



Nordplus workshop
Culturally Diverse Approaches to Learning Mathematics and Computational Thinking

in cooperation with the International Doctoral Consortium on Informatics and Informatics Engineering Education Research

Draft AGENDA

Friday, November 30

- 15:00 *Bus from Vilnius airport*
15:30 *Bus from Vilnius bus station*
18.30 *Dinner*
20:00 *Welcome and discussion (please bring your bath suits)*

Saturday, December 1

- 07.30 – 09.00 *Breakfast*
09.00 – 10.30 Don Passey (Lancaster University, UK). Suggestions and criteria for developing computer science education research.
10.30 – 11.00 Valentina Dagiene (Vilnius University). Introducing to the *Nordplus* project: Bebras & ViLLE (including research questions)
11.00 – 11.30 *Coffee break*
11.30 – 12.30 Mikko-Ville Apiola (*University of Turku, Centre for Learning Analytics*)
Presentation the collaborative education platform ViLLE and discussions
12.30 – 13.30 *Lunch*
13.30 – 15.00 Willem van der Vegt (Windesheim University for Applied Sciences, Zwolle, The Netherlands) Bebras tasks. A bridge between informatics concepts and challenging questions
15.00 – 16.00 Practical work in two groups: 1. Doctoral students (working on developing posters). 2. *Nordplus* participants (working on interactive Bebras tasks).
16.00 – 16.30 *Coffee break*
16.30 – 18.00 Reflection on students' posters: all participants will read posters and write down their questions and comments.
19.00 – 20.00 *Dinner*
20.00 – 22.00 Late discussions in groups

Sunday, December 2

- 07.30 – 09.00 *Breakfast*
09.00 – 11.00 Prof. Dr. Erik Barendsen (Nijmegen Rounbound University, The Netherlands). Investigating teacher knowledge and students' learning using PCK instruments, concept maps and learner reports.
11.00 – 11.30 *Coffee break*
11.30 – 12.30 Individual work. 1. For doctoral students: Improve (re-write) your poster which summarizes your research: BIG research question, goal, subtasks, data collection and analysis methods, theoretical framework, scope, and use of results. 2. For *Nordplus* participants: Introducing the new ideas for Bebras tasks.

- 12.30 – 13.30 *Lunch*
- 13.30 – 16.00 Practical work in two groups: 1. Doctoral students (working on developing posters). 2. *Nordplus* participants (working on Bebras tasks integrating to ViLLE).
- 16.00 – 16.30 *Coffee break*
- 16.30 – 19.00 Continuation of the work in small groups.
- 19.00 – 20.00 *Dinner*
- 20.00 – 22.00 Read posters and write down their questions and comments

Monday, December 3

- 07.30 – 08.30 *Breakfast*
- 08.30 – 13.00 Visiting Druskininkai Saules progymnasium. Workshop with teachers on Computational Thinking and ViLLE.
- 13.00 – 14.00 *Lunch*
- 14.00 – 16.00 Arnold Pears (KTH – Royal Institute of Technology, Sweden) and Valentina Dagiene (Vilnius University). *Nordplus* project: Preparation material for teacher training on cultural diverse approaches teaching mathematics and computational thinking.
- 16.00 – 16.30 *Coffee break*
- 16.30 – 19.00 Presentation of group works and new ideas.
- 19.00 – 20.00 *Dinner*

Tuesday, December 4

- 07.30 – 09.00 *Breakfast*
- 09.00 – 11.00 Mirjana Ivanovic (University of Novy Sad, Serbia) Learning Analytics: problems and future works.
- 11.00 – 11.30 *Coffee break*
- 11.30 – 12.30 Arnold Pears (KTH – Royal Institute of Technology, Sweden). Proposals for further work and activities. Planning a research work and dissemination of the project ideas.
- 12.30 – 13.30 *Lunch*
- 13.30 – 16.00 Practical work in two groups: 1. Doctoral students (working on developing posters). 2. *Nordplus* participants (working on Bebras tasks and ViLLE).
- 16.00 – 16.30 *Coffee break*
- 16.30 – 19.00 Final discussion and proposals for future work.
- 19.00 – 20.00 *Dinner*

Wednesday, December 5

- 07.30 – 09.00 *Breakfast*
- 09.30 *Departure to Vilnius airport*