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**Minutes of the**

**STEM coordination meeting Istanbul**

**October 6-7, 2022**

**Participants**

Janerik Lundquist (LiU), Martin Widin (LiU), Keelin Leahy (UL), Oona Kiviluoto (UH), Gultekin Cakmakci (HU), Nursaule Karelkhan, Meruerts Serik (ENU), Gaukhar Omashova, Manat Shomanbayeva, Lyazzat Zhaidakbayeva (SKSU), Agyzar Dauletbek, Meunert Kaidanova (EKSU)

**Agenda**

1. Welcome address
2. Confirmation of the agenda
3. Report from the Summer school 2022 at ENU
4. Report from the Integrated Approach to STEM Teaching Training, Helsinki October 2021
5. Report from Summer Programme for School Children
6. Report on Summer Programme for STEM Ambassadors
7. Report on official recognition of the new MSc STEM programme
8. Status of the STEM Career Atlas
9. Status of the STEM Handbook
10. Report on the monitoring on project implementation at KZ universities
11. Organize a workshop on teaching and learning resources
12. Report from the National dissemination workshop in Nur Sultan spring 2022
13. Preparation for the STEM centres’ network
14. Quality assurance of all STEM activities and outcomes
15. Organize of a joint STEM Day in three KZ cities
16. Create inter-project coaching in Europe
17. Student mobility 2 months KZ to Europe
18. Staff mobility 1 week KZ to Europe
19. Staff mobility 1 week Europe to KZ
20. Develop a STEM engagement programme and its implementation
21. Conduct regional training workshops
22. Conduct peer reviews at KZ partners
23. Analysis of the evaluation feedback
24. Project promotion and STEM homepage
25. STEM raising awareness events
26. Dissemination events in KZ
27. Next coordination meeting in KZ
28. Final conference in KZ – when and where
29. Presentation of all original TSs, JDs, Employment statements and ITRs from each partner
30. Preparation of the final report and money transfer
31. Summing up and closing of the meeting
    1. **Welcome address**

Professor Lundquist, the project coordinator, welcomed all the participants. He outlined the sequence of the earlier mentioned request to the EU desk officer in Brussels asking for a clarification on the project implementation under prevailing conditions. First action from EU was an answer to terminate the project. But after that the project coordinator pointed out the benefits off all other partners work, the EC changed the decision, and the project could continue if it was possible to find a new partner who would replace the three Russian partners. Due to a positive response and help from EU desk officer in Brussels finding a new partner the project will continue.

* 1. **Confirmation of the agenda**

All participating partners did agree of the agenda received before the meeting.

* 1. **Report from the Summer school 2022 at NEU**

ENU – Summer school was performed as planned face-to-face. The meeting was given a report with photos and video from different activities during the summer school. 47 certified students out of 4 classes. 8 school children did participate.

* 1. **Report from the Integrated Approach to STEM Teaching Training, Helsinki October 2021**

UH – Performed during three day’s online ambassador training. First day with 60 participants with 30 the following day’s. Result was approx. 30 certificated ambassadors.

* 1. **Report from Summer Programme for School Children**

ENU – conducted as planned with 8 school children in a “big summer school”. Decided that a report is sent to HU together with program within the next two weeks.

* 1. **Report on Summer Programme for STEM Ambassadors**

UH – presented that it was conducted online.

* 1. **Report on official recognition of the new MSc STEM programme**

All partner universities confirmed that the new Master’s programmes are officially recognized by both their local universities and the relevant Ministries.

Partner universities has to submit proofs of official recognition of Master‘s programmes to the project coordinator.

* 1. **Status of the STEM Career Atlas**

EKSU – Not yet finished. Decided that EKSU take the lead to finish the structure of the Atlas and to allocate roles and responsibilities. It will be translated in English and Kazakh language. Decided that it is OK to use staff cost for the translation. The publications will be printed forms and also electronic at the web site. The web site must be living to the end of 2023. Decided that SKSU will take the responsibility for web site.

* 1. **Status of the STEM Handbook**

Handbook is not ready and decided that HU will take the lead. Set up goal is a book form about at least 20 pages. The other document “Best practice” is ready, but the link to reach the document doesn’t work. Will be fixed.

* 1. **Report on the monitoring on project implementation at KZ universities**

ENU will monitor SKSU, EKSU. Together they will discuss the practical issues. The outcoming will be a short report. Decided that it will be ready before the end of October.

* 1. **Organize a workshop on teaching and learning resources**

Decided that the European partners UH and UL will take the lead. The form will be a workshop in teaching/learning and is to be a repetition/extension of the workshop earlier held of UH. Decided to be an online training (with a possible face-to-face option) for two days.

* 1. **Report from the National dissemination workshop in Nur Sultan spring 2022**

ENU – Seminar was held in Mars 2022 with ENU, SKSU and EKSU using social sites, articles and publishing. EKSU vice president introduced the seminars program. Decided to have a report within two weeks.

* 1. **Preparation for the STEM centres’ network**

What is the status of each STEM Centre?

EKSU – Robot lab has been set up in its own space on the University site. The space also includes office space and a laboratory. The STEM Centre opened in March 2021 and has been running since. The STEM Centre gets visits from around 20 towns/villages near the Campus. The visits are done mainly by teachers, and who have studied robotics. The teachers will teach other teachers locally after their visit. This way the new methods will reach every student in the region. The visits and the training will continue.

