

Overview of the external evaluation of four programmes in the field of ‘Ecology and Environmental Studies’ at two universities in Lithuania – Klaipėda and Vilnius.

1. Introduction

1.1. The programme evaluated at Klaipėda University is the Master’s study programme in *Ecology and Environmental Studies*. At Vilnius University, three programmes were evaluated: the Bachelor’s and Master’s study programmes in *Ecology* and the Master’s programme in *Environmental Studies and Management*. All had been previously evaluated by the same international expert group in 2007. The reports of those evaluations had led to the four programmes receiving temporary accreditation until 2010.

1.2. It is relevant that the evaluating group comprises experts in aspects of geography, chemistry, limnology and ecology related to environmental science. They were competent to evaluate the programmes in the light of their experience gained in their own countries and from accreditation processes in other EU countries (Hungary, Estonia, UK, Latvia). In the evaluations, they assessed the progress the two universities had made in responding to the 2007 reports, whilst evaluating the programmes following the new protocols introduced in 2009.

2. Summary remarks

2.1. The expert group was greatly impressed by the extent and quality of the positive changes made to improve all the programmes, in what was effectively just the past two academic years. At the same time, there are still improvements to be made, as indicated by the recommendations in the evaluation reports. These are not generally seen as ‘quick fixes’. Changes that probably require redeployment and/or retraining of staff need some time to implement. That is also true where taking up the recommendations might impact on structures and procedures beyond the units responsible for delivering the programmes. The general assessments of three of the four programmes are such as to lead to accreditation for six years, time enough to make the significant improvements that the expert group recommends. In just one programme, the Master’s programme in *Environmental Studies and Management* at Vilnius, do the recommended changes, specifically to the programme content, limit accreditation to three years. (As the recommended changes other than to programme content are common to all three Vilnius programmes, some progress should also be expected in those areas after three years.)

3. Structural issues

3.1. At the 2007 evaluations, which covered the study field at seven higher-education institutions, the expert group observed that some serious structural problems were hindering further developments and improvements of the programmes in Ecology and Environmental Studies. These are conditions in the higher-education system that jeopardise programmes and against which institutions have few if any means of defence. Hence they can be expected to affect other study programmes and all institutions to a greater or lesser extent. Actions at national level were needed to address these structural issues. To some extent the issues still remain:

3.1.1. The most significant structural issue was considered to be the need to improve the financing of university education and research. The international financial crisis and its effects on the national economy have not helped the addressing of this issue. Institutions are currently suffering reductions in funding of 25-40 per cent from 2009 levels. It is all the more encouraging, then, that the Science Studies and Business Valleys projects are associated with considerable investments in the research infrastructure of both universities, investments that are already benefiting the evaluated programmes..

3.1.2. The distinction between researchers and teachers was considered to be too strong, often leading to intolerably high working loads for “teachers”. The expert group observed that the workload of teachers was clearly too high, whilst the scientific research activity was too low. It was suggested that institutes allied to universities could do more teaching and give

other staff the time and opportunity to develop research strengths. This suggestion has not been taken up: according to the new Lithuanian Law of Science and Higher Education (which came into effect from 1st January 2010) the status of university institute no longer exists. All scientific institutes became state bodies, including institutes reorganized into Scientific Centres. Despite some improvements in scientific activity observed in the current evaluations, and the supervision of some Master's theses by Scientific Centre staff, the polarisation of academic activity still impacts on staff workloads.

3.1.3. A further general problem lay with the involvement of Lithuanian universities in the EU educational space. Many EU countries (and especially countries in the Baltic Sea region) have been intensively implementing the restructuring of university education according to the principles of the Bologna declaration. Those principles direct attention to the concepts of study content and curricula, including the division of study content and progression between Bachelor's and Master's study levels. Adoption of the Bologna principles is important also to increase student mobility, not only between countries but also between types of institution, enabling students to change when it is appropriate. Although a signatory to the Bologna declaration, Lithuania's reluctance to embrace the Bologna principles was an important factor in the assessment of the 'Ecology and Environmental Studies' programmes. The expert group has noted in individual programme reports some improvements in EU engagements – for example in programme content, and staff and student mobility. More attention to the EU dimension of studies is still needed but it is recognised that there remain severe financial constraints on staff and students spending extended periods in other EU countries.

