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STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Šiaulių universiteto
STUDIJŲ PROGRAMOS
BIOEDUKACIJA (valstybinis kodas – 621X20036)
VERTINIMO IŠVADOS
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EVALUATION REPORT
OF *BIOEDUCATION* (**state code – 621X20036**)
STUDY PROGRAMME
at Siauliai University

Expert team:

1. **Prof. Ian Smith (team leader),** *academic,*

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4. **Ms Danguolė Kiznienė,** *representative of social partners,*

5. **Ms Gerda Šidlauskytė,** *student representative*.

Evaluation coordinator -

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Išvados parengtos anglų kalba
Report language – English

Vilnius
2016

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	*Bioedukacija*
Valstybinis kodas	621X20036
Studijų sritis	socialiniai mokslai
Studijų kryptis	edukologija
Studijų programos rūšis	universitetinės studijos
Studijų pakopa	antroji
Studijų forma (trukmė metais)	nuolatinės (2), ištęstinės (2,5)
Studijų programos apimtis kreditais	120
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	edukologijos magistras
Studijų programos įregistravimo data	2013 m. balandžio 6 d.

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INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	*Bioeducation*
State code	621X20036
Study area	Social Sciences
Study field	Education Studies
Type of the study programme	University studies
Study cycle	Second
Study mode (length in years)	Full-time (2), part-time (2,5)
Volume of the study programme in credits	120
Degree and (or) professional qualifications awarded	Master in Education Studies
Date of registration of the study programme	6 April 2013

CONTENTS

I. INTRODUCTION

1.1. Background of the evaluation process

The evaluation of on-going study programmes is based on the **Methodology for evaluation of Higher Education study programmes,** approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC).

The evaluation is intended to help higher education institutions to constantly improve their study programmes and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.*

On the basis of external evaluation report of the study programme SKVC takes a decision to accredit the study programme either for 6 years or for 3 years. If the programme evaluation is negative such a programme is not accredited.

The programme is **accredited for 6 years** if all evaluation areas are evaluated as "very good" (4 points) or "good" (3 points).

The programme is **accredited for 3 years** if none of the areas was evaluated as "unsatisfactory" (1 point) and at least one evaluation area was evaluated as "satisfactory" (2 points).

The programme **is not accredited** if at least one of evaluation areas was evaluated as "unsatisfactory" (1 point).

1.2. General

The Application documentation submitted by the HEI follows the outline recommended by the SKVC. Along with the self-evaluation report and annexes, the following additional document has been provided by the HEI before the site-visit:

No.	Name of the document
1.	List of final thesis of Master study programme "*Bioeducation*", 2015.

The *Bioeducation* Programme is a new Programme, first registered in 2013, and this is the first evaluation of the Programme. In this context, the current report will include a range of suggestions for the further development and enhancement of the Programme. The Review Team wishes to emphasise that these are intended as constructive suggestions to strengthen a

Programme which the Team found essentially satisfactory. They are not intended to imply 'critical shortcomings' in the Programme. In the Review Team's view, it is natural to identify such areas for further development and enhancement in any new higher education programme. The Team wishes to emphasise the underlying positive point that it was extremely impressed by the commitment and enthusiasm of the Programme team, and it is confident this commitment and enthusiasm will be applied fully to the further development and enhancement of the Programme.

These general remarks should be seen as applying to all six evaluation areas in the current report. As various places in the text of the report, this point may be specifically re-emphasised.

1.3. Background of the HEI/Faculty/Study field/Additional information

The "*Bioeducation*" programme is implemented by the Department of Education Systems (DES) in the Faculty of Education (EF) of Siauliai University. In the Self-Assessment Report (SAR), the qualification is described as a "Master in Education Sciences", i.e. a postgraduate degree which corresponds to the second cycle of the Bologna Process. The Programme was established in 2013. The Programme is full-time and part-time duration with 120 ECTS over a duration of two years and two and half years, respectively.

The administrative back up for the Review Team on-site was very good. All the necessary arrangements were in place to ensure that everything went very smoothly during the visit, e.g. the meeting room was ideal, each group arrived on time to meet the Review Team, coffee/tea were available, etc.

The procedure followed in writing this Evaluation Report may be summarized as follows: The review team received the SAR in July 2015. The Group members prepared a preliminary report with questions to be followed up during the visit. The entire Review Team performed the on-site evaluation on 22 October 2015.

The group members took responsibility for asking questions related on specific areas and one member was responsible for summarizing and synthesising the comments. The Team leader gave a brief exit presentation at the end of the visit. After the visit, the Review Team had a one-day meeting to discuss this and two other programmes and agree on the further development of the reports. All further discussions to complete the final draft of the report took place via e-mail to complete the final draft of the report.

1.4. The Review Team

The Review Team was assembled in accordance with the *Expert Selection Procedure*, approved by Order No 1-55 of 19 March 2007 of the Director of the Centre for Quality Assessment in Higher Education, as amended on 11 November 2011.

1. **Prof. Ian Smith (team leader),** *Professor of Education, School of Education, University of the West of Scotland, the United Kingdom.*
2. **Prof. Dr Marit Allern,** *Professor of Education, Center for Teaching, Learning and Technology, UiT The Arctic university of Norway, Norway.*
3. **Dr Maria Filomena Rodrigues Teixeira,** *Coordinator Professor, coordinator of study programmes at the Higher School of Education – Polytechnic Institute of Coimbra, Portugal.*
4. **Ms Danguolė Kiznienė,** *Self-employed consultant, former Partnerships and Projects Manager at the British Council, Advisor to the Minister of Education and Science.*
5. **Ms Gerda Šidlauskytė,** *postgraduate student in Education at Vilnius University, Lithuania.*

II. PROGRAMME ANALYSIS

2.1. *Programme aims and learning outcomes*

Programme aims and Learning Outcomes (LOs) are defined and publicly accessible (on the University website at www.su.lt and on the AIKOS system at www.aikos.smm.lt), and this is good. However, they are currently perhaps presented in a too broad way. The overall aim of the Programme appears to be to progress non-formal approaches to Bioeducation, and this should be described more precisely in a way which is understandable for all stakeholders.

