

# Promoting Transparency and Quality Improvement in Higher Education through International Comparative Evaluation

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## Abstract

By presenting experiences from an international comparative evaluation of BSc programmes in agricultural science and the methodology applied in the project, this paper provides a contribution to the debate on the perspectives in cross-border evaluations. The evaluation was conducted by the Danish Evaluation Institute (EVA) in 2001-2002 and published in November 2002. The evaluation covered agricultural science related BSc programmes in four European countries, namely Denmark, Germany, Ireland and the Netherlands.

The paper argues that international comparative evaluations can be used as a means to ensure transparency in higher education and simultaneously stimulate quality improvement of the evaluated objects. The paper also provides advice on how to ensure these outcomes through the design of the evaluation.

The paper concentrates on lessons learned from developing and applying common quality criteria, and the strengths and weaknesses of applying a common criteria approach when assessing quality of higher education programmes in different educational/national settings. Finally, the paper presents some of the conclusions of the evaluation and its future perspectives.

## 1. Introduction

The Danish Evaluation Institute (EVA) has recently conducted an international comparative evaluation of agricultural science related BSc programmes in four European countries. The programme oriented aims and objectives were to provide the participating institutions with a comprehensive report on the quality of their programme(s) within the field of agricultural science, to establish mechanisms for continuous quality improvement and cooperation between participating institutions and to stimulate international discussions about what constitutes good quality within higher education. Methodologically the project aimed at developing a credible methodology for international comparative evaluation of higher education programmes using a common quality criteria approach.

The evaluation was a pilot project reflecting the fact that experience of international comparative programme evaluations within higher education was at the time limited. The

extensive methodological development perspective of the evaluation and the publication of a separate report presenting the methodological lessons learned from the evaluation reflect the view of EVA that the introduction of credible methodologies and procedures should be the first step towards strengthening the international dimension in evaluation and quality assurance.

The evaluation covered agricultural science related BSc programmes offered at the Royal Veterinary and Agricultural University (Denmark), University College Dublin (Ireland), University of Hohenheim (Germany) and Wageningen University (the Netherlands). While a team of evaluation officers from EVA were responsible for the methodological and practical design and implementation of the evaluation, an international panel of experts within the field of agricultural science appointed by EVA held responsibility for the conclusions and recommendations presented in the evaluation report.<sup>1</sup> Self-evaluations conducted by representatives from the institutions and two-day site-visits at each of the institutions conducted by the international panel of experts formed the basis for the evaluation of the programmes.

This paper will present the findings from the method applied in the evaluation with a particular focus on value added and on its future perspectives. Initially, however, the paper will present some of the characteristics of recent international and European developments which constitute the background for the initiation and methodological design of the evaluation.

## **2. Background**

Quality assurance of higher education is mainly a national affair embedded in national quality assurance agencies. This is consistent with the fact that higher education around the world is highly diverse and most often regulated and financed nationally. Nevertheless important recent developments indicate that strict national approaches to evaluation and quality assurance have some shortcomings.

### ***2.1 The international context***

Recent developments in the international community for higher education entail that conditions for quality assurance are changing and that there is an increasing demand for innovation in the nationally based evaluation activities.

Firstly, increased international promotion, competition and cooperation in higher education create increased mobility among students choosing to study and work abroad. Secondly, higher education institutions face increasing competition in recruiting academic staff, research funding and collaborators due to growing international orientation. Thirdly, new modes of delivery of higher education programmes are gaining ground, e.g. franchising, distance learning, branch campuses and twinning. These new modes of delivery challenge national quality assurance agencies as they are not always regulated or controlled by the national framework of higher education that constitutes the basis for national quality assurance.

From a national perspective internationalisation of higher education has become a noticeable development that must be considered. Internationalisation and trans-national education raise a series of challenges for the national higher education systems regarding quality assurance even though the impact, for the time being, is of differing significance for agencies in Europe and globally. On the one hand, there is a growing need for higher education institutions to be able to document their quality internationally through methodologically sound and recognised procedures. Transparency in the quality of the institutions makes comparisons possible and strengthens the institutions' position in the international competition. On the other hand, both national education authorities and users of higher education programmes need visibility and comparability regarding the quality of the programmes offered to be able to regulate,

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<sup>1</sup> *Agricultural Science – International Comparative Evaluation of Agricultural Science related BSc Programmes*, EVA 2002

prioritise and make educational choices. Thus quality assurance initiatives securing international transparency are increasingly necessary.

