

BECK

INTEGRATING EDUCATION
WITH CONSUMER BEHAVIOUR RELEVANT TO
ENERGY EFFICIENCY AND CLIMATE CHANGE
AT THE UNIVERSITIES OF RUSSIA,
SRI LANKA AND BANGLADESH



D.1.4. GUIDELINES FOR THE QUALITY ASSURANCE OF MOOCS

Project Number: 598746-EPP-1-2018-LT-EPPKA2-CBHE-JP



I. GENERAL PROVISIONS

1. This specification of the quality assurance measures for the massive open online courses created as part of the BECK (Integrating education with consumer behaviour relevant to energy efficiency and climate change at the Universities of Russia, Sri Lanka and Bangladesh) project (hereinafter the Specification) sets out the requirements applicable to the massive open online courses (hereinafter MOOCs) created as part of the BECK project (hereinafter the Project).

2. This specification of MOOC quality assurance measures has been prepared to make sure MOOCs will at least meet the quality standards mutually agreed by the Project participants.

3. The following terms used in this Specification shall have the following meanings:

3.1. **MOOC quality assessment (approval)** means assessing MOOCs to determine to what extent they meet certain requirements set forth by the Project participants.

3.2. **MOOCs** mean massive open online courses created as part of the Project and offered by the Project participants or delivered in a particular virtual environment as digital media.

II. MOOC SUBMISSION FOR ASSESSMENT

4. A MOOC needs to be approved before it can be delivered to learners. To be approved, the course is assessed against the key requirements.

5. If MOOC materials are yet incomplete or only partially meet the key requirements, such materials may be used in pilot studies but only once and only for the stated course duration. In order to use a MOOC in pilot studies, its creator(s) must submit an application of a standard form to the MOOC quality assessment committee set up by the Project participants (hereinafter the Committee). Pilot studies using such MOOCs are only possible with an express approval of the Committee.

6. The annexes attached hereto set forth the requirements applicable to any MOOC materials submitted for approval.

7. The following documents must be submitted to the chair of the Committee for the approval of MOOC materials:

7.1. An application of a standard form requesting the approval of the MOOC materials (<http://www.....com>).

7.2. The subject reviews by two different reviewers with the following points considered: whether the information is accurate and comprehensive; whether the contents are of appropriate structure; whether the materials are consistent, well-structured, clear and comprehensive; whether citations and additional resources are provided; use of visual methods; whether the materials are suitable for self-study. The reviews shall confirm that with the submitted MOOC materials and measures the course objectives can be achieved and the knowledge and skills acquired by stating that in their final conclusion. (The course creators shall select their reviewers themselves).

7.3. Other documents requested by the Committee (if any).

7.4. Other information the creator believes to be essential.

8. The MOOC materials must be submitted for approval in the same format they will be delivered to students, e.g. online or as videos. If that is not possible, where students, for



instance, will attend videoconferencing sessions, a detailed description of the teaching process must be submitted together with the DL materials.

9. If certain related questions arise in the course of the MOOC quality assessment, the Committee may make a decision to request additional details. The course creator must respond to any questions within the time specified by the Committee.

III. APPROVAL OF MOOC MATERIALS

10. MOOC materials shall be approved by a Committee of five members nominated by the Project participants. The Committee shall be set up for a term of five years. With the consent of the Project participants, a temporary replacement of any members of the Committee with other persons is allowed.

11. More than 50% of the Committee members must be present in the assessment of MOOC materials. All Committee meetings shall be recorded in minutes. The chair of the Committee shall be in charge of their storage.

12. No creator or co-creator of MOOC materials can sit in the Committee in charge of approving their MOOC materials or must withdraw from decision making.

13. If required and at the request of the Committee, experts can be invited for a specific task.

14. For approval, the quality of MOOC materials shall be assessed based on a standard assessment questionnaire prepared by the Committee (<http://www.....com>). Questionnaires may differ depending on the type of assessment. Each member of the Committee shall score materials against each criterion on a ten-point scale and must justify their score if the score is below 7. Other feedback the assessor believes to be important may be provided as well. All assessment criteria in the questionnaire shall carry equal weight.

15. The chair of the Committee or an authorised person shall submit to the Committee any materials required for the assessment and notify it of the assessment request.