The *Bioeducation* Programme is new in Lithuania. In 2013-2014, it was unique. "The *Bioeducation* Programme is more oriented to non-formal society education and the creation of conditions for self-education" (SAR, p.12). The Programme aims and Learning Outcomes are formally related to references like the European Qualification Framework and a wide range of international and national strategy documents. These features combine positively to create a Programme which is innovative and linked to important public needs.

On the other hand, within this positive overall context, given the Programme's emphasis on non-formal approaches to Bioeducation, more detail could be developed within the standard documentation for Programme aims and Learning Outcomes on the practical activities involved in progressing such non-formal approaches (see also comments in Section 2.2 below on the Programme's specialized website and Subject syllabuses). More specific reference could also be made to the importance of the Programme providing education for all age groups and social groups, e.g., families, children, young people, elderly people, people with special needs. This will further strengthen the underpinning positive links between the Programme's aims and public needs.

As will be returned to in Section 2.5 below, there are also issues on the aim of the Programme relative to the students to be recruited onto the Programme. It is important to refine approaches to recruitment so that the public benefit of the Programme, already identified as potentially very positive, can be most fully achieved.

In stating that "the aim of the Programme is to prepare education science specialists of high quality who have education of university level, who are competent in Bioeducation area" (SAR, p.5), the SAR seems to indicate that specific study background relevant to Bioeducation will be required of students. However, subsequently, the SAR (p.12) states "The pedagogues of all cycles of general education school may study in the programme and develop bioeducational activity in region alongside with the major position at school". This appears to indicate that it is possible for someone who does not have a relevant specific science background to undertake the Programme.

On this apparently ambiguous position, the Review Team considers that the *Bioeducation* Programme, as a specific second cycle of studies, should require a target group of students who have studied Biology, Natural Sciences, or similar scientific subjects, at an appropriate level. This should be fully reflected in the Programme's aims and Learning Outcomes. Specifying this target group will further strengthen the link between the Programme's aims and Learning Outcomes and the relevant academic and professional requirements of its students, and the labour market needs for these particular students. In turn, this will ensure there is complete clarity on the compatibility between the qualification offered and the type and level of studies within the Programme.

In conclusion, the Programme aims and Learning Outcomes provide a positive basis for a Programme which can meet important public needs. On the other hand, within this overall positive context, further refinement can be achieved on the systematic development of the Programme aims and Learning Outcomes. For example, it is important to clarify the overall Programme aim around non-formal approaches to Bioeducation. This must then be reflected in the curriculum.

2.2. Curriculum design

The curriculum design meets legal requirements. The Programme has 120 ECTS. There are subjects of study field (60 ECTS), subjects of another study field (30 ECTS) and master thesis (30 ECTS). The Programme is offered in full-time and part-time study modes. There are 5 subjects per semester. In total, 15 subjects must be completed before the Masters-thesis. The study subjects are spread evenly and are not repetitive. All these features provide a positive framework of overall curriculum design.

On the other hand, within this overall positive context, there are some specific aspects of curriculum design which can be considered for further development and enhancement.

For example, in the meeting with the staff responsible for the SAR, the Review Team suggested that some subjects should be taught together by a team of teachers (e.g. Bioethics and Biotechnology; Methodology of Quantitative Research and Methodology of Qualitative Research). This would not only reduce the range of subjects but also offer the possibility of elective subjects. Such developments will also ensure that the scope of the Programme is sufficient to ensure learning outcomes are reached.

When specific aspects of the Programme's curriculum are considered, particular examples are evident of the issue already discussed in Section 2.1 above on the scientific background of students. For example, the subjects of 'another study field' are: Systems of Living Organisms, Protection of Ecosystems, Genotype and Environment, Global Biotechnology and

Special Bioethics. These subjects require a specific knowledge that the students may not have. Yet, the SAR (p.13) makes clear the specialist expectations from the study of these subjects in stating "The mission of the study subjects of another field – to develop the knowledge of biology, biotechnology, ecology, environment research, bioethics that help a bioeducator to work as a mediator in the process of communication between society and biomedicine specialists". These specialist expectations are appropriate to reflect content of subjects consistent with the type and level of the studies required. The Review Team is confident that the full application of the approaches to student recruitment, as further discussed in Section 2.5 below, will address these issues of specialist scientific subject background appropriately.

More generally, some other specific aspects within curriculum design should be considered for further development to ensure full coverage of the Learning Outcomes. The staff responsible for the SAR have plans to make changes between subjects because their students have asked for changes. One of them is "to transfer the subject Technologies of E.education to the first semester" (SAR, p.15), but the staff agreed in meetings that its replacement by another subject is not yet clear. Staff said that they needed to reflect more on this. Since learning in non-formal contexts is accessible to all, the Review Team thinks it is necessary to contemplate electives subjects with contents that reflect the latest achievements in Bioeducation Studies, such us "Sustainability, Education, Gender and Citizenship" or "Biology, Culture and Art" or "Special Needs and Inclusion". Such further developments will strengthen the existing connection between the content of subjects, the type and level of studies required, and the latest achievements in relevant sciences and arts.