## ***2.2 The European Context***

Besides the international developments, the European perspective on the quality of higher education has since 1999 been strongly influenced by the process of follow-up to the Bologna Declaration. In brief, the aim of the declaration is to stimulate a European system of higher education that in the terms of quality assurance ensures transparency, compatibility, flexibility, comparability, and protection. The Bologna Declaration introduces the “Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies”.<sup>2</sup> A commitment which was confirmed in the Prague-communiqué. In several European countries, including Denmark, a distinct debate has taken place after Bologna. The Bologna process has thus turned out to be a remarkable catalyst for faster development in the European debate on internationalisation and quality assurance of higher education. Examples of Bologna spin-off activities are plenty.<sup>3</sup> For national quality assurance agencies, the Bologna Declaration and its spin-off activities emphasise that there is a manifest European setting which must be taken into consideration when planning and conducting quality assurance of higher education.

EVA’s international comparative evaluation of BSc programmes within the field of agricultural science represents a direct response to the general objectives of the Bologna process and not least the specific objective of securing transparency in the quality of higher education as expressed in the Bologna Declaration and as required in a broader international perspective.

## **3. Methodology**

### ***3.1 Why a criteria based approach?***

In national evaluations of educational programmes in Denmark and elsewhere, quality is often assessed in terms of the extent to which the individual programmes achieve their own goals and comply with the legal regulations under which they operate. An approach commonly referred to as the “fitness for purpose” approach. A typical argument for the application of the fitness for purpose approach is that by evaluating the programmes against their own purpose, quality improvement rather than quality control is emphasised.

However, in an international context, the fitness-for-purpose approach has some critical disadvantages. Firstly, fitness-for-purpose has a built-in disadvantage in terms of (international) transparency. It is difficult to form an opinion from the result of a fitness-for-purpose evaluation without detailed knowledge of the educational system of a specific country. This is because a fitness for purpose evaluation only reports whether or not a program or an institution meets its own objectives. Secondly, the use of the traditional fitness for purpose approach does not enable a comparative assessment of how programmes fulfil common, identical goals. Neither does it enable an identification of comparable good practices. Thirdly, fitness for purpose gives no guarantee for students and employers that a programme is at a certain level. Again this is especially a problem for people without knowledge of the educational system of specific countries.

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<sup>2</sup> *The European Higher Education Area, Joint declaration of the European Ministers of Education Convened in Bologna on the 19th of June 1999*, [http://www.esib.org/prague/documents/bologna\\_declaration.htm](http://www.esib.org/prague/documents/bologna_declaration.htm), 1999.

<sup>3</sup> Following the paper *Systematic evaluation in an international context: A small country perspective*, presented by EVA at 24<sup>th</sup> EAIR Forum in Prague, September 2002 the following initiatives can be mentioned as examples of such spin-off activities: A project on accreditation conducted by The Association of European Universities (CRE); the project *Tuning Educational Structures in Europe* which is particularly marked by the context of the Bologna-Prague-Berlin process; *The Joint Quality Initiative* which, among other things, has illuminated the commonalities of the descriptions of Bachelor and Master degrees in different European countries; a range of pilot projects carried out by ENQA, ESIB and EUA respectively, including a pilot project on transactional evaluations; and a pilot project on mutual recognition carried out by quality assurance agencies in Denmark, Finland, Norway and Sweden.

Evaluations using predefined criteria do not have these built-in disadvantages. By using a criteria based approach a comparative dimension is ensured as the criteria establish a common framework for the assessment of the individual programmes etc. Evaluations based on predefined criteria also provide explicit statements about whether or not certain criteria are met. Thus it is easier for a person without knowledge of the specific educational context to form an opinion on the quality of a certain programme or institution.

In the international comparative evaluation of agricultural science programmes, criteria were thus applied with the aim of enhancing transparency in the framework for the assessment as well as the evaluation results.

### ***3.2 Evaluation – not accreditation***

Despite the advantages associated with a criteria based approach particularly in an international context, the often perceived disadvantages of such an approach should not be underestimated. The main reservation towards criteria based evaluation schemes, often associated with accreditation, is that they can lead to unintended harmonisation and lack of development of the evaluated object.

In this respect it must be stressed that although EVA's international comparative evaluation applied a criteria based approach it did not have an accreditation purpose nor did it result in accreditation of the evaluated programmes. This point is important and in order to avoid misunderstandings a distinction must be made between evaluation and accreditation. Accreditation has two main characteristics: it presupposes an evaluation based on explicit criteria, it is aimed at an award of a status and it signals approval. In this way accreditation is primarily an outcome of evaluation. It can certainly be argued that an evaluation which only results in "approval"/"non approval" carries a risk of jeopardising the motivation for quality improvement of the evaluated object beyond what is strictly necessary for obtaining a specific status or approval. It can also be argued that the application of very narrow criteria can have the same effect, whereas an application of criteria that are broader and more open may have a better chance of stimulating improvement. Particularly when coupled with a final identification of good examples of compliance among the evaluated objects.

