - Attitude towards internal QA
 - Attitude towards external QA
 - Perceived attitude of leadership towards QA
 - Assessment of cost/benefit ratio of QA
 - Plans for major programme changes
 - Suggestions for QA improvement
- **Questionnaire items – individual case study**

IMPALA project plan

| Activity | Description of activity | Participants | Timeframe and Location |
|--|---|---|--|
| 1 st project meeting (kick-off) | Introduction to project Assignment of tasks Work plan Discussion of conceptual frame for methodology | All project partners (ca. 23 persons) | 05-06 Nov 2013 Mannheim (evalag) |
| EACEA project meeting | EACEA project meeting (obligatory) | evalag | 23-24 Jan 2014 Brussels |
| 2 nd project meeting | Finalising methodology | Project focus group | 10-11 April 2014 Bucharest (ARACIS) |
| European conference seminar | European conference seminar (in cooperation with ENQA) on the methodology developed | All project partners, International QA agencies; participants | 19-20 May 2014 Mannheim (evalag) |
| PAPER | Publication of a theoretical paper on methodology in reviewed journal (in German) | | April 2014 |
| PAPER | Publication of a theoretical paper on methodology in peer reviewed journal (in English) | | June 2014 |

| | | | |
|---------------------------------|---|------------------------|--|
| BASELINE STUDY | Online surveys (focus groups: members & students & QA staff & academic staff of HEI) In-depth interviews (HEI leadership) Baselines for impact analysis | 4 QA Agencies + 4 HEIs | June 2014 – Febr 2015 (depending on HEI) Each HEI |
| 3 rd project meeting | Interim meeting Stocktaking and discussion of previous results First inspection of data (baseline) for impact analysis Inductive adaptation of methodology (e.g., self-evaluation questionnaire, interviews, work plan, endline study) | Project focus group | 11-12 Dec 2014 Helsinki (FINEEC) |
| Progress report | Progress Report at the mid-point of the project life-cycle | 4 QA Agencies | March – April 2015 |
| MIDLINE STUDY | Online surveys (complete investigation: members & students of HEI) In-depth interviews Midlines for impact analysis | 4 QA Agencies + 4 HEIs | April 2014 – Jan 2016 (depending on HEI) Each HEI |

IMPALA project plan

| | | | |
|---|--|----------------------|---|
| Special Issue of "Quality in Higher Education", Vol 21/3 (2015) | Publication of seven papers on the state of the art of impact analysis in HE in a peer reviewed journal (in English) | | Jan 2016 |
| Analysis of data | Analysis of data | Project focus group | Oct 2015 – Jan 2016 |
| 4 th project meeting | Interim meeting Stocktaking and discussion of previous results Impact analysis on the basis of baseline and midline data Inductive adaptation of methodology (e.g., work plan, endline study) Planning of final conference | All project partners | 25-26 Jan 2016 Barcelona (AQU Catalunya) |
| Analysis of data (continuing) | Analysis of data | Project focus group | Jan 2016 – April 2016 |
| ENDLINE STUDY | Online surveys In-depth interviews Endlines for impact analysis | Agencies + HEIs | Dez 2015 – June 2016 (depending on HEI) Each HEI |

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|---|---|--|---|
| 5 th project meeting | Interim meeting Stocktaking and discussion of previous results (e.g., implementation of work plan) Impact analysis on the basis of baseline, midline and endline data Planning and marketing of conference | Project focus group | 26-27 April 2016 Bucharest (ARACIS) |
| Analysis of data (continuing) | Analysis of data | Project focus group | February 2016 – June 2016 |
| INTERNATIONAL CONFERENCE (in collaboration with ENQA) | Public conference to present and discuss project results | All project partners + keynote speakers + participants | 16-17 June 2016 Barcelona (AQU Catalunya) |
| PROJECT PUBLICATION | Publication based on project and conference "Impact analysis handbook" | All project partners + keynote speakers | (June –) Sept 2016 |
| Euro-Region training workshops | Four training workshops with QM managers, students, experts, and policy makers | evalag AQU Catalunya ARACIS FINEEC | Sept 2016 Germany Spain Romania Finland |
| Final report | Final Report (at the end of the contractual period) | Project focus group | Sept 2016 |

Published IMPALA outcomes so far

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For further information see <http://www.impala-qa.eu/impala/>



Further IMPALA outcomes in progress or in planning

- **Four Euro-region training workshops (three in Sept 2016, one in Autumn 2017)**
- **Impact evaluation manual (Autumn 2016)**
- **Final (Conference) publication (2017)
Special Issue in European Journal of Higher Education)**



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