The Review Team considers that it is advisable to continuously develop the curriculum through teamwork, with the collaboration of the teaching staff and students, and by listening to the social partners. It is also important that the teaching staff familiarize themselves with other international Programmes of this kind to learn more, prior to further developing this *Bioeducation* Programme. Staff responsible for the SAR themselves agreed 'We like our teachers to go abroad and to see how this is done in other universities'. Basing Programme development on such collaborative approaches, fully informed by international initiatives, will further strengthen the already underlying positive scope of the Programme, and the capacity of its subject studies to meet the intended learning outcomes and reflect the latest achievements in relevant sciences most fully.

In the original SAR submitted by the University and used at the Review visit (table 5, p.13), the presentation of 'Contact hours' all appeared under 'Theory', with '0' entries under 'Practice'. Of course, this may simply have indicated that no actual full 'Practice' placements at

social partner sites are involved. However, it could also have been interpreted as meaning that no 'practical activities' are involved in subjects.

Subsequently, the University indicated that an error had been made in Table 5 in the original SAR, and a corrected Table 5 was made available to the Review Team. This now gave 'Practice' hourages for every Subject study. Presumably to confirm further that the Programme included 'practical activities', the University also subsequently provided the Review Team with a link to an English version of the Programme's 'specialized website' (which the University describes as the Programme's 'blog'). The Review Team was asked to look particularly at the 'STUDY MOMENTS' within this website for evidence of students' 'practical activities', specifically 'in the territories of social partners'.

This subsequent material certainly helped clarify for the Review Team that 'practical activities', including those involving social partners, are included in the Programme. This is an important positive feature of the Programme. However, to further highlight this importance, the Review Team still urges the University to ensure that Curriculum documentation provides an appropriately detailed presentation of how the Programme covers 'practical activities' as fully as possible.

For example, the 'STUDY MOMENTS' within the website refer to particular 'practical activities', including 'in the territories of social partners'. However, more formally, these largely photographic materials do not currently indicate explicit links between these 'practical activities' and particular parts of the Subject study fields of the Curriculum. The presentation of these materials could be usefully enhanced by providing these explicit links.

On the formal Subject study field documentation more generally, while the revised Table 5 certainly now includes 'Practice' hourages, it remains the case the individual Subject Module documents could often provide more detail on exactly what 'practical activities' are involved within these hourages. Whether under 'Study methods', 'Abstract' or 'Content of laboratory and practical sessions', it could generally be made much clearer in various Subject syllabuses precisely what the '**activities**' are, and particularly where these may involve 'the teritories of social partners'. Further clarifying such details will publicly reinforce the Programme team's obvious commitment to the importance of 'practical activities'.

All this Curriculum documentation should be reviewed to ensure that there is as clear and full a presentation as possible of the Programme's 'practical activities', including the links through these with social partners.

In conclusion, the Curriculum design generally establishes a positive framework for the Programme to meet legal requirements; provide an even, non-repetitive spread of subjects; offer content and methods of subjects appropriate to the type and level of studies, and to achieving the

intended learning outcomes. On the other hand, within this overall positive context, consideration should be given to further enhancing the systematic development of the strategic connection between the overall aim (discussed in Section 2.1, i.e. the 'non-formal' aim of the Programme), and 'Curriculum Design'. This should include the Curriculum reflecting the need for relevant specialist scientific background, important elective study opportunities, and a full range of practical activities.

2.3. Teaching staff

The teaching staff is qualified (they all have PhD degrees) and are specialized on the study field and other study fields of the *Bioeducation* Programme. Out of 9 lecturers, there are 3 Professors and 6 Associate Professors. This is a positive underpinning staff basis for the Programme. In the context of checking that the Programme meets all legal requirements for second cycle study programmes, the Review Team drew the attention of University staff to the need to ensure that "*no less than 20% of major study field subjects volume has to be taught by teachers holding a Professors academic degree*".

Formally, the qualifications of the teaching staff are adequate to ensure Learning Outcomes. Their research interests are usually related to the academic disciplines they teach. Programme staff generally demonstrate a positive commitment to developing their research activities. On the other hand, within the overall context of this general positive commitment, staff need to give particular focus to further strengthening the level of their published research output. Scholarly articles tend to be published in Siauliai University's own publications, e.g. Teacher Education, Journal of Young Scientists, Social Research, or, at most, in the Journal of Baltic Science Education. Staff should be attempting to publish in more widely prestigious international academic journals, including English language journals. Of course, the Review Team recognises the challenges in achieving these types of publications in a highly competitive international academic publishing environment.

The number of the teaching staff is adequate to ensure Learning Outcomes (LO), and this is good. However, on one particular issue, staff perhaps need to focus more on practical skills of science communication for public audiences.

There was no staff turnover in 2013-2014.

A number of staff members are particularly active in professional development, academic exchanges and participation in conferences. However, in the SAR, professional development seems more of an individual effort, rather than the result of a planned institutional approach. Not all of the teaching staff appear to have as strong a record of professional development activities.

On the other hand, it is good that the SAR is self-critical about the need to 'increase the internationality' of the Programme, including increasing the number of lecturers from foreign universities involved in the Programme, and the number of its own lecturers participating in Erasmus international exchanges. This will provide a very positive way of further enhancing the Programme.

However, on English language capacities of Programme staff, the Review Team judged from its various meetings with staff that the clear majority of staff are not comfortable using spoken English, preferring to rely on interpretation into Lithuanian. This suggests there is a wider need for staff development on underlying English language competences, not only those relating to specialist academic writing. Of course, the Review Team recognises this is a challenge for the wider Lithuanian higher education community, and the issue is not peculiar to this particular Programme. The Review Team expects that the Programme staff will give appropriate focus to this as an area for further personal and professional development, thus enhancing their own professional competences and the positive impact of these on the Programme.

