

Report 3rd STEM-CPD Summer School

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Date Report: 24th November 2023

Dates summer school: 15th – 19th October 2023

Location: University of Aveiro, Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

Organizing Committee: Vânia Calisto (University of Aveiro, Portugal), Brian Goodfellow (University of Aveiro, Portugal), Goreti Pereira (University of Aveiro, Portugal), Natasa Brouwer (University of Amsterdam, The Netherlands), Iwona Maciejowska (Jagiellonian University in Krakow, Poland), Vincenzo Russo (University of Naples Federico II, Italy), Oreste Tarallo (University of Naples Federico II, Italy), Sanjiv Prashar (University Rey Juan Carlos, Madrid, Spain), Marjan Veber (University of Ljubljana, Slovenia)

Teaching staff: Natasa Brouwer (University of Amsterdam, The Netherlands), Brit Giesbertz (University of Amsterdam, The Netherlands), Iwona Maciejowska (Jagiellonian University in Krakow, Poland), Matti Niemelä (University of Oulu, Finland), Gabriela Reses (University of Aveiro, Portugal), Érika Ribeiro (University of Aveiro, Portugal)

The 3rd STEM-CPD Summer School was organized by the ECTN Working Group Eurolecturer Academy in collaboration with the local organizing institution, the University of Aveiro, in Aveiro, Portugal. The summer school took place in the beautiful meeting room in the Rector's building at the University of Aveiro campus. Thirteen participants from 11 different Higher Education institutions in nine countries across three continents took part in the intensive program of the summer school under the guidance of experts in continuous professional development (CPD) and became CPD Ambassadors. The role of CPD Ambassadors is to share knowledge and experience in education by promoting, motivating, and organizing CPD activities for lecturers in their local institutions and, based on such activities, become members of a larger international STEM-CPD community.

The organization and support by the University of Aveiro were excellent. The 3rd STEM-CPD Summer School started on Sunday evening, October 15, with the Icebreaker and concluded on Thursday afternoon with presentations of the CPD user cases by participants and the CPD-Ambassadors certificates ceremony. On Wednesday afternoon, there was an excursion that included a workshop on how to make "ovos moles," a famous traditional sweet from Aveiro, with a tasting and hands-on experience, a visit to the Maritime Museum, and the Summer School social dinner in a restaurant with traditional local food.

The Vice-Rector of the University of Aveiro, Prof. Sandra Soares and the Director of the Chemistry Department, Prof. Armando Silvestre, welcomed the participants of the summer school.



Vânia Calisto (Organizing committee), Sandra Soares (Vice-rector), Armando Silvestre (Director Chemistry Department)

The approach of the 3rd STEM-CPD Summer School was collaborative learning and co-creation. The summer school had 14 sessions that covered different topics in education: challenges in teaching and learning in higher education, designing CPD user cases and active learning, constructivism and inquiry learning, motivation, inclusive education, technological pedagogical content knowledge approach (TPACK), constructive alignment in CPD, and collaborative teaching..



Group photo in front of the University of Aveiro Rector building



Entrance Rector building



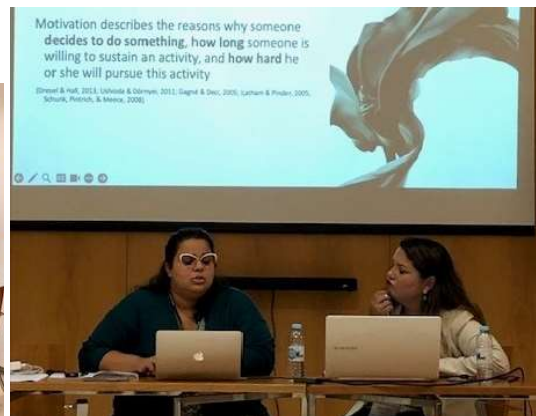
Icebreaker, 15 October 2023



3rd STEM-CPD Summer School Session about CPD competences (Natasa Brouwer)



Matti Niemelä: CPD User cases



Gabriela Reses & Érika Ribeiro: Motivation



Iwona Maciejowska: Constructivism



Brit Giesbertz: Inclusive education



Iwona Maciejowska: TPACK session on Wednesday



Matti Niemelä: Check in CPD User cases in the SALT room (Space for Active Learning and Teaching)



Group work



Group work



Group work

During the summer school, the participants often worked in small groups. Each participant developed their own CPD user case, designed to identify problems and challenges related to teaching and learning in STEM disciplines at their home institution and to propose possible solutions for development as CPD activities. Daily check-in sessions were organized to discuss progress on the CPD User cases.

In the registration of the 3rd STEM-CPD Summer School, coffee/thee breaks between the working sessions, lunches, excursion and a social summer school dinner were included.



