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EduEnvi
**Enhancing Competences of Sustainable Waste Management in Russian and
Kazakh HEIs**

**The Quality Strategy
on Grant Activities**

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INTRODUCTION

This document presents the Quality Plan for Erasmus + project 585761-EPP-1-2017-1-FI-EPPKA2-CBHE-JP “Enhancing Competences of Sustainable Waste Management in Russian and Kazakh HEIs / EduEnvi”. It is developed in the scope of the WP 8 (Quality Plan) of the Project in compliance with the Project description and all applicable rules and guidelines. Quality control is an integral part of the project and aims to ensure that objectives are met in the most effective way. This Quality Plan (QP) defines the general approach to quality control, internal and external evaluation and the procedures to be followed by the partners for effective communication as well as production and documentation of the Project deliverables. The document outlines the strategy for how the quality control mechanisms will be applied so that the operational, management and working procedures are comprehensively monitored and improved throughout the project duration. The QP contains a set of scheduled activities and defines the objectives, roles and responsibilities. The QP includes established indicators, methodology and procedures for evaluation of project activities and results. For each task it determines the responsible partner(s), timeframe and tools of implementation, the expected results or products, as well as the respective quality criteria.

This document forms a single point of reference on the quality that will be governed during the course of the EduEnvi project. The aim of the Quality Plan (QP) is to define the quality control and quality assurance activities that will be carried out throughout the project in order to ensure smooth implementation, continuous monitoring and high-quality level of the project results and the project outcomes.

The QP will enable an efficient collaboration among the project partners and delivery of project results and outcomes, whereas the risk assessment analysis is



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necessary for evaluation and control of potential project risks, focusing on their precautionary diagnosis and handling.



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DISTRIBUTION LIST

This Quality Plan will be distributed to the all the Project Partners:

1. Tampere University of Applied Sciences
2. Lillebaelt Academy
3. University of Valladolid
4. Saint Petersburg National Research University of Information Technologies,
Mechanics and Optics
5. Ural Federal University
6. Tyumen State University
7. Al-Farabi Kazakh National University
8. Shokan Ualikhanov Kokshetau State University
9. M. Auezov South Kazakhstan State University

The Quality Plan (draft version) is prepared by UrFU. All partners need to revise and update the Quality Plan.



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PROJECT DESCRIPTION

The main aim of the project is to modernize, improve the accessibility and to internationalize the higher education in Physical sciences and Environmental protection in Kazakhstan and Russia. This aim will be achieved by building the capacity of the local academic staff (main target group of the project) in participating partner country universities 1) in sustainable waste management and 2) in the latest European pedagogical approaches. Additionally, eight online learning modules will be built on sustainable waste management to benefit the secondary target group, students and company/local/regional authority staff.

The objectives of the project:

- Through the training sessions organized in WP4 the target group will adopt the latest research, best practices, and latest technology in Europe in Sustainable Waste Management;
- after the training sessions and peer assessment work in WP3 the academic staff will be able to combine industry-cooperation into defining the competence definitions of new curricula as well as about the latest curriculum building approaches;
- after the completion of WP5 the target group will be able to integrate entrepreneurship and innovation methods into the learning modules;
- after the completion of WP6 the target group will be able to choose the pedagogically best suited eLearning tools for each learning purpose f. ex. for collaborative knowledge building, brainstorming, feedback collection, knowledge testing;
- based on the above knowledge to build eight online learning modules on sustainable waste management (each university will build one-two modules of 6-9 ECTS).



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The competence building of the academic staff in the area of Sustainable Waste Management will enable the modernization of existing curricula and the building of new educational programs in Sustainable Waste Management, for which only recently new professional standards were introduced in Russia and for which no educational standards exist in Kazakhstan.

The new online learning modules will offer students flexible and inclusive learning paths which have been insufficiently available in both partner countries. The introduction of innovation methods and industry-university cooperation issues will provide students with relevant skills and knowledge needed in working life.