2.4. Facilities and learning resources

The premises for subject studies are generally adequate, although the Review Team recognised that further planned investment in upgrading some of the Faculty premises they observed will be a much needed enhancement of the learning and teaching environment. Of course, Programme staff clearly indicated to the Review Team that plans for this further investment were in place.

The general University Library is new, modern and very impressive, although the Programme staff should work fully on presenting this as a key high-profile resource central to student provision. The students have good access to databases and Moodle.

The HEI has its own specific resources for students to practice, such as the Nature Museum, the Botanical Gardens and a Laboratory of Research Centre of Biological Researches. The Review Team was told that students of this Programme only use the Nature Museum and the Botanical Gardens extensively. The Review Team understood that use of the Laboratory of Research Centre of Biological Researches was confined to some limited demonstrations. The Review Team would expect more use of such Laboratory facilities by Masters students engaging in specialist scientific work relevant to Bioeducation Studies. On the other hand, staff clearly stressed the importance of the Nature Museum and the Botanical Gardens to the Programme, and obviously valued these resources highly.

While recognising the very enthusiastic commitment shown by staff in developing the Nature Museum and the Botanical Gardens to their current levels, the Review Team urges continual investment by the University in these facilities to ensure they reach best-practice international standards. This will ensure the continuing enhancement of the positive impact these resources already have on student experiences during the Programme.

2.5. Study process and students' performance assessment

According to SAR the admission requirements are clear, well-founded and publicly available. The requirements are based on a competitive score using the mean of undergraduate grades, with additional points linked to the relevance of previous fields of study, and relevant previous research outputs. Entrants who graduated from another study field or from non-university education institution have to attend additional courses before the admission. Admission requirements are publicly available on the University website (www.su.lt).

It is a positive feature that these general aspects of admission approaches are delineated. However, as already suggested in Sections 2.1 and 2.2 above, further development should take place on refining the admission requirements in relation to the science background of students.

As it is stated in the syllabuses most of the subjects require as prerequisites having finished another subject or several subjects. Some subjects (Methodology of Quantitative Research, Education for Career) require subjects that are taught in the same semester. Global Biotechnology requires as a prerequisite Biochemistry and General Genetics. These subjects are not taught in the Programme. There are no such courses in the supplementary subjects either. According to students, the students without biology background have difficulties in reaching the required level of skills in these subjects.

Therefore, the Review Team judges that entrance qualifications for the Programme should be revised to require students to have studied Biology, Natural Sciences, Environmental Engineering, or similar scientific subjects, at an appropriate level.

Moving from entrance qualifications to the wider study process, generally the organisation of the study process ensures an adequate provision of the programme and the achievement of the learning outcomes, and students are encouraged appropriately to participate in research and research activities.

On assessment, generally the weights of each task for final grades of the subjects are clearly defined. Overall, this presents an assessment system of students' performance which is clear and adequate.

On the other hand, further development is appropriate in refining the presentation of ''Non-traditional tasks'' within assessment. In some syllabuses (Methodology of Quantitative

Research, Systems of Living Organisms, Protection of Ecosystems, Genotype and Environment, Technologies of E-education, Management of Bioeducational Projects), the individual work plan has a final "Non-traditional task" with a weight for the end of syllabus grade. However, in the section on Assessment of knowledge and skills, all the tasks are clearly defined (without a specific indication that one of these is being defined as a 'Non-traditional task', and the tasks given generally seem 'traditional'). Therefore, it is not clear what is being presented as a "Non-traditional task". This kind of confusion should be eliminated when further refining enhanced Programme documentation.

On "Non-traditional tasks", practical fieldwork may be particularly relevant. The students and the teachers on the Programme should customise projects to the Nature Museum and the Botanical Garden, involving different public groups such as children, adolescents, adults, elderly, and have specially designed programmes for families. More widely, in order to maintain and develop the strong connection between fieldwork and study, the social partners should take as full a part as possible in the development of the Programme's approach to 'Non-traditional task' activities and the assessment of these. This should be part of a full role for social partners in Programme development (see Section 2.6 below). The Review Team was impressed in meeting a wide range of varied social partners, all clearly committed to the Programme. This commitment provides a very positive basis for further enhancing the use of ''Non-traditional tasks'' within assessment.

Apart from these specific aspects relating to 'Non-traditional tasks', more generally the assessment system of students' performance is appropriately clear, adequate and publicly available.

For example, this extends to the assessment of the master thesis. As a new Programme, only a small number of students have already graduated, and therefore completed the master thesis. However, it is clear from the SAR (see p. 27, par.98-102) that comprehensive and appropriate approaches to the master thesis are in place, including on assessment. For example, these draw heavily on existing general Faculty regulations, and will therefore be based on well-established practices. These practices include clear provision for the roles of a reviewer and 'qualification commission' in final assessment of the thesis. The SAR (par.99) also emphasises the importance of the topics for the thesis relating to 'the issues proposed by social partners'. The social importance of master thesis topics was confirmed when the Review Team met a graduate who emphasised the social impact of her thesis topic.

According to subject syllabuses almost all the subjects include not only Lithuanian but also foreign literature. Some of the subjects (Systems of Living Organisms, Protection of

Ecosystems) may need more foreign literature, but this is in the overall positive context of syllabuses generally encouraging students to engage with international publications.