Coffee break corner



Lunch buffet



Excursion: Workshop Ovos Moles



Excursion: Maritime museum



Excursion Maritime museum: Explanation cod fishing by Vania Calisto



3rd STEM-CPD Summer School Social Dinner

The detailed program

3 rd STEM-CPD Summer School in Aveiro 15-19 October 2023				
Sunday, 15th October				
18 ⁰⁰ –19 ⁰⁰	Registration			
19 ⁰⁰ –21 ⁰⁰		Ice-breaking event (snacks and drinks included)		
Monday, 16th October				
9 ⁰⁰ –9 ¹⁵	Walk in			
9 ¹⁵ –9 ³⁰		Greeting by Aveiro		
9 ³⁰ –11 ⁰⁰		Session 1.1	Challenges in Teaching and Learning in HE	Nataša Brouwer
11 ⁰⁰ –11 ³⁰	Coffee break			
11 ³⁰ –13 ⁰⁰		Session 1.2	Designing courses using ADDIE approach	Nataša Brouwer
13 ⁰⁰ –14 ⁰⁰	Lunch break			
13 ³⁰ –14 ⁰⁰				
14 ⁰⁰ –15 ³⁰		Session 2.1	Previous experience about CPD—pros and cons of different activities	Matti Niemelä
15 ³⁰ –16 ⁰⁰	Coffee break			
16 ⁰⁰ –17 ³⁰		Session 2.2	How to design user cases? Examples from the CPD Ambassadors	Matti Niemelä
Tuesday, 17th October				
9 ³⁰ –11 ⁰⁰		Session 3.1	How to motivate students, fellow lecturers and yourself?	Gabriela Reses & Érika Ribeiro
11 ⁰⁰ –11 ³⁰	Coffee break			
11 ³⁰ –13 ⁰⁰		Session 3.2	Constructivism and Inquiry-Based STEM Education	Iwona Maciejowska
13 ⁰⁰ –14 ⁰⁰	Lunch break			
14 ⁰⁰ –14 ³⁰		Check in User cases		Matti Niemelä & Natasa Brouwer
14 ³⁰ –15 ³⁰		Session 3.3	Inclusive education - Step in your students' and fellows' shoes	Brit Giesbertz
15 ³⁰ –16 ⁰⁰	Coffee break			
16 ⁰⁰ –17 ⁰⁰		Session 3.4	Competence model (TPACK) and development of personal career pathway in teaching (certification, European experience)	Iwona Maciejowska
Wednesday, 18th October				
9 ³⁰ –11 ⁰⁰		Session 4.1	Constructive alignment in teaching and learning students as well as in CPD activities	Brit Giesbertz and Natasa Brouwer
11 ⁰⁰ –11 ³⁰	Coffee break			
11 ³⁰ –13 ⁰⁰		Session 4.2	Collaborative teaching and learning and CPD activities	Iwona Maciejowska Brit Giesbertz
13 ⁰⁰ –14 ⁰⁰	Lunch break			
14 ⁰⁰ –14 ¹⁵		Check in User cases		Matti Niemelä and Natasa Brouwer
		Excursion and Summer School Dinner		
14 ³⁰ –18 ⁰⁰		Excursion		
18 ⁰⁰ –22 ⁰⁰		Summer School Dinner		
Thursday, 19th October				
9 ³⁰ –11 ⁰⁰			Finalizing work on User cases	Matti Niemelä and Natasa Brouwer
11 ⁰⁰ –11 ³⁰	Coffee break			
11 ³⁰ –13 ⁰⁰		Session 5.1	Presentations CPD User cases, discussion, evaluation (Part 1) (2 parallel groups)	
13 ⁰⁰ –14 ⁰⁰	Lunch break			
14 ⁰⁰ –15 ³⁰		Session 5.2	Presentations CPD User cases, discussion, evaluation (Part 2) (2 parallel groups)	
15 ³⁰ –16 ⁰⁰	Coffee break			
16 ⁰⁰ –17 ⁰⁰		Session 5.3	Reflection and Certificate ceremony	
17 ⁰⁰	Closing of 3rd STEM-CPD Summer School			



3rd STEM-CPD Summer School – Group photo in the Rector’s building

After each session, participants defined their take-home message and what they would like to explore further. The last session of the summer school was devoted to the reflection of all participants and the staff. The entire group was very satisfied with the results, their own involvement, and the pleasant atmosphere during the summer school.



Certificate ceremony

At 3rd STEM-CPD Summer School the 13 new CPD-Ambassadors have created 13 new CPD User cases that are published on Starfish at:

<https://starfish-education.eu/browse/?community=2&ftype=usercase>

After the summer school, participants were asked to complete an anonymous evaluation. Fourteen individuals responded to the survey. They expressed very positive feedback about the summer school, with all indicating that they would recommend it to their colleagues. One participant suggested the possibility of a second summer school for those who have already obtained their CPD-Ambassador certificate. Additionally, some participants mentioned that they would appreciate more time in the daily program for developing the User case.



Group photo from the University library