Training provided for curriculum building, eLearning technology and pedagogy will support the updating of the education in Sustainable Waste Management to meet the European and global standards. The modernized and new curricula and online modules will enable the education of new master's level professionals as well as continuous and lifelong training for persons employed by industry in Sustainable Waste Management to solve burning environmental problems in both countries. Partner countries HEIs' closer cooperation with industry and the integration of industry-university cooperation into the learning modules will launch the development of mutually beneficial innovations and new ways of cooperation and funding in the future.

This Quality Plan aims at developing a systematic, smooth, and effective plan to oversee the project activities and to ensure the attainment of all deliverables.

MILESTONES AND INDICATORS

- Eight online learning modules are set up at the online platforms of ITMO and KazNU by 12/2019
- Eight modules are piloted by at least 12 teacher and 120 students by 01/2020
- Feed-back from students and stakeholders is gathered by the end of 2/2019
- Analysis of the results from eight surveys for teachers and students ready by 02/2020
- Discussions and decisions about modification needs with partners in a Meeting 2/2020
- Finalizing the learning modules by 4/2020
- 18 events for the stakeholders to disseminate the results by 06/2020
- Dissemination and exploitation plan published by 11/2017
- Project website and social media channels ready by 11/2017, regular updates thereafter
- Press releases (three times during the project)
- Outreach articles in national and international journals, at least 12 articles
- Project national information days, 18 workshops and 18 webinars
- 30 Conference presentations by 08/2020
- Dissemination of project final results in an International Conference 06/2020

QUALITY PLAN DESCRIPTION

The main aim of this work package “Quality Plan” will be to assure that the activities performed in the project are completed in time and with desired high level of quality. Moreover, the project will be systematically evaluated to assess and improve the planning, implementation and impact of the project. Three *main tasks* will be performed:

- 1) A quality plan consisting of internal and external quality assurance and monitoring is created and refined in cooperation.
- 2) The project will be evaluated yearly by external experts to identify design flaws or missed opportunities in the project.
- 3) The project including the developed curricula and learning module syllabi will be finally evaluated to understand the real usefulness of the intervention for all participating countries.

Objectives:

- evaluate the impact, relevance, efficiency, effectiveness and long-term sustainability of the project;
- confirm that the tasks of WPs of the project are fulfilled and the project work can move on;
- give opportunities for project members to learn and to improve the results of the project based on evaluation reports;
- give opportunities to open discussion and reflection on project performance
- get expertise evaluation to improve the project’s results;

The quality assurance and monitoring will take place during the whole lifespan of the project. The quality plan is refined in a one-day-workshop together with all partners next to the kick-off meeting at the beginning of the project. The quality plan

is published in the project intranet. Regular online and face-to-face meetings support the aims and objectives of the WP.

Internal quality assurance

An internal quality evaluation plan will be created and distributed among partners in the form of qualitative surveys and quantitative reports. The internal quality evaluation is performed mainly through self-evaluation and peer mentoring. The surveys and reports will be executed on a quarterly basis per project year and the results will be published quarterly on the project's intranet. Altogether 10 surveys and reports will be performed. The results of the internal quality evaluation will be discussed face-to-face in yearly quality assurance meetings in order to improve good practice and performance and avoid pitfalls. The managerial group will participate in the yearly quality assurance meetings. Among the project managers the Quality status form will be distributed. This form is used in managerial group meetings to check the quality review of each WP. The leader of the WP should fill in the table before the managerial group meeting. It provides the instrument in the managerial group meeting to concentrate on quality issues and help the project to proceed. The conversation will be reported in the minutes of the meeting.

External quality evaluation

External quality evaluation will be performed for 1) the project 2) the developed curriculum/learning modules. External experts are invited to do this task. The external evaluation will provide the project higher degree of objectivity into the evaluation work and add to the credibility of the project. It will also enhance the accreditation processes in HEIs inside and outside the project consortium.

METHODS OF QUALITY CONTROL

In this document we intend to apply the procedure described within the ISO 21500 Official standard, adapting the suggested process to the peculiarities of the EduEnvi project. The International Standard ISO 21500 provides guidance on concepts and processes of project management that are important for, and have impact on, the performance of projects. It provides high-level description of concepts and processes that are considered to form good practice in project management.