For the international comparative evaluation the above considerations formed part of the basis for the way in which criteria were formulated and applied, thus the evaluation was neither formally nor in reality an accreditation. This is not to say, however, that the way in which the criteria were formulated and applied for this particular evaluation and the lessons learned from this approach would not be relevant for evaluations with an accreditation purpose.

### ***3.3 Criteria formulation***

To formulate and not least to reach an agreement on commonly relevant goals internationally is not an easy task. For the international evaluation, criteria were formulated with reference to a number of different sources. Although the criteria formulation benefited greatly from these many different sources and previous experience, it was nevertheless vital to take into account the specific conditions, which characterise an international comparative evaluation. Firstly, there are considerable differences between educational cultures, national traditions and regulatory systems within which the individual programmes operate. Secondly, the aim of developing a methodology for international comparative evaluations implied an obligation to ensure that the formulation of criteria was sufficiently flexible to allow them to be applied in other international evaluations of programmes with a similar perspective. Thirdly, variation in programme content represented a significant challenge to the development of commonly relevant criteria that would also provide space for expressing individual priorities and qualities and thus not hinder improvement.

To overcome these obstacles and to ensure a high level of common applicability and relevance, EVA developed a framework for criteria formulation. Within that framework the following demands were formulated for the criteria to be applicable:

- *Breadth*: To ensure the criteria respect specific national traditions, concerns and priorities, and will not hinder diversity, the criteria must be formulated broadly enough to allow for variations.
- *Uniformity*: The criteria should be the same for all the programmes participating in the evaluation. This ensures that the programmes are assessed on an equal basis, that the assessments are transparent and that a comparative perspective is enabled.
- *Reference to level*: In order to operate with one set of criteria, this set has to be formulated with reference to the BSc as a single level, irrespective of the variations in the nominal duration.
- *Precision*: The criteria must be precise enough to allow an assessment of how they are fulfilled by the individual programmes.
- *Internal consistency*: The set of criteria must be internally coherent.
- *Topicality*: The criteria must reflect present objectives and developments within the area of higher education in Europe.

The specific set of criteria were developed by EVA with reference to these requirements and were then approved by the institutions participating in the evaluation through a discussion with representatives from each of the programmes being evaluated. This process resulted in a set of criteria, which integrated “fitness-for-purpose” elements into a general predefined criteria set-up. The criteria are presented in the public evaluation report.

### **3.4 Evaluation process**

In accordance with EVA’s usual procedure, a team of evaluation officers from EVA was responsible for the practical and methodological planning and implementation of the evaluation, while a panel of experts - in this case international experts - was responsible for the academic quality of the evaluation, including the assessments, conclusions and recommendations presented in the published evaluation report. The five individual members of the panel were all independent of the institutions being evaluated. Four of them were invited to form part of the panel based on recommendations of national/regional experts provided by the institutions participating in the evaluation. When selecting among the recommended experts, EVA paid attention to the desired composition of the panel. In addition to including experts with different qualifications within agricultural science, EVA considered it relevant to include a representative from a typical employer of graduates in agricultural science. The fifth member of the panel, the chairperson, was chosen exclusively by EVA based on the primary criterion that this expert had to be both independent of the institutions involved in the evaluation and be from another country to those in which the programmes included in the evaluation are based.

Based on the revised set of criteria, EVA prepared a self-assessment guide in cooperation with the chairperson of the expert panel. The questions in the guide were formulated in such a way that the responses would provide the panel with the necessary information for assessing the programmes in relation to the criteria. At the same time, they were formulated in such a way that the answers would require both descriptions of, and reflections on existing practices and thereby inspiring further quality development. The self-assessment guide was submitted to the institutions participating in the evaluation and they were given two and a half months to prepare and conduct their self-assessment.

After receiving the self-assessment reports the panel of experts and the team of evaluation officers conducted a two-day site visit to each of the institutions. Each visit comprised a number of separate interviews with the different groups of stakeholders who, in one way or

another, were engaged with the programme(s) included in the evaluation. The purpose of conducting separate interviews with different stakeholder groups was to validate the content of the self-assessment reports. In other words, the interviews were used as a means to get a clear picture of the opinions, perspectives, etc. of the different stakeholders, in relation to the information provided in the self-assessment report.

Based on the documentation material from the institutions, the panel assessed the extent to which each of the programmes complied with the criteria used in the evaluation. Whenever relevant, the recommendations following the assessments included a “best/better practice perspective” in the sense that the panel recommended that the good practice(s) of one or more institution(s) in one area of operation was adopted by the others as a frame of reference when implementing the recommended changes.

#### **4. Outcome**

Generally, the approach applied in the evaluation facilitated the intended comparative perspective of the evaluation and provided a transparent and conspicuous basis for the assessment of the programmes included in the evaluation ensuring that the programmes were assessed on equal grounds. Furthermore it provided an opportunity to identify good practice in matters relevant for all the programmes involved in the evaluation. Finally, the incorporation of a fitness-for-purpose element ensured that the different national, cultural and organisational contexts in which the programmes operate were taken into account.

