# **TEACHING PORTFOLIO**

## Personal details

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## Teaching merits

• Pedagogical training

I have completed the International Professional Teacher Education Program (60 ECTS, 13 months) at HAMK, Finland. I finalised these studies in 2018. The study plan was divided into 5 separated, yet interlinked, modules: basic studies in education sciences (13 ECTS), teaching, guidance and assessment competence (17 ECTS), developing personal expertise in pedagogy (9 ECTS), competence of building a learning community (12 ECTS) and practical teacher training (9 ECTS). Each one of these modules supported my development in terms of understanding how we learn and how we should teach at different educational levels, as well as the planning and delivery of educational material, taking into account the role that educators play in society.

With particular attention to supervision and guidance of students, the teacher education program that I completed offered about 31 ECTS distributed in courses within the 5 modules, directly covering different aspects of supervision and guidance, including planning of teaching and guidance, methods, interculturality, dialogue among other relevant topics. Further details are provided in the corresponding annexes.

### Research-based collaborative development

I have participated in the following pedagogical conferences (link to the contribution provided):

o The European Conference on Educational Research 2021

Suero Montero, C., Vladimira Correia, S., Kamali Vinne, F. (2021). *Exploring Students' Perceptions of the Meaning of Science in Their Daily Lives* 

https://eera-ecer.de/ecer-programmes/conference/26/contribution/50697/

Suero Montero, C., Oliveira Leite, L. (2021). Family-based Open Science Schooling: Towards Improving Home-School Collaboration

https://eera-ecer.de/ecer-programmes/conference/26/contribution/50715/

Oliveira Leite, L., Suero Montero, C. (2021). Science Learning in the Community – Case Study Air Pollution in Romania

https://eera-ecer.de/ecer-programmes/conference/26/contribution/50784/

Bunikowska, J., Suero Montero, C. (2021). *Science4Girls – Understanding Pedagogically Ingrained Teachers' Gender Biases* 

https://eera-ecer.de/ecer-programmes/conference/26/contribution/51192/

### • Teaching experience in general (courses development)

I have had the opportunity to teach at undergraduate and postgraduate levels in several countries, in various formats including workshops, seminars and lectures. My experiences teaching and training in several cultures has been challenging and rewarding, an ongoing process to re-learn and re-adjust in every new situation. A summary is provided in the following table.

Teaching experience	Teaching form	Teaching philosophy	Teaching environment
Digital Fabrication and Making in Education. UEF Summer School Course (5 ECTS)	Face to face instruction Hands-on lectures Group work <i>(learning-by-doing)</i>	Constructivist (interactive) Goal-oriented and final demonstration work	Final year undergraduate and master's level students. (2022) https://bit.ly/3CvRLFh
Innovative Pedagogies for STEM Education – Open Science Schooling and Female Students Science Engagement	Seminars Lectures (delivered online)	Constructivist Group work and interactive	Young Universities for the Future of Europe (spring semester 2022) https://vc.yufe.eu/course/3842
NASA Epic Challenge Course (5 ECTS)	Group work (learning-by-doing)	Constructivist (interactive) Goal-oriented and final demonstration work	University of Eastern Finland, optional course (2017–2018)
"Interview Process as a Research Method" (2 sessions, I ECTS)	Hands-on lecture Workshop <i>(learning-by-doing)</i>	Constructivist (interactive)	University of Eldoret, Kenya, Visiting Lecturer (2015)
"Introduction to eLearning – MOODLE Platform" (intensive course, 3 ECTS)	Seminar Workshop	Introducing groups work with hierarchical responsibilities within the groups	University of Los Andes, Venezuela, Visiting Lecturer (2014)
"Designing eCourses" (intensive course, 3 ECTS)	Workshop		
"Qualitative Research Methods in Computer Science" Intensive course, 2 ECTS.	Hands-on lectures (learning-by-doing) Workshop	Introducing on-the-go brainstorming, quizzes and pop-up questions to fuel discussion during the class.	College of Business Education, Tanzania, Visiting Lecturer (2014)
"Academic Writing" Intensive course, 2 ECTS.	Hands-on lectures Workshop (learning-by-doing)		
"Education through Technology - Finnish Landscape" (public lecture)	Interactive public lecture	Constructivists (interactive)	VTT Technopolis (2014)
"Introduction to Human Language Technology – Emotions and Opinions" (Course, 5 ECTS.)	Lectures Seminars	Goal oriented lectures with practical final demonstration work, relevant to the individual students' groups	University of Eastern Finland. Materials found here: https://wiki.uef.fi/x/JYByAQ (2013)