In accordance to the “ISO 21500 Guidance on Project Management”, project management is subdivided into subjects and performed through processes (a set of interrelated activities). The International Standard ISO 21500 identifies the recommended project management processes to be used during a project as a whole, for individual phases or both. The processes should be aligned in a systemic view. Each phase of the project life cycle should have specific deliverables (which are described and evaluated as below). These deliverables should be regularly reviewed during the project to meet the requirements of the financing authority, beneficiaries and stakeholders.

Within the process groups, we would include the following:

- initiating (develop project charter, identify stakeholders, establish project team),
- planning (develop project plans, define scope, create work breakdown structure, define activities, estimate resources, define project organization, sequence activities, estimate activity durations, develop schedule, estimate costs, develop budget, identify risks, assess risks, plan quality, plan procurements, plan communication),
- implementing (direct project work, manage stakeholders, develop project team, treat risks, perform quality assurance, select suppliers, distribute information),
- controlling (control project work, control changes, control scope, control resources, manage project team, control schedule, control costs, control risks, perform quality control, administer procurements, manage communication),

- closing (close project, collect lessons learned).

Within the subject groups of process, we would include:

- integration (including the processes required to identify, define, combine, unify, coordinate, control and close the various activities and processes related to the project),
- stakeholders (including the processes required to identify and manage the project sponsor, customers and other stakeholders),
- scope (including the processes required to identify and define the work and deliverables, and only the work and deliverables required),
- resources (including the processes required to identify and acquire adequate project resources such as people, facilities, equipment, materials, infrastructure and tools),
- time (including the processes required to schedule the project activities and to monitor progress to control the schedule),
- cost (including the processes required to develop the budget and to monitor progress to control costs),
- risk (including the processes required to identify and manage threats and opportunities),
- quality (including the processes required to plan and establish quality assurance and control),
- procurement (including the processes required to plan and acquire products, services or results, and to manage supplier relationships),

The evaluation strategy will include appropriate tools, devised to assess on an ongoing basis project relevance, efficiency and impact, to measure progress throughout its life cycle, to determine if the project responds to main target groups' needs, to measure the level of satisfaction of beneficiaries of project activities, to

determine how project impacts on social communities, to evaluate unexpected results and control all processes. The tools will be delivered to the appropriate target groups over the project duration, according to the activity schedule.

The tools presented in the Annexes are meant to check and measure processes and outputs during the project development and evaluate it at the end. Different categories of tools are devised, in accordance to what is described in the introduction ('internal' monitoring and 'external' evaluation):

- The Logical Framework Matrix (see original project document) represents a control list to assess any progress and the rate of success of project activities in relation to specific objectives and expected results.
- Check lists (Annex A) are used as preventive actions to ensure smooth development of specific project activities, through the control of any steps needed for the achievement of the results.
- Evaluation questionnaires (Annex B), are used as means to assess the outcomes of specific project activities carried out and to take corrective measures for the critical issues which will be outlined through these tools.

Three annual progress report, and one final report will be written, including a narrative section in which the advancement within the different tasks, any problems within the partnership, the communication and visibility actions launched, the interchange of knowledge and experience will be described. Moreover, any modification to the initial planning will be mentioned and reasons for changes or delays will be given, as well as the measures adopted for facing difficulties or delays will be mentioned. Also, the degree of achievement of program indicators, strategic indicators and specific project indicators will be measured on occasion of the interim and final report.



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THE PEOPLE IN CHARGE

Ural Federal University, responsible for WP8 will be especially in charge for the timely delivery of reports and the quality review and validation of the reports. At the management level the Quality Manager (WP8 leader) will report to the partners on project advancement on occasion of each transnational project meeting. Moreover he/she will collect in progress data from the WP Leaders, to check the advancements of deliverables and the achievement of indicators set in the Logical Framework Matrix within each Work Package.