In the meeting with students, they reported easy access to teachers for feedback on work. More generally, the Review Team understands that 'regular academic, non-academic, social and other support' is provided to students throughout the Programme, and that this support can involve a range of University staff (e.g., see SAR, par.88, p.25). These are all positive features in relation to student support.

As it is stated in the SAR, students do not currently participate in the mobility programmes although the surveys show the interest in short-term financed mobility programmes. The main reasons for such results are indicated as students' employment, family, and under-age children, which make it particularly difficult for students to consider the current type of international mobility programmes.

However, the Faculty searches for new forms of mobility programmes. "Since 2014, according to Erasmus Plus programme, it has been planned to promote the Programme students to participate in short-term summer courses (the duration of activity 3-4 weeks), in intensive programmes (the duration of activity 2-6 weeks), which might be acceptable for the second cycle students" (SAR, p.27).

The Review Team fully appreciates the difficulties the Programme team faces in finding students who can reconcile current mobility programme patterns with financial, employment, and family commitments. The Review Team was impressed by the obvious desire of Programme staff to enhancing students' international experiences by identifying new, creative forms of mobility programmes.

2.6. Programme management

The quality assurance is regulated by a number of internal documents among them: "The Conception of System of Internal Quality assurance of Siauliai University, which represents the publicity/implementation of quality values in the context of dialogue culture through scientific knowledge, study process, and liberal environment" (SAR, p.29).

The responsibility for quality management is allocated at several levels: University level, Faculty level, Education Department level, Programme Committee level and Teaching staff level.

University level (Senate, Rector's Office and Vice-Rector of Studies, Council of Strategy and Quality Management and Studies Department, etc.) approves new programmes, is responsible for quality assurance strategy, collects and stores information. At the Faculty level (Faculty Council, Study Programmes Assessment Committee of Education Sciences) they make

decisions about the renewal of study programmes, they certify programmes of study subjects, they analyse employers and students needs and interests. At the Department level (Head of Study Programme, Study Programme Committee), "manages the work of Monitoring Group" (SAR, p.29), they are responsible for the Programme implementation and monitoring.

The above details indicate a comprehensively developed institutional approach to quality management. However, at the level of the specific Programme, despite these formal statements of various roles and responsibilities within the institution, the Review Team thinks it is crucial that a key continuing position is undertaken by clearly-identified Programme Leader, very committed to the Programme, and in a publicly-recognised high profile role. This role will underpin the continuing development and enhancement of the Programme.

The quality assurance responsibility is certainly allocated among several layers of management at the University. The Programme Committee and Centre of Quality Management collect information and data on the Programme implementation and monitor results. They use questionnaires, round-table discussions, focus groups and feedback surveys after the course completion. Lecturers perform yearly self-assessment.

Therefore, in general terms, apart from the specific comments on fully ensuring an appropriate Programme Leader role, the Review Team sees evidence of a broadly comprehensive University system for using the outcomes of internal and external evaluations for the continuing improvement of the Programme, thus achieving internal quality assurance measures which are effective and efficient.

On stakeholder involvement specifically, the SAR indicates that the Career Centre in Non-Academic Activity Council is responsible for maintaining social partner networks. SAR (p.29) reports that the Programme Committee "organizes the surveys of students, lecturers, graduates and employers (together with Centre of Quality Management)".

More regular meetings with social partners and students have been indicated as an area for improvement in the SAR. This indicates good self-evaluation by the Programme team. The Review Team would certainly urge the Programme staff to involve social partners and students as fully as possible in discussions on the ongoing development and enhancement of the Programme. As already mentioned in Section 2.5 above, the Review Team was impressed by the wide range of social partners, all clearly committed to the Programme. This use of these social partners will ensure the continuing role of stakeholders in evaluation and improvement processes.

In conclusion, as mentioned above, the *Bioeducation* Programme would benefit if the Programme Leader has a significant responsibility, full knowledge about the specificity of the Programme, and a clear, high-profile role. However, the Review Team would emphasise that

they see this as a particular enhancement action point (although a very important one) within an overall institutional approach to quality assurance which has clearly been thoroughly developed.

III. RECOMMENDATIONS

1.   Programme aims and learning outcomes

- The overall aim of the Programme to progress non-formal approaches to Bioeducation should be described more precisely in a way which is understandable for all stakeholders.

- As a specific second cycle of studies more oriented to non-formal society education, the *Bioeducation* Programme's aims and Learning Outcomes should provide more detailed focus on practical activities.

- It is also important that the Programme's aims and Learning Outcomes fully address preparing students to provide education for all age groups and social groups, e.g., families, children, young people, elderly people, people with special needs.

- The Programme should require a target group of students who have studied Biology, Natural Sciences, or similar scientific subjects, at an appropriate level, thus strengthening the link between the qualifications of the Programme's students and the labour market needs for them as graduates of the Programme.

2.   Curriculum design

- Any further development of the Programme's curriculum on 'preparation for non-formal education' should be progressed through teamwork and collaboration of teaching staff and students, also by listening to the social partners.

- It is important to transfer the subject Technologies of E.education to the first semester, but replace this subject with another subject. This should be seen as an opportunity to contemplate electives subjects, such us "Sustainability, Education, Gender and Citizenship" or "Biology, Culture and Art" or "Special Needs and Inclusion".

- The possibilities for elective subjects should also be increased by considering a reduction in the range of existing subjects, e.g. by teaching certain course together (e.g. Bioethics and Biotechnology; Methodology of Quantitative Research and Methodology of Qualitative Research).

- The Programme's curriculum should provide as full a range as possible of practical activities to prepare students for delivering 'non-formal' approaches to Bioeducation.

- The Programme's curriculum should also ensure that students develop appropriate specialist scientific knowledge relevant to Bioeducation.

