

Quality Assurance for doctoral education



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Warsaw 17-18 June 2010

A demand for Quality Assurance in Doctoral (PhD) studies derives from

- The Bologna process
- Globalization and international competition
- A need for mutual trust among institutions
- Changing needs of the labour market

The Bologna concept of QA includes:

- A compliance with ENQA Standards and Guidelines
- Fitness for purpose
- Reflection of the institutional mission
- Relation to the Qualifications Frameworks
- Defining of learning outcomes
- Involvement of stakeholders

ENQA. European standards and guidelines for internal quality assurance within higher education institutions

- 1.1 Policy and procedures for quality assurance
- 1.2 Approval, monitoring and periodic review of programmes and awards
- 1.3 Assessment of students
- 1.4 Quality assurance of teaching staff
- 1.5 Learning resources and student support
- 1.6 Information systems
- 1.7 Public information

Fitness for purpose

- Professional research experience combined with personal development

- Preparation of PhD graduates to:

 - further research and academic career

 - managerial positions outside of academia

 - active role in economic and cultural development

 - leadership in the civil society

Institutional mission

Universities can decide where to strive for excellence:

- in international research
- in teaching
- in regional innovation
- in life-long learning
- in community interaction

Relation to the Qualifications Frameworks

1. Qualifications Framework for the European High Education Area –(QFEHEA : level 3)
2. European Framework of Qualifications for Life Long Learning (EQF-LL : level 8)
3. National Qualifications Framework (NQFs) level ?
4. Sectoral Qualifications Frameworks?

Learning outcomes for doctoral awards

Knowledge-based:

K1 – acquisition and understanding of knowledge at the forefront of a discipline

K2 – creation and interpretation of new knowledge (through original research)

K3 – detailed understanding of applicable techniques for research and advanced academic enquiry

Learning outcomes for doctoral awards

Research skills:

R1 – general ability to conceptualise, design and implement a project at the forefront of a discipline

R2 –make informed judgment on complex issues in specialist fields

R3 – able to communicate ideas and conclusions clearly to specialist and non specialist audiences

Learning outcomes for doctoral awards

Attitudes:

A1 – continue to undertake pure or applied research

Professional skills:

P1 – have the qualities and transferable skills
necessary for employment

Involvement of stakeholders

- Role of PHD students in programme structuring and quality assurance
- Role of employers in defining desired competencies of graduates
- Cooperation with industry, companies and other enterprises on the market
- Taking account of societal expectations

Quality of PhD studies - Eurodoc perspective

- Access & transparency (recruitment procedures)
- Supervision (supervision of supervision)
- Monitoring
- Assessment, expectations, outcomes
- Transferable skills development
- Career development
- Working conditions
- Availability of funding resources
- Mobility and internationalization

Quality of Doctoral studies

includes:

- 1. Quality of doctoral theses**
- 2. Quality of study programmes**
- 3. Quality of supervision**
- 4. Quality of students**
- 5. Quality of graduates**
- 6. Quality of environment**

1. Quality of doctorate theses

- Shall deal with a relevant issue
- Use acknowledged scientific methods
- Research should be publishable (published ?) in international peer-reviewed journals
- Possibly written in an international language

”Not having benchmark standards for doctoral work leaves too much in sometimes arthritic hands of disciplinary custom and practice”

E.J.Evans. 2006

2. Quality of study programme

1. Courses in research methods, methodology, techniques as well as in ethics applied to research
2. Advanced courses in research topics
3. Training in transferable skills
4. Introduction into scientific community
5. Thematic doctoral schools (across similar disciplines)

3. Quality of supervision

- Selection of supervisors on a basis of their research achievements and personal qualifications
- Introduction of co-supervisors
- Training of supervisors
- Supervision acknowledged as a teaching activity
- Limited number of PhD students per 1 supervisor
- Participation of supervisors from abroad

4. Quality of students

- Careful selection of candidates: admission criteria, internationally open process, accessibility
- Diversity of candidates (gender, age ethnicity, cultural tradition, social environment)
- Individual level of autonomy and responsibility

5. Quality of graduates

- Fair judgment of the doctoral theses
- Assessment of transferable skills
- Development of performance standards

6. Quality of environment

- Scientific position of the institution
- Infrastructure:
 - well equipped laboratories and libraries
 - highly qualified academic staff
 - intellectual milieu
- Budget for research (international projects, grants)
- Internationalisation

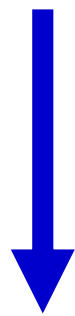
1. "We should seek to clarify what curricular and skills expectations should be required of our doctoral students, whatever their programmes of study.