16. Upon the receipt of all required documents, the assessment must be completed within 20 business days.

17. Having assessed a MOOC against the key requirements, the report shall state the following: the average score for each criterion, the final score (an arithmetic mean of the scores rounded to two decimal points) and the final conclusion of MOOC's compliance with the key requirements. Possible wording of the final conclusion:

17.1. We hereby approve the MOOC for a period of 5 years.

17.2. We hereby declare that the MOOC meets only part of the requirements and needs adjustments.

17.3. We hereby declare that the MOOC fails to meet the requirements and its approval is denied.

18. A MOOC shall be declared meeting only part of the approval requirements and handed back for adjustments if at least one of the average criteria scores is below 5.

19. A MOOC shall be declared failing to meet the requirements and its approval shall be denied if the final score is below 5.

20. If the creator(s) request a permission to start pilot MOOC studies and the MOOC has been assessed against the key requirements, the final report shall state the following: the average score for each criterion, the final score (an arithmetic mean of the scores rounded to two decimal points) and the final conclusion whether the pilot MOOC studies are permitted. Possible wording of the final conclusion:



20.1. We hereby permit the pilot MOOC studies.

20.2. We hereby deny the permission to start the pilot MOOC studies.

21. A MOOC shall be declared suitable for pilot studies if its assessment shows that the MOOC is being developed in the right direction but its finalisation has been prevented by objective reasons (e.g. it is the first year the subject is offered as a distance course, the teacher has never taught this subject before, etc.).

22. If the Committee's denies approval, a new adjusted version of the MOOC can be resubmitted for assessment only upon expiry of a 60-day period after the decision and if substantial improvements have been introduced in the MOOC.

V. FINAL PROVISIONS

23. The chair of the Committee or an authorised person shall submit the assessment results to the applicant by email or a written statement.

24. The chair of the Committee shall be in charge of storing MOOC approval details.



REVIEW OF MOOC MATERIALS

1. MOOC title
2. MOOC creator(s):
name(s) of the creator(s)
3. A brief description of the MOOC (optional)
4. Assessment of the instructional and DS materials

Rated features	Reviewer's rating (please cross one)				
	Feedback (mandatory for scores 6 and below)				
4.1. Accuracy of the information <i>The reviewer rates MOOC materials for the accuracy of their information</i>	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.2. Comprehensiveness <i>The reviewer rates MOOC materials for their comprehensiveness</i>	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.3. Well-structured contents <i>The reviewer rates MOOC materials for their content structure</i>	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.4. Consistency of the materials <i>The reviewer rates MOOC materials for their consistency</i>	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.5. Clarity <i>The reviewer rates MOOC materials for their clarity</i>	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.6. Citations and references to additional	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Rated features	Reviewer's rating (please cross one)				
	Feedback (mandatory for scores 6 and below)				
resources <i>The reviewer rates MOOC materials for the publications cited in them</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.7. Use of visual methods; suitability for self-study <i>Rated for texts, charts, diagrams, tables, photos, images, etc.</i>	10	8	6	4	2
	very good	good	average, some flaws	major flaws	multiple major flaws
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Feedback</i>					
4.8. Other feedback and suggestions the reviewer may have					
The submitted MOOC materials can be used for teaching; with them the course objectives can be achieved and the knowledge and skills acquired. YES <input type="checkbox"/> NO <input type="checkbox"/>					

Reviewer academic title, academic degree, name
Employer, position, phone

(signature)

(date)

Creator's arguments:
Creator's comments

(signature)

(date)



ASSESSMENT QUESTIONNAIRE FOR MOOC MATERIALS

course unit title

Rated features:

1. Use of information and communication technologies
2. Appropriate presentation of the main and supplementary course materials
3. Quality assurance in teaching and learning

Assessment principles:

The course shall be assessed on a ten-point scale

0–4 points – materials fall short of the requirements for a particular criterion or have major flaws.

5–8 points – materials meet all the requirements for a particular criterion and if there are flaws, they are minor.

9–10 points – materials meet all the requirements for a particular criterion and exceed them.

USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

Item	Criterion	Attributes of average quality	Score	Feedback and recommendations
		5-8		
1	Online access to learning resources	All learning materials (for theory studies, supplementary literature essential for learning, practical information, assignments, video lectures, etc.) must be available online.		
2	Use of video lectures and tutoring technologies	Videos or interactive presentations of lectures, laboratory assignments and practice sessions are available. Means for video tutoring are included.		
3	Use of information and communication technologies for better delivery of learning materials without encumbering the teaching process	Typical online learning tools are used to aid the learner such as email, chatrooms, calendars, grade trackers, assignment sections, student introductions, links, self-assessment tests, examinations and reviews. Such tools must be introduced for the purpose of improving the quality of learning; the principle of their use must be specified. Integrated affective tutoring and affective computing methods are used.		
4	Assistance for information and communication technology users	Links to external online resources are provided or quick user guides made available.		



APPROPRIATE PRESENTATION OF THE MAIN AND SUPPLEMENTARY COURSE MATERIALS

Item	Criterion	Attributes of average quality	Score	Feedback and recommendations
1	Availability of essential course materials	High-quality, authentic, relevant resources and content that are aligned with learner needs and pedagogical approaches, and opportunities for quality knowledge creation throughout the course of the MOOC. The scope of learning materials must at least correspond to the scope indicated in the module specification		
2	Availability of general course details and clearly defined procedures of learning and assessment	All general details of the course are presented (its title, code, credits (if any), objectives, etc.), and the procedures of learning (course structure, the sequence of teaching and assessment steps) and assessment (time frames and principles) defined.		
3	Adequate quality of assignments, self-assessments and examination materials	Includes analysis-, synthesis- and judgement-based and other similar knowledge-building assignments promoting skill development through knowledge applied in practice. Assignments and self-assessments are frequent enough to ensure continuous learning, as well as measuring the current and achieved level of knowledge. Includes different types of tests to examine learners and special tools to speed up the assessment process by automating as many assessments as possible.		
4	Learner-centred materials	Materials take into consideration different possibilities and needs of learners. Materials are offered in different formats (e.g. texts, tutoring videos, links to supplementary sources of information) and delivered in a way that encourages students to be active learners who feel responsible for their own learning process.		
5	Possibility of asynchronous learning	Offers the possibility to learn and do assignments without being present in real-time lectures and with minimum interference of the teacher.		



QUALITY ASSURANCE IN TEACHING AND LEARNING

Item	Criterion	Attributes of average quality	Score	Feedback and recommendations
		5-7		
1	Means for learner-to-learner interactions and learner-to-teacher Q&A sessions	Offers different ways for learner-to-learner and learner-to-teacher interactions (email, videoconferences, chatrooms). Lists in what cases certain means of communication can be used and their capacity.		
2	Means for learning personalisation	Offers an automatic function (by using the historical statistical data defining student individual interests (student's level of knowledge, student's learning style, student's levels of interest in learning and learning productivity) that takes module topics and compiles an optimal set of personalised materials for a specific student. The Centre constantly changes the learning subject with regard to situational and individual interest and most suitable learning style for a specific lecturer, learner and other stakeholder.		
3	Specific time frames for assignment assessment and responding to questions	Specifies certain time frames for learners to complete their assignments and for the assessment of such assignments; indicates ways to ask questions about an assessment result and how such questions will be answered.		
4	Possibility to learn by using online resources	The learning process must be arranged in a way that permits a student to get ready for tests and examinations or complete certain assignments by using only resources available online.		
5	Measures promoting continuous learning	Includes measures promoting continuous learning (adequate number of in-course assignments, seminars, tutoring sessions, information made available only upon completion of certain assignments, etc.). There are self-report instruments that measure learners' motivations and goals		
6	Measures of students engagement	There are clear procedures and instruments which allows to measure how individual learners are engaging and learning throughout their participation in a MOOC		



7	Real-time measures of students emotional and affective engagement	There are clear procedures and instruments which allows to real time measure how individual learners are emotionally and affectively engaging and learning throughout their participation in a MOOC. Emotional and affective engagement involves interest, boredom, happiness, anxiety, and other affective states, any of which factors could affect learners' involvement with learning or their sustained effort in studies. Emotional engagement also involves the sense of belonging and values and a student's belief that a personal connection (either positive or negative) exists between themselves and the studies.		
8	Learner feedback	Learner rating have been established, which allow participants to rate their experience of specific MOOCs: <ul style="list-style-type: none">• students' perceptions of outcomes in relation to their motivations and goals;• whether learners have gained new employment opportunities, new jobs or promotions, any of which they can trace back to their MOOC experience;• asking learners whether they have engaged in further learning opportunities as a result of their participation in a MOOC;• asking learners whether they have connected with and/or stayed in touch with people whom they otherwise would not have met as a result of their participation in a MOOC.		

Mean score: 0,00

Assessed by (*name and signature of the accreditation committee member*):

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