As several partners will contribute to the same WP performing specific tasks, the WP leader in accordance with “Responsibilities of the lead organizations of Work packages” (Annex C) will take care for collecting and integrating the contributions of the other participants to achieve performance indicators.

Proposals for reviewing and updating the indicators table will be put forward by the WP leaders if required.

Each partner has undertaken to take part in the efficient implementation of the project, to cooperate, perform and fulfil all of its obligations, to notify promptly, in accordance with the governance structure of the project, any significant information, fact, problem or delay likely to affect the project, in order that corrective measures can be taken in due time.

RISK MANAGEMENT

The project environment may impact project performance and success. EduEnvi project considers the following potential factors:

- factors outside the organizational boundary, such as socio-economic, geographical, political, regulatory, technological and ecological;
- factors inside the organizational boundary, such as strategy, technology, project management maturity, resource availability, organizational culture and structure.

While the second factors are considered in the above-mentioned quality and monitoring processes, factors outside the organizational boundary must be carefully analyzed (through a so-called risk analysis) as they may have an impact on the project by imposing constraints or introducing risks affecting the project.

Although these factors are often beyond the control of the project manager, they should still be considered.

Risk monitoring will be a constant activity during the project. In order to perform the risk management and control function successfully, the circumstances which may produce a threat should be promptly identified and prioritized. The WP8 Leader will hold responsibility for conducting regular formal reviews on such matters. In doing this, it is hoped that the level of risk embedded within the project can be minimised, and when action is required, contingency plans can be carried out in a timely manner.

The WP8 Leader will hold responsibility for conducting regular formal reviews on such matters in order to prevent the possible consequences of the risk embedded into the project, and, when action is required, to activate contingency plans to be carried



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out in a timely manner. The Committee will provide inputs to the Project Coordinator on this issue to be included in the periodic monitoring reports.



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QUALITY OF PROJECT DELIVERABLES

The quality of project deliverables will be evaluated through a set of indicators. Evaluation indicators vary according to the result or process which is being evaluated. The project is going to use both qualitative and quantitative indicators. Indicators will help to get information in progress on the project effectiveness in achieving the objectives and efficiency in the optimal use of resources, and the relevance of the project activities to the needs identified.

Annex A

CHECKLIST FOR MANAGING PROJECT MEETINGS

Preparation

Done?	(✓)
Clarify the objectives of the meeting	
Confirm who will attend/participate and who will chair the meeting	
Confirm the date, time and location of the meeting with participants	
Prepare a draft agenda and distribute it for comments/additions	
Allocate subtasks to be carried out among the human resources in charge	
Assemble relevant data/information (including management/monitoring reports)	
and distribute copies in advance to those attending the review meeting	
Organize other logistics for the meeting (e.g. secretarial support, transport,	
venue, required equipment/materials for presentations, refreshments, etc.)	

The meeting

Done?	(✓)
The available time is effectively managed, based on the agreed agenda/timetable	
Each participant is given adequate opportunity to share his/her views (the	
meeting is not dominated by the loudest/most talkative)	
Key issues are clarified	
Supporting material is distributed	
Disagreements are cordially solved	
A problem solving approach is taken	
Agreement is reached (by consensus or vote) on key actions that need to be taken	
An accurate record of discussions and decisions is taken	
Meeting objectives are achieved	

Follow-up

Done?	(✓)
Feedback forms were distributed, collected and analyzed	
Finalization and dissemination of a record of key decisions taken/agreements reached	
Revision to action plan and/or time schedule if/as required	
Information about the meeting	



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Information about the meeting in the project website	
Feedback from partners	

Annex B

Quarterly survey

One of the EduEnvi project desired results is to develop the team of educators from different countries able to achieve the common goal. The underlying idea of this survey is not only to measure the progress of our work toward the project's goal, but also to understand how we are creating the united team and able to work together. We expect all project group members, i.e. participants from all partner institutions that are involved in the development work will answer the questions of the survey.