2. We should also provide more guidance to Institutions on how to ensure that success in a doctoral programme does not depend excessively upon the opinion of a single individual and perhaps also upon a single piece of work".

E.J.Evans. 2006

External systems for quality assurance

Based on



Verified by

Internal systems for quality assurance

Formats of external quality assurance

1. Evaluation
 2. Accreditation
 3. Benchmarking
 4. Rankings
 5. Complementary actions
- 
- peer judgment

External evaluation

“Evaluation is a systematic determination of merit, worth and significance of something or someone using criteria against a set of standards”

Wikipedia

External evaluation

The goals:

- Minimum quality assurance
- Quality improvement
- Quality label
- Public accountability
- Information for stakeholders

The Programme Evaluation Standards

- ▼ **The utility standards** (serve information needs of intended users)
- ▼ **The feasibility standards** (ensure evaluation to be realistic, prudent, diplomatic and frugal)
- ▼ **The propriety standards** (ensure evaluation to be conducted legally, ethically with due regard for the welfare of those evaluated and affected)
- ▼ **The accuracy standards** (evaluation will reveal technically adequate information about the features of the programme)

External evaluation

Positive aspects:

- deeper insight into the institution (“mirror effect”)
- quality improvement

Negative aspects

- subjective views of evaluators
- inadequate awareness of local context
- expenses

2. Accreditation

„A self-regulatory process by which governmental, non-governmental, voluntary associations or other statutory bodies grant formal recognition to educational programmes or institutions that meet stated criteria of educational quality”

A.Wojtczak

Common aspects of external evaluation and accreditation

Can focus on:

- ▼ Institution
- ▼ Programme
- ▼ Both

Are based on:

- ▼ Institutional self-report
- ▼ Analysis of the report by experts
- ▼ Site-visit
- ▼ Final report and recommendations
- ▼ Public report

Accreditation differs from external evaluation in:

- ▼ Strict reliance on standards (education, content, staff)
- ▼ Accreditation decision combined with official certificate
- ▼ Formal consequences
 - closing of the programme/school
 - redistribution of funds

Accreditation

Positive aspects:

- Assurance of the required quality level
- Protection of students
- Public accountability
- Increase of mutual trust
- Quality improvement (?)
- Quality label (?)

Accreditation

Negative aspects:

- time needed to prepare self studies
- expenses
- uniformisation (to fit standards)
- inhibition of innovations/ petrification of the current situation
- over-bureaucratisation
- activity related to quality occurs periodically

3. Benchmarking

“It is an ongoing, systematic process, with an external standard for measuring the quality and cost of internal activities ”

Kempner 1993
modified

A method of teaching an institution how to improve

Leibfried&MacNair 1992

3. Benchmarking

Questions to ask:

- How well are we doing compared to the others?
- How good do we want to be?
- Who is doing it the best?
- How do they do it?
- How can we adapt what they do to our institution?
- How can we be better than the best?

Kempner 1993

3. Benchmarking

How to do it?

- decide if this is the correct quality improvement tool
- select processes to be analyzed and personnel
- begin with more “grass root” level and local competitors
- look for partners (web professional associations, personal contacts)
- distribute a final report internally and externally (partners)

3. Benchmarking

How to do it? (cont.)

- elaborate questionnaire and send to partners
- visit in partner`s institution (agreed !)
- analysis of differences, gaps, setting goals
- inform about results and get acceptance
- start implementing

Benchmarking Code of Conduct should be followed

3. Benchmarking

Positive aspects

- based on institutional will to change (ownership)
- facilitates sharing experience
- enhances dissemination of best practices
- promotes academic networking
- free of legal consequences

It is better to learn from sb`s mistakes than from the own ones

3. Benchmarking

Negative aspects

- applicable only to administrative or only teaching processes (?)
 - can expose institutional weaknesses
 - may lead to simple copying
 - solutions from other institutions may not work
- (but :” adapt not adopt” approach should be used)

4. Rankings

“ It is a relationship between set of items establishing a hierarchical order according to certain criteria. By reducing detailed measures to a sequence of ordinal numbers rankings make it possible to evaluate complex information..”

modified from Wikipedia

4. Rankings

Positive aspects:

- Information (?) for students, foundations, governments
- Incentives for programme administrators
- Some links to QA
- Marketing tool valued by managers

