





## The TeaEdu4CT Project Partner Meeting in Paderborn, Germany

The partner meeting was organised by University of Paderborn, Germany, on November 29-30, 2021

Professors Claudia Tenberge and Carsten Schulte from University of Paderborn, the host institution, have welcomed 13 participants from nine project partner universities, who managed to attend the meeting in Paderborn (partner from Cyprus could not attend, sent apologies). The goal of the meeting was to exchange experiences of activities and developed materials by partner institutions.



Photo of participants of Paderborn meeting. The front row from the left: Ayşegül Bayraktar (ANKU), Yasemin Gülbahar (ANKU), Eglė Jasutė (VU), Claudia Tenberge (UPB), Valentina Dagienė (VU), Michael Lenke (UPB), Alessia Valenti (CESIE), and Helena Isaksson Persson (KTH). The 2<sup>nd</sup> row from the left: Martina Landman (TUW), Gerald Futschek (TUW), Serkan Keleşoğlu (ANKU), Christos Chytas (RU), Carsten Schulte (UPB), Erik Barendsen (RU), and Mart Laanpere (TLN).

**On the 1**<sup>st</sup> day of the meeting the Project coordinator, Valentina Dagienė, has presented the Project updates focusing on remaining future tasks of the project. She has informed the participants about the issues of project administration, budget and reporting about the progress of the project moving to its final phase. Then the presentation about Paderborn University was made by Michael Lenke.

Most of attention was given to piloting and translation of modules. Partners shared their reflections of piloting modules.

Ankara University piloted O3 and O7 modules. O3 model was taught in 3 courses for 14 weeks (whole semester) and O7 module was taught in 2 elective Art Language courses for 6 week. Moodle

was used for homework activities. Some material was arranged in MOOC (Massive Online Open Courses), the ANKU planned to start from MOOC and then come to face-to-face activities.

Claudia Tenberge suggested to ask students to do a report for their homework. In Paderborn University, students make portfolios: they invited in-service teachers in piloting, and they tried activities with classes and reflected (piloting was for modules O2 and O4). Yasemin used tests (questionnaire) for three different skills for pre-service students. She offered Claudia to translate these questionnaires.

In Vienna University of Technology (TUW), parts of 01 and O2 were piloted for prospective informatics teachers. The piloting took place in two other universities (Vienna and Linz). They started in winter term face-to-face teaching. They had restrictions: less students (12 and 10 because the Covid requirements in auditory). Some units of O1 an O2 were chosen for piloting, which were integrated in other subjects. From O1 they took units 2 (project based learning) and 5 (inquiry based learning) units as these modules fit best to module O6. Whole module O6 was taken for piloting and it was improved after piloting. Additional slides for module O1 and O2 were created and reading tasks were changed to discussion activities. The auditory proposed to have an instructions for lectures, because some material has to be prepared in advance.

Mart Laanpere (Tallinn University) piloted O6 unit 2 (about coding). Sweden piloted Module O2 as introduction for engineering students, who are planning to be teachers. Sweden plans to start piloting in December- February.

The Netherland had some issues. Teacher education takes just one year and piloting is difficult to organize. A professional development of in-service teacher is possible, and they have an opportunity to pilot with primary teachers, where there is a 4-year course and there piloting is more suitable. Yasemin will help to pilot their module.

Results from Vilnius piloting were discussed. Students gave positive feedback, students liked material and activities.

On the 2nd day of the international partner meeting Valentina Dagiene presented an overview of feedback to the student training school on computational thinking C1 and the STEM and pedagogical staff training event C2 in September 2021 at Vilnius University. Participants of C2 appreciated the event very much: we got variety of material and resources; practical and interactive activities; quality of discussions. Participants of C1 appreciated the ideas provided for real lessons; practical activities for individual and group work; unplugged activities, programming and coding with bots. In the 3<sup>rd</sup> -6<sup>th</sup>-month internal evaluation the results were positive.

In respect to the problems (Covid) of the project implementation this evaluation is more positive than the earlier evaluation. The Covid is less scaring. Focusing for next period: piloting, translation, dissemination and organisation of C3 training event. Erik Barendsen initiated a discussion about scales of questionnaire questions: with or without a middle value (1 - Totally disagree, 2 - Disagree, ?, 3 - Agree, 4 - Totally agree).

Then Felix Winkelkemper (Paderborn University) presented Pentamino & CT. This digital tool was developed to learn mathematics and improve students creativity, visual imagination and CT. Partners discussed the following questions: What is relation of this tool with CT education? How to represent data what you need? How it works in context, i.e. in Pattern recognition? What skills can be developed: Complexity skills, stepwise thinking (algorithmic)?

https://pentomino-digital.de/pentomino-app

The end of the 2nd day was dedicated to wrapping-up of the meeting & planning further work (meeting schedule, working plans). There was the overall satisfaction expressed to hosts with the results of the meeting and discussion of further work leading to successful completion of the project by end of August, 2022.

The staff training in Tallinn was planned (last week of June, 4 persons per partner can come). Vilnius University organizes an international multiplier event, 20 foreign stakeholders of other countries (not from partner organizations) and 25 local participants. Valentina suggested to organize international multiplier event on 30 May -1 June in Vilnius.

At the end of the meeting partners had a guided tour of the Heinz Nixdorf-Museum (world's largest computer museum). Some photos below show big interest of the partners in the Heinz Nixdorf-Museum exhibition.



Valentina Dagienė (Lithuania) and Erik Barendsen (The Netherlands) at the Heinz Nixdorf-Museum