The survey is built around four dimensions: goals, results, management and cooperation. Below you will find a number of questions within each dimension. Each team member must answer the questions by stating to which degree they agree with the statement using a 5-point scale (1 = Totally disagree, 2 = Disagree, 3 = Neither or, 4 = Agree, 5 = Totally agree).

* Mandatory

1. Please, choose your university *

Tampere University of Applied Sciences

Erhvervsakademiet Lillebælt

Universidad de Valladolid

ITMO University

Ural Federal University

Tyumen State University

Al-Farabi Kazakh National University

Sh.Ualikhanov Kokshetau State University

M. Auezov South-Kazakhstan State university

2. The project team have set clear goals for the work *

Totally disagree

Disagree

Neither or

Agree

Totally agree

3. The university team have set clear goals for the work *

Totally disagree

Disagree

Neither or

Agree

Totally agree

4. The project team's focus and priorities are in line with the set goals *

Totally disagree

Disagree

Neither or

Agree

Totally agree

5. The university team's focus and priorities are in line with the set goals *

Totally disagree

Disagree

Neither or

Agree

Totally agree

6. The project team's work is closely linked to the overall goals of the workplace *

Totally disagree

Disagree

Neither or

Agree

Totally agree

7. The university team's work is closely linked to the overall goals of the workplace *

Totally disagree

Disagree

Neither or

Agree

Totally agree

8. The results the project team produce are of good quality *

Totally disagree

Disagree

Neither or

Agree

Totally agree

9. The results the university team produce are of good quality *

Totally disagree

Disagree

Neither or

Agree

Totally agree

10. The project team is good at being focused during the team meetings *

Totally disagree

Disagree

Neither or

Agree

Totally agree

11. The university team is good at being focused during the team meetings *

Totally disagree

Disagree

Neither or

Agree

Totally agree

12. The project team is good at managing the tasks and planning process *

Totally disagree

Disagree

Neither or

Agree

Totally agree

13. The university team is good at managing the tasks and planning process *

Totally disagree

Disagree

Neither or

Agree

Totally agree

14. Roles and responsibilities have been agreed in the project team *

Totally disagree

Disagree

Neither or

Agree

Totally agree

15. Roles and responsibilities have been agreed in the university team *

Totally disagree
Disagree
Neither or
Agree
Totally agree

16. The project team achieves the goals you have set up *

Totally disagree
Disagree
Neither or
Agree
Totally agree

17. The university team achieves the goals you have set up *

Totally disagree
Disagree
Neither or
Agree
Totally agree

18. The project team reaches the things you have set to reach *

Totally disagree
Disagree
Neither or
Agree
Totally agree

19. The university team reaches the things you have set to reach *

Totally disagree
Disagree
Neither or
Agree
Totally agree

20. If the work is going too slowly or too fast, the project team is good at adjusting the pace *

Totally disagree
Disagree
Neither or

Agree
Totally agree

21. If the work is going too slowly or too fast, the university team is good at adjusting the pace *

Totally disagree
Disagree
Neither or
Agree
Totally agree

22. The project team members openly discuss the mistakes committed and use them as learning experiences *

Totally disagree
Disagree
Neither or
Agree
Totally agree

23. The university team members openly discuss the mistakes committed and use them as learning experiences *

Totally disagree
Disagree
Neither or
Agree
Totally agree

24. The project team has defined/discussed rules/standards for team work *

Totally disagree
Disagree
Neither or
Agree
Totally agree

25. The university team has defined/discussed rules/standards for team work *

Totally disagree
Disagree
Neither or

Agree
Totally agree

26. The project team is good at identifying conflicts and solving them in a constructive manner *

Totally disagree
Disagree
Neither or
Agree
Totally agree

27. The university team is good at identifying conflicts and solving them in a constructive manner *

Totally disagree
Disagree
Neither or
Agree
Totally agree

28. The project team members openly discuss the mistakes committed and use them as learning experiences *

Totally disagree
Disagree
Neither or
Agree
Totally agree

29. The university team members openly discuss the mistakes committed and use them as learning experiences *

Totally disagree
Disagree
Neither or
Agree
Totally agree