ENU – The STEM Centre has done mainly teaching training as well. They have organized workshops for teachers. The STEM Centre has two rooms on the University Campus.

SKSU – The equipment has been bought. The STEM Centre was opened in the Spring of 2021, and it has its own space in the main building of the University. The Centre has organized training for both teachers and pupils. Topics have been computer science, physics, and biology.

It has been suggested to all partners that the STEM Centre should be open for everyone in the region, not just for university use. Also, the STEM logo together with the EU logo should be presented on the wall of all centres. Also, networking, such as national STEM conferences, is encouraged.

* 1. **Quality assurance of all STEM activities and outcomes**

Gultekin Cakmakci presented QA activities and outcomes. The quality Assurance plan is proceeding according to the plan. It required everybody to fill in the missing information in the QA Plan Table. Gultekin Cakmakci suggested that partners can contact him with questions, and he will provide guidance with evaluation. The QA needs to be done by the end of October!

* 1. **Organize a joint STEM Day in three KZ cities**

The Joint STEM Day was organized first time in January 2021, the second time in October 2021 and the third time in January 2022. ENU was the main organizer in these first two events and SKSU organized the third event. Next STEM Day will be organized by SKSU.

* 1. **Create inter-project coaching in Europe**

There is a possibility in the project, that KZ Universities could visit Europe and get to know similar projects. UL has promised to investigate possible projects and after that, KZ universities can decide if they want to visit the project. Visiting universities must disseminate about STEM project on their visit. The list of suitable projects is already being drafted and ready in a week (Keelyn sent this already on 6th of October).

ENU has already done inter-project twice with other Erasmus+ projects: the first time in October 2020 and the second time in December 2021. These will be reported to the project coordinator by the end of this October.

* 1. **Student mobility 2 months KZ to Europe**

No mobility has been executed due to COVID-19 and strict University policies (short application windows, long waiting times and heavy bureaucracy). Students should have a good level of independence and satisfactory English language skills since some universities have language requirements and others expect students to book their own apartments autonomously in English through online systems. Thesis work can be, for example, done in European countries even though the semester is already ongoing.

* 1. **Staff mobility 1 week KZ to Europe**

Decided that 2 teachers per partner could use the 1-week mobility. Not supposed all at the same time and maximum 2 per hosted university at the same time. Before planning, check if visa is needed. The aim is for teachers to take the lead, be involved in lectures, seminars, presentations etc.

* 1. **Staff mobility 1 week Europe to KZ**

The three European partners decided who to visit whom and was done as below:

HU visit ENU

UH visit EKSU

UL visit SKSU

The participants were recommended to as soon as possible decide a date, latest in the end of October. The outline of the week is to use 3 days teaching/lecturer and 2 days for travel. 1 whole day should be spent scrutinizing the course document’s part for part. The scrutinizing can be done online.

Concern, are the students skilled enough in English? Translator can be an option.

The project coordinator will visit each of the involved universities including the new partner at one day per university.

* 1. **Develop a STEM engagement programme and its implementation**

UH – responsible with help from UL if necessary. Decided to set a deadline before the end of project.

* 1. **Conduct regional training workshops**

KZ universities must organize local training workshops for teachers. EKSU and ENU have already completed this action. SKSU must complete the action by the end of November.

* 1. **Conduct peer reviews at KZ partners**

Peer reviews will be conducted in situ at the Universities or online. Universities will agree with the details together: UH & EKSU, UL & SKSU and HU & ENU. LiU will conduct the review with the possible 4th KZ university. EU partners will review, e.g., programme contents and their relations to credits (ECTS).

* 1. **Analysis of the evaluation feedback**

Gultekin Cakmakci presented the evaluation questionnaire. Reports were discussed and reports from past trainings and events need to be sent by the end of this month.

* 1. **Project promotion and STEM homepage**

Promoting was encouraged. Details of promotion must be conserved: who, when, what and the target group was promoted. The deadline for promotion is the end of the project, the 14th of January 2023. The homepage must be updated as soon as possible. SKSU will contact partners and manage the homepage.

Items 25 and 26 were addressed together

* 1. **STEM raising awareness events**
  2. **Dissemination events in KZ**

Several STEM events have been organized already despite COVID-19. The events have been reported to the project management and unreported ones must be reported by the end of this month. More events can be organized within the project timeline.

Items 27 and 28 were addressed together

* 1. **Next coordination meeting in KZ**
  2. **Final conference in KZ – when and where**

The final conference will be held in Astana on the 6th of January 2023. The Staff mobility (Item 19, Europe to KZ) and peer reviews at KZ partners (Item 22) will happen around the Final conference (before or after the 6th of January). The final coordination meeting will be held on the same day as the final conference.

* 1. **Presentation of all original TSs, JDs, Employment statements and ITRs from each partner**

The original documents must be handed over to Martin Widin as soon as possible. Also registered post is possible. If the documents are sent via registered post, they must be scanned and sent first by email. Originals can be sent via registered post after they have been approved by project management.

* 1. **Preparation of the final report and money transfer**

Everyone is expected to contribute to the final report. The project leader will assign parts of the report for each partner to write. The writing work will be carried out in Jan-March of 2023. The template will be distributed as soon as the Commission will publish it.

The last money transfers will be done after the project has ended and the Commission has accepted the project. This might happen in May 2023.

* 1. **Summing up and closing of the meeting**

All the items were run through again and the deadlines were pointed out.