4. Rankings

Negative aspects:

- lagging reputation (maintain the established order)
- accumulate “apples & pears”
- underestimation of small, specialist programmes
- distorting effect of “star” faculty
- extra advantage for English speaking staff
- escape of students from developing countries

“Ranking is a culture of fear”

Possible criteria for ranking of PhD programmes:

- reputational surveys (opinion of experts in the field)
- quantitative data:
 - No of staff on post-doc position
 - No of publications (per-capita)
 - No of citations
 - research productivity of graduates
 - placement of graduates into faculty position

- multiattribute approach:

No of the research award winners among faculty

No of editorial board membership to top journals held by faculty

No of named position holders among faculty

Complementary actions:

- certification of laboratories
- external examiners /reviewers
- external controlling bodies
- mobility of students and staff

Internal systems for QA in Doctoral studies

- Detailed description of procedures and rules
- Guidelines for PhD students (Code of conduct, Survival kit)
- Periodic control of: procedures
 - supervision in action
 - effectiveness
 - quality of courses (students feed-back)
 - social conditions

Internal systems for QA in Doctoral studies...cont

- Evaluation of the projects and possibilities for their realization **before the start**
- Regular evaluation of the students' progress („work in progress seminars”)
- Implementation of the system(s) for data collection
- Survey on Students' satisfaction
- Tracking the graduates

Postgraduate Students Mirror Survey 2007

Gunilla Jacobson 2008

Seven scales used:

1. Introduction to postgraduate education
2. Professional development
3. Dialogue with supervisors
4. Supervision in action
5. Relevance of taught courses
6. Reflection of values
7. Study environment

Postgraduate Students Mirror Survey 2007

Gunilla Jacobson 2008

Professional development:

To what extent have your doctoral studies involved:

- Acquiring knowledge of scientific or scholarly methodology?
- Acquiring knowledge of scientific theories?
- Acquiring ability to carry out your own research independently?
- Deeper insight into research ethics?

Very little
Not at all

Not very
much

A great
deal

To a very
great extent

Postgraduate Students Mirror Survey 2007

Gunilla Jacobson 2008

Supervision in action:

To what extent have you

- Experienced shortcomings in supervision?
- Seriously considered switching supervisor?
- Have been offered supervision the desired extent?
- Found yourself in a situation of dependence on your supervisor?

Very little
Not at all

Not very
much

A great
deal

To a very
great extent

Postgraduate Students Mirror Survey 2007

Gunilla Jacobson 2008

Relevance of taught courses:

To what extent:

- The courses offered fit my wish and needs?
- The courses are relevant to the work I am doing for my thesis?
- The quality of courses is consistently high?
- The balance between then credit points for course work and my thesis is a good one?

Very little
Not at all

Not very
much

A great
deal

To a very
great extent

Postgraduate Students Mirror Survey 2007

Gunilla Jacobson 2008

Study environment:

To what extent have you:

- Experienced your study environment as creative?
- Felt as an accepted member of the research collective?
- Experienced your studies as positive and stimulatory?
- Had a feeling that you could exert influence in your department??

Very little
Not at all

Not very
much

A great
deal

To a very
great extent

Postgraduate Students Mirror Survey 2007

Gunilla Jacobson 2008

Reflection on ethics:

To what extent have your doctoral studies involved:

- Reflection on your own values?
- Greater understanding of social and cultural differences based on gender?
- Involvement in the development of society
- Deeper insight into research ethics?
- Acquiring greater understanding of people from another cultural/ethnic background?
- Broadening your general education?

Striving for excellence is the only choice Europe has

European Commission 2009

3. Benchmarking

Four kinds can be distinguished:

- **internal** (within big institution) with similar units
- **competitive** (analysis of processes in peer institution)
- **functional** (as above but the group larger)
- **generic or best-in-class**-(the broadest application to find best practices)

3. Benchmarking

Prerequisites for successful benchmarking:

- knowledge of the concept
- proper attitude of the leaders
- documenting processes
- willingness to share

3. Benchmarking

Procedures can be condensed into 4 steps:

- planning the study (which processes, which institutions)
- conducting the research (primary or secondary research)
- analyzing the data (identifying the process enablers)
- adapting the findings to the home institution

Applicability to PhD programmes:

1. Benchmarking (among comparable programmes, schools)
2. Rankings (depending on well defined criteria)
3. Accreditation (based on learning outcomes)