The evaluation focused on aspects related to core competencies, quality assurance mechanisms and internationalisation. The overall conclusion of the evaluation is that the participating institutions possess different comparative strengths and weaknesses and that the strengths and weaknesses relate to different areas. Therefore, the institutions are provided with an opportunity to learn from each other. However, the institutions also share common strengths and weaknesses. The four institutions are all strong on production sciences (animal and crop sciences) while compulsory courses in the fields of economics and social sciences are not being emphasised sufficiently at any of the institutions.

In relation to core competencies a main conclusion is that the extent to which the institutions have formulated independent educational goals for the BSc programme(s), including goals for the desired core competencies of their graduates, varies considerably across the institutions. In addition there are differences in the stages of development across the four institutions regarding the definition of goals for the desired core competencies of their BSc graduates. They have all formulated general or specific goals relating to both *professional* and *methodological* qualifications. The extent to which these goals are supported by programme content and methods of teaching and learning differs, however, considerably. A special concern about the substantial amount of overlap of courses, which seems to be characterising the programmes of all four institutions was also raised. This situation influences the level of progression and cohesion of the programme content.

Concerning quality assurance mechanisms the evaluation concluded that the extent to which strategies, goals and procedures for quality assurance are established and implemented in practice varies greatly among the institutions. This situation seems to be derived mainly from the existence of a legal framework for quality assurance in the four countries. While legal frameworks are already established - and have been for several years - in the Netherlands, Denmark and Ireland, a legal system for quality assurance has only recently been established in Germany.

Finally, as regards internationalisation the evaluation revealed that at all the institutions, written goals for internationalisation exist. Across the institutions, however, these goals differ considerably in terms of comprehensiveness and reflection and expression in practice. Procedures for and participation in student exchange programmes exist to a different degree at all four institutions. Student exchanges mainly take place within the framework of established initiatives such as the EU Socrates, Erasmus, Leonardo and Tempus programmes.

## **5. Further perspectives**

It is yet to be seen to what extent the approach developed for and applied in the evaluation and its results in the form of the recommendations provided in the evaluation report will lead to improvements of the quality of the evaluated programmes. However, the impression gained from a follow-up seminar with participation of representatives from all the evaluated programmes is promising. The participants in this seminar emphasised that the evaluation did indeed stimulate quality improvement and that a number of initiatives already had been planned. The feed-back highlighted the value of focussing on identifying examples of good practice and using the identified good practices as terms of reference in the formulation of recommendations while respecting the specific (national) context of the different programmes. Moreover, the institutions agreed that this approach made them very aware of their possibilities for cooperation and for exchanging experiences to further mutual learning and quality improvement. More importantly, they acknowledged that the formulation of recommendations based on existing – and not just “likely to be” – good practices provided motivation and inspiration for the continuous development of the programmes

The participants also emphasised that the evaluation provided a valuable contribution to a continuous reflection on one’s own practices within the individual programmes by elucidating the similarities and differences in the priorities and characteristics of each of the evaluated programmes. In so doing the evaluation fulfilled the aim of providing international transparency in higher education and its quality.

Despite the general success of the approach developed for and applied in the evaluation, there were a few criticisms. The experience from the evaluation is that the criteria developed for the evaluation did not fit each of the participating programmes equally well due to differences in the central programme characteristics. Furthermore, definitions of important terms led to discussions at the individual institutions during the self-assessment, despite the fact that they had been agreed upon in the methodological design process. Consequently, terms that were not supported by definitions led to different interpretations, which had a negative impact on the comparability of the information provided in self-evaluation reports.

These experiences illustrate, among other things, the importance of ensuring a process of criteria formulation that includes a critical assessment of the criteria to be applied in the evaluation. Such a criteria assessment was included in the international comparative evaluation of agricultural science-related BSc programmes but mainly after the application of the criteria. As an integral part of their self-evaluation the institutions were asked to critically assess the quality of the criteria developed for the evaluation. The institutions were specifically asked to assess the structuring, intelligibility, clarity, precision and consistency of the criteria. Additionally, as a consequence of the different interpretations of key terms a recommendation is to be made that explanatory documents including glossaries and precise definitions and interpretations of key terms are of paramount importance when conducting cross border evaluations that include a comparative perspective.

In summary, the experience from the international comparative evaluation of agricultural science-related BSc programmes has convinced EVA that comparative international evaluations, despite being methodologically challenging, are relevant and valuable for ensuring increased international transparency of the quality of higher education. Such evaluations may also create new ground for quality enhancement in the higher education institutions as international benchmarks for good practice are identified and applied. Furthermore, the comparative evaluation methodology is valuable for establishing a basis for comparative assessment while respecting national/educational variations between the programmes being evaluated.