





# TRAIN THE TRAINERS WORKSHOP AND STEM COORDINATOR MEETING OF THE ERASMUS+ KA2 PROJECT

# 598367-EPP-1-2018-1-SE-EPPKA2-CBHE-JP
"INTEGRATED APPROACH TO STEM TEACHER TRAINING", STEM

22-25 October 2019 University of Helsinki Address: Exactum-building, Pietari Kalmin katu 5, Helsinki, Finland.

#### PROGRAMME

Working language is English

#### 22 October, Tuesday

0.00			
9:00 - 9:30	Registration of participants, Exactum-building – room B120		
Opening session			
Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator			
9:30 - 10:30	Welcoming words and backgrounds of STEM education in University of Helsinki, prof. Maija Aksela, University of Helsinki, Director of LUMA Centre Finland.		
10:30 - 11:30	Presentation of the organizational structure and teacher education in STEM education, Topias Ikävalko		
11:30 - 12:30	Lunch at Exactum-builing, Unicafe restaurant		
Research and STE	Research and STEM education models		
Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator			
12:30 - 13:30	Design Based Research as a tool for development, Johannes Pernaa, University teacher, Chemistry Education Unit, University of Helsinki		
13:30 - 14:15	STEM Center collaboration model, Oona Kiviluoto, Project manager, LUMA Centre Finland		
14:15 - 14:45	Coffee Break		
Drama workshop			
Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator			
14:45 – 16:30	Drama tools in STEM Education, Jaakko Turkka, Researcher, Chemistry Education Unit, University of Helsinki		
16:30	End of the day		

# 23 October, Wednesday

09:00	Registration of participants, Metsätalo-building, Room 25, Address: Unioninkatu 40, Helsinki	
Makerspace workshop		
Chair: Oona Kiviluoto, LUMA Centre Finland, University of Helsinki		
09:00 - 10:30	Makerspace learning, Sini Riikonen, Researcher, Faculty of Educational Sciences, University of Helsinki	
10:30 - 11:30	Break and walk to Helsinki Normal Lyceum, Address: Ratakatu 6, Helsinki	
Visit at Helsinki Normal Lyceum Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator		
11:30 - 11:35	Welcome words in Teachers' Lounge, Ms Jaana Silvennoinen	
11:35 - 12:50	Lesson observation, Ms Annina Rostila, room B311 and Ms Pipsa Blomgren, room B305	
12:50 - 13:20	School lunch at School Cafeteria	
13: 30 - 14:45	The role of practical activities in science education, Ms Tiina Ranta-aho, room A107	
14:45 - 15:00	Coffee Break	
15:00 - 15:30	Presentation of Helsinki Normal Lyceum, Ms Jaana Silvennoinen	
15:30 - 16:00	Break and walk to Porthania, Room P219, Address: Yliopistonkatu 3, Helsinki	
Reflections and discussion Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator		
16:00 - 17:00	Reflections on lessons learned at Helsinki Normal Lyceum	
17:00	End of the day	

### 24 October, Thursday

09:00	Registration of participants, Chemicum-builing, Address: A.I. Virtasen aukio 1, Helsinki	
Hands-on activities and visit to ChemistryLab Gadolin		
Chair: Oona Kiviluoto, LUMA Centre Finland, University of Helsinki		
09:00 – 10:00	Hands-on activities in ChemistryLab Gadolin, Iisa Rautiainen, Science Education Coordinator, Science Education Centre, LUMA Centre Finland	
Presentations of EU Partners Exactum-building, Room D123, Pietari Kalmin katu 5, Helsinki		
Chair: Topias Ikäval	lko, University of Helsinki, STEM Project Coordinator	
10:00 - 10:45	Presentation by Keelin Leahy, University of Limerick, Ireland	
10:45 - 11:30	Presentation by Gultekin Cakmakci, Hacettepe University, Turkey	
11:30 - 12:30	Lunch at Exactum-builing, Unicafe restaurant	
Workshops on mathematics and climate education		
Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator		

12:30 - 13:15	Hands-on activities about mathematics, Iikka Talvala, Science Education Coordinator, Science Education Centre, LUMA Centre Finland	
13:15 - 14:00	Thinking and teaching climate systems, Tapio Rasa, Science Education Coordinator, Science Education Centre, LUMA Centre Finland	
14:00 - 14:30	Coffee Break	
Conclusions and discussion		
Chair: Topias Ikävalko, University of Helsinki, STEM Project Coordinator		
14:30 - 16:00	Reflection and planning of STEM Centers	
16:00	Closing remarks for Train the Trainers Workshop and farewell	

# 25 October, Friday, Coordinator meeting

•		
09:00	Registration of participants, Exactum-building, Room D123, Pietari Kalmin katu 5, Helsinki	
Work plan for 2019-2020		
Chair: Janerik Lundquist, Linköping University, STEM Project Coordinator		
09:00 - 10:00	Report on the Monitoring visit to Kazakhstan	
10:00 - 11:00	STEM Master's programmes, STEM centres and Summer schools.	
11:00 - 12:00	Training workshops for teachers from PC	
	Training of STEM ambassadors	
	Quality Assurance	
12:00 - 13:00	Lunch at Exactum-builing, Unicafe restaurant	
Plans and strategies		
Chair: Janerik Lundquist, Linköping University, STEM Project Coordinator		
13:00 - 14:00	Equipment	
14:00 - 15:00	Project web site, One Drive and news form partners	
	Dissemination events and instruments	
	STEM days, STEM weeks, STEM festivals	
15:00 - 15:15	Coffee Break	
Plans and strategies continues		
Chair: Janerik Lundquist, Linköping University, STEM Project Coordinator		
15:15 - 16:00	Financial issues	
16:00 - 16:30	Inter-project coaching. Conclusions from Maxim Bondarev's visit to Istanbul	
16:30 - 17:00	Teamwork among PC participants.	
17:00	Closing remarks for Coordinator meeting and farewell	