3. Teaching staff

- University staff need to ensure that the Programme meets the legal requirement that "*no less than 20% of major study field subjects volume has to be taught by teachers holding a Professors academic degree*".

- The Programme needs a coherent, overall professional development plan for teaching staff. This should include full support for staff in achieving publication in prestigious international academic journals, and in strengthening their English language competence, both generally and for international publication specifically.

- The Programme needs an increase in internationalisation, e.g. inviting lecturers from other foreign universities; an increase in the number of the Programme lecturers participating in Erasmus lecturers exchange programme.

4. Facilities and learning resources

- The Library is a high quality resource for the University, and Programme staff must do everything they can to ensure maximum use of the Library by students.

- The Nature Museum and the Botanical Gardens need continual investment by the University in these facilities to ensure they reach best-practice international standards.

- The Laboratory of Research Centre of Biological Researches should be available for fuller use in some subjects of the Programme.

5. Study process and student assessment

- The entrance qualifications for the Programme should be revised to require students to have studied Biology, Natural Sciences, or similar scientific subjects, at an appropriate level.

- In addition, the possibility of introducing supplementary subjects should be considered if a Programme course require specific prerequisites, and there remain students without sufficient specialist biology background who are having difficulties in reaching the required level of skills in these courses (eg. Global Biotechnology).

- The students and the teachers on the Programme should customise projects to the Nature Museum and the Botanical Garden, involving different public groups such as children, adolescents, adults, elderly, and have specially designed programmes for families.

- In order to maintain and develop the strong connection between fieldwork and study, the social partners should have as full involvement as possible in the development of the Programme.

- The Programme should continue to look for all appropriate possibilities on international mobility for the students, including short-term financed programmes more suitable for students with employment and family responsibilities.

6. Programme management

- The Programme will benefit from identifying more explicitly an individual Programme Leader with significant responsibility and a clear, high-profile role.

- There should be regular and frequent meetings of the Programme Committee with Students and Social Partners.

IV. SUMMARY

1. Programme aims and learning outcomes

The overall aim of the *Bioeducation* programme is directed to preparing students to deliver non-formal approaches to Bioeducation. This should be described more precisely in a way which is understandable for all stakeholders.

Details within Programme aims and Learning Outcomes (LOs) should focus fully on the practical activities involved in the Programme, and how its students are prepared to deliver education experiences to all age groups and social groups, including families, children, young people, elderly people, and people with special needs.

More specifically, the Review Team thinks it is important that the Programme's target group of students should have a study background in Natural Sciences, Biology, or similar scientific subjects, at an appropriate level.

2. Curriculum design

The coherence of the Programme will be strengthened through demonstrating a more explicit and sustained strategic connection between curriculum design and the overall aim of the Programme.

The curriculum should be subjected to continuing, further internal evaluation and review, progressed through teamwork and collaboration of teaching staff and students, and also social partners. This should include exploring possibilites for the inclusion of electives subjects, such us "Sustainability, Education, Gender and Citizenship" or "Biology, Culture and Art" or "Special Needs and Inclusion", and the possibilities of certain existing courses being taught together (e.g., Bioethics and Biotechnology; Methodology of Quantitative Research and Methodology of Qualitative Research).

The curriculum should also ensure that students gain experience in as full a range as possible of practical activities to prepare them for delivering 'non-formal' approaches to Bioeducation, and also develop appropriate specialist scientific knowledge relevant to Bioeducation.

3. Teaching staff

The HEI should develop a more coherent and strategic commitment to supporting the development of the Programme's staff. This should address their competences and opportunities to engage in research, especially at an international level leading to publication in prestigious international journals (including English language journals). For this, it will be necessary to strengthen their English language skills. It is also important to increase the number of the Programme lecturers participating in Erasmus mobility, in order to make contact with similar Programmes and learn more about them.

4. Facilities and learning resources

The Library is a high quality resource for the University, and Programme staff must do everything they can to ensure maximun use of the Library by students.

The University also owns a Nature Museum and a Botanical Gardens which are available to the Programme and students. However, strategic priority should be to invest in their continuing development in order to further enhance the quality of teaching and learning in a Programme that prepares to the non-formal education. In addition, it is important that the Laboratory of Research Centre of Biological Researches can be used fully in some practical and laboratory activities of the Programme.

5. Study process and students' performance assessment

The Programme staff should continue to work on further clarifying the prerequisites for the students' admission to the *Bioeducation* Programme. This Programme requires students with a relevant science background. The most effective time for addressing some necessary prerequisites for certain subject courses is at admission to the Programme, rather than subsequently.

The Faculty and the Programme staff should further explore short-term placement options within existing bipartite agreements so that Programme student participation in international student mobility programmes can be increased.

6. Programme management

The Faculty and Programme team needs to clarify who is ultimately responsible for monitoring the quality of the Programme. The Programme will benefit from explicitly identifying a Programme Leader with significant responsibility and a clearly-defined, high-profile role. The HEI also needs to implement regular and frequent meetings with social partners and students.

V. GENERAL ASSESSMENT

The study programme *Bioeducation* (state code – 621X20036) at Siauliai University is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation of an area in points*
1.	Programme aims and learning outcomes	2
2.	Curriculum design	2
3.	Teaching staff	2
4.	Facilities and learning resources	2
5.	Study process and students' performance assessment	2
6.	Programme management	2
	Total:	**12**

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

Grupės vadovas: Team leader:	Prof. Ian Smith
Grupės nariai: Team members:	Prof. Dr Marit Allern
	Dr Maria Filomena Rodrigues Teixeira
	Ms Danguolė Kiznienė
	Ms Gerda Šidlauskytė

ŠIAULIŲ UNIVERSITETO ANTROSIOS PAKOPOS STUDIJŲ PROGRAMOS
BIOEDUKACIJA **(VALSTYBINIS KODAS – 621X20036)**
2016-04-27 EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-102 IŠRAŠAS

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Šiaulių universiteto studijų programa *Bioedukacija* (valstybinis kodas – 621X20036) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	2
2.	Programos sandara	2
3.	Personalas	2
4.	Materialieji ištekliai	2
5.	Studijų eiga ir jos vertinimas	2
6.	Programos vadyba	2
	Iš viso:	12

* 1 - Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)
2 - Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)
3 - Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)
4 - Labai gerai (sritis yra išskirtinė)

<...>
IV. SANTRAUKA

1. Programos tikslai ir studijų rezultatai

Bendras Bioedukacijos programos tikslas – parengti studentus vykdyti neformalias bioedukacijos programas. Šį tikslą reikėtų suformuluoti tiksliau, kad jį suprastų visi socialiniai dalininkai.

Programos tikslų ir studijų rezultatų formuluotė turėtų pilnai apimti praktinę veiklą, vykdomą studijuojant programą, ir paaiškinti, kaip studentai rengiami perteikti edukacinę patirtį visoms amžiaus ir socialinėms grupėms, įskaitant šeimas, vaikus, jaunimą, pagyvenusius asmenis ir specialiųjų poreikių turinčius asmenis.

Konkrečiau, vertinimo grupės nuomone, svarbu, kad norintys studijuoti programą būtų baigę atitinkamo lygmens gamtos mokslų, biologijos ar panašių mokslų studijas.

2. Programos sandara

Siekiant didesnio programos nuoseklumo, reikėtų aiškesnio ir ilgalaikio strateginio ryšio tarp programos sandaros ir bendrojo programos tikslo.

Taip pat reikėtų tolesnio tęstinio vidinio programos turinio vertinimo ir peržiūros, suvienijus jėgas ir bendradarbiaujant su dėstytojais, studentais ir socialiniais partneriais. Reikėtų išanalizuoti galimybes įtraukti pasirenkamuosius dalykus, pvz., Tvarumo, edukacijos, lyties ir pilietiškumo arba Biologijos, kultūros ir meno, arba Specialiųjų poreikių ir įtrauktis dalykus, ir sujungti tam tikrus dėstomus dalykus (pvz., Bioetiką su Biotechnologija; Kiekybinių tyrimų metodologiją su Kokybinių tyrimų metodologija).

Programos turinys taip pat turėtų užtikrinti, kad studentai įgytų kiek įmanoma įvairesnės praktinės veiklos patirties ir pasirengtų vykdyti neformalųjį bioedukacijos ugdymą, taip pat įgytų atitinkamų specialiųjų mokslinių bioedukacijos žinių.

3. Personalas

Universitetas turėtų prisiimti nuoseklesnį strateginį įsipareigojimą remti programos personalo profesinį tobulėjimą. Jis turėtų apimti kompetencijos ugdymą ir galimybes vykdyti tyrimus, ypač tarptautiniu lygiu, ir skelbti tyrimų rezultatus prestižiniuose tarptautiniuose žurnaluose (įskaitant žurnalus anglų kalba). Todėl reikia gilinti anglų kalbos mokėjimo žinias. Taip pat svarbu didinti „Erasmus" judumo programoje dalyvaujančių dėstytojų skaičių, siekiant užmegzti ryšius su panašiomis programomis ir daugiau apie jas sužinoti.

4. Materialieji ištekliai

Biblioteka yra Universiteto aukštos kokybės išteklius, todėl programos personalas turėtų daryti viską, ką gali, kad užtikrintų, jog studentai maksimaliai naudotųsi jos teikiamomis galimybėmis.

Universitetui priklauso Gamtos muziejus ir Botanikos sodas, kuriais gali naudotis programos studentai. Tačiau vienas iš strateginių prioritetų turėtų būti investavimas į nuolatinį jų gerinimą, siekiant toliau didinti mokymo ir mokymosi kokybę studijuojant programą, rengiančią neformaliajam ugdymui. Be to, svarbu visiškai išnaudoti Biologinių tyrimų mokslinio centro laboratorijos galimybes, atliekant tam tikras programos praktines ir laboratorines užduotis.

5. Studijų eiga ir jos vertinimas

Programos personalas turėtų ir toliau stengtis aiškiau nustatyti reikalavimus studentams, siekiantiems studijuoti Bioedukacijos programą. Tai turėtų būti atitinkamos mokslo krypties žinios. Efektyviausia būtų nustatyti stojimo reikalavimus, o ne spręsti šį neatitikimą vėliau.

Fakultetas ir programos personalas turėtų išanalizuoti trumpalaikių stažuočių galimybes pagal esamus dvišalius susitarimus ir padidinti tarptautinėse studentų judumo programose dalyvaujančių studentų skaičių.

6. Programos vadyba

Fakultetas ir programos vykdytojai turi aiškiai nustatyti, kas galiausiai atsakingas už programos kokybės stebėseną. Programai būtų naudingiau, jei būtų aiškiai nurodytas vienas atsakingas programos vadovas, atliekantis aiškiai apibrėžtas ir svarbias funkcijas. Universitetas taip pat turi rengti reguliarius ir dažnus susitikimus su socialiniais partneriais ir studentais.

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III. REKOMENDACIJOS

1.   Programos tikslai ir studijų rezultatai

• Bendras programos tikslas – vystyti neformalias bioedukacijos programas – turėtų būti tiksliau aprašytas siekiant, kad būtų suprantamas visiems socialiniams dalininkams.

• Kaip specifinės antrosios studijų pakopos programos, labiau orientuotos į neformalųjį visuomenės ugdymą, *Bioedukacijos* studijų programos tikslai ir studijų rezultatai turėtų būti labiau nukreipti į praktinę veiklą.

• Taip pat svarbu, kad programos tikslai ir studijų rezultatai būtų suformuluoti taip, kad pilnai atspindėtų siekį parengti studentus ugdyti visas amžiaus ir socialines grupes, pvz., šeimas, vaikus, jaunimą, pagyvenusius asmenis, taip pat specialiųjų poreikių turinčius asmenis.

• Į programą turėtų būti priimami studentai, baigę atitinkamo lygmens biologijos, gamtos mokslų ar panašių mokslų studijas, taip stiprinant ryšį tarp programos studentų kvalifikacijų ir darbo rinkos poreikių šios programos absolventams.

2. Programos sandara

- Toliau tobulinti studijų programos turinį dėl „rengimo neformaliajam ugdymui" reikėtų galudžiai bendradarbiaujant dėstytojams, studentams ir atsižvelgiant į socialinių partnerių nuomonę.

- Svarbu perkelti *E. švietimo technologijų* dalyką į pirmąjį semestrą, o vietoj jo įtraukti kitą dalyką. Taip gali būti sukurta galimybė įvesti pasirenkamąjį dalyką, pvz., *Tvarumas, edukacija, lytis ir pilietiškumas* arba *Biologija, kultūra ir menas*, arba *Specialieji poreikiai ir įtrauktis*.

- Reikėtų padidinti galimybę rinktis pasirenkamuosius dalykus mažinant esamų dalykų skaičių, pvz., jungiant kai kuriuos dalykus (pvz., *Bioetiką* su *Biotechnologija*; *Kiekybinių tyrimų metodologiją* su *Kokybinių tyrimų metodologija*).

- Į programos turinį reikėtų įtraukti kiek įmanoma daugiau praktinės veiklos, siekiant parengti studentus įgyvendinti „neformalųjį" požiūrį į bioedukaciją.

- Programos turinys taip pat turėtų užtikrinti, kad studentai įgytų atitinkamų specialiųjų mokslinių bioedukacijos žinių.

3. Personalas

- Universiteto personalas turi užtikrinti, kad programa atitiktų teisinį reikalavimą, pagal kurį „*ne mažiau kaip 20 procentų krypties dalykų apimties turi dėstyti profesoriaus pareigas einantys dėstytojai*".

- Turi būti parengtas nuoseklus bendras programos dėstytojų profesinio tobulėjimo planas. Jame turėtų būti numatyta visiška parama dėstytojams, siekiantiems skelbti savo darbus prestižiniuose tarptautiniuose akademiniuose žurnaluose ir tobulinti savo anglų kalbos žinias – tiek apskritai, tiek konkrečiai straipsniams tarptautiniuose leidiniuose skelbti.

- Reikia didinti programos tarptautiškumą, pvz., kviesti užsienio universitetų dėstytojus, didinti „Erasmus" dėstytojų mainų programose dalyvaujančių studijų programos dėstytojų skaičių.

4. Materialieji ištekliai

- Biblioteka yra Universiteto aukštos kokybės išteklius, todėl programos personalas turėtų daryti viską, ką gali, kad užtikrintų, jog studentai maksimaliai naudotųsi jos teikiamomis galimybėmis.

- Universitetas turėtų nuolat investuoti į Gamtos muziejų ir Botanikos sodą, siekdamas užtikrinti, kad jie atitiktų tarptautinius geriausios praktikos standartus.

- Dėstant kai kuriuos programos dalykus, reikėtų plačiau naudotis Biologinių tyrimų mokslinio centro laboratorija.

5. Studijų eiga ir jos vertinimas

- Reikėtų peržiūrėti stojančiųjų į programą kvalifikacijas ir įtraukti reikalavimą, kad studentai būtų baigę atitinkamo lygmens biologijos, gamtos mokslų ar panašių mokslų studijas.

- Be to, reikėtų apsvarstyti, ar įtraukti papildomų dalykų, jei numatyti konkretūs išankstiniai programos dalyko reikalavimai ir yra studentų, neturinčių pakankamai specialiųjų biologijos žinių, todėl susiduriančių su sunkumais studijuojant atitinkamus dalykus (pvz., *Globaliąją biotechnologiją*).

- Programos studentai ir dėstytojai turėtų pritaikyti projektus Gamtos muziejui ir Botanikos sodui, įtraukdami skirtingas visuomenės grupes, pavyzdžiui, vaikus, paauglius, suaugusiuosius, pagyvenusius asmenis, taip pat parengti specialias programas šeimoms.

- Siekdami išlaikyti ir plėtoti stiprias sąsajas tarp praktinės veiklos ir studijų, socialiniai partneriai turėtų kaip įmanoma daugiau dalyvauti rengiant programą.

- Programos vykdytojai turėtų ir toliau ieškoti visų tinkamų studentų tarptautinio judumo galimybių, įskaitant trumpalaikes finansuojamas programas, labiau tinkančias dirbantiems ir šeimas sukūrusiems studentams.

6. Programos vadyba

- Programai būtų naudingiau, jei būtų aiškiai nurodytas vienas atsakingas programos vadovas, atliekantis aiškias ir svarbias funkcijas.

- Turėtų būti rengiami reguliarūs ir dažni Studijų Programos Komiteto, studentų ir socialinių partnerių susitikimai.

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Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

Vertėjos rekvizitai (vardas, pavardė, parašas)