4. ***Impacts of structural issues***

4.1. The evaluated programmes still demonstrate features that stem from the impact of those structural issues. Of particular note is the *lack of congruence with designated studies elsewhere of Lithuania's designation and specification of the study field within which the programmes are located*. (There appears to be some confusion of terminology. Klaipėda University's self-assessment document designates the study field as 'Ecology and Environmental Sciences'; Vilnius University's self-assessment document states the study field to be 'Ecology and Environmental Studies'; the pro-forma template for the reports has the study field as 'Ecology'; all agree that the degrees are in 'Ecology and Environmental Studies'.)

4.2. The various designations suggest an *undue emphasis on a subject that is itself only one of the environmental sciences*. In practice, the broader subject is interpreted as ecology ('the study of organisms in their environment'). This, in turn, puts disproportionate and, at times, almost exclusive focus on the organism and its biosphere, rather than on the whole environment. Hence, the physical environment (lithosphere, atmosphere, hydrosphere, etc) is being studied far too little for any modern environmental programme. Where this was raised as an issue in the 2007 evaluation of the programmes under current scrutiny, considerable improvements have been made. It was observed in 2007 that ecologists were very much in demand in both the state and private sectors, but the numbers graduating each year were quickly outstripping that demand and had insufficient knowledge and training in the wider environmental sciences. This has been reinforced in the current evaluations. Some state departments are currently restructuring and releasing positions, whilst expecting to recruit in the future. Discussions in Vilnius with employers strongly emphasised the employment opportunities for scientifically trained, but 'broad perspective', environmental managers, i.e. those with a clear understanding of the interdisciplinary demands of environmental management and of studying human, as well as other biotic, ecology. At both institutions, and with regard to all four programmes, graduates and employers observed that the acquisition of general managerial skills and a broader scientific focus would be just as important as specialist skills for future employment in areas such as environmental research, environmental management and environment protection.

4.3. *Programme content* is an important issue. In Lithuania, there is still no specific 'regulation' for the study field of Ecology and Environmental Sciences. The lack of a specific

regulation was a contentious issue in institutions during the 2007 evaluations; some programme designers and organisers claimed to lack a firm foundation of guidance in mounting such programmes. It is surprising that such a 'regulation' has not been promulgated. The expert group again asserts the need for the broader discipline of Environmental Science(s) to be identified as the study field, embracing a number of core subjects and providing for a range of optional specialties. Integral to this development is the formulation of standards ('benchmarking' in UK and EU parlance) as guidelines for programme structure and content at Bachelor and Master levels, and providing for progression through the levels. In the absence of such guidelines, the content is understood differently among the institutions. This has given rise to the variety of names for the study field's programmes and divergence from what is internationally understood as Environmental Science. The development of guidelines should not be the formulation of rigid regulation, but rather to secure a measure of core standardisation that would make the programmes sufficiently uniform whilst allowing for flexibility to develop the specialties appropriate to the institution's strengths and location. The absence of benchmarking is at the root of comments and recommendations about programme content in both the 2007 and 2010 programme evaluation. Committing to the Bologna process would help to focus what would be a major structural reform and curriculum review.

5. ***Other matters for attention***

5.1. *Staffing issues*, in respect of scientific activity and mobility, are to a great extent related to the structural issues detailed in 3.1.1. and 3.1.2. above. There are ways, however, in which the Faculty at Klaipėda University and the Centre at Vilnius University could better address the issues. In the 2007 evaluation at Vilnius, the expert group recommended the urgent formulation and implementation of a staff management plan and development strategy. (In fact, this was one of two compulsory requirements. In the 2010 self-assessment document, that requirement is interpreted as preparation and implementation of a staff progress strategy; the resultant action was the creation of new positions, the use of PhD students in some laboratory teaching and reduction of enrolments.) Although not now including such a formal recommendation in the 2010 report, the expert group would suggest that all universities should have such plans and strategies in place; these should cover such responsibilities, at the appropriate level – university, faculty, department, centre – as managing teaching and research workloads; scheduling periods of study leave and facilitating staff mobility; encouraging and rewarding scientific activity, publishing and pedagogic enhancement. These are matters that undoubtedly receive attention in a variety of different ways, but it was not apparent to the expert group that the issues are strategically and systematically addressed.

5.2. *Engagement with employers* could be better in all the evaluated programmes. More contacts between potential employers and students during their studies and a systematic process of securing advice from state and private sector employers (an employers' panel would be one method) could greatly benefit programme management and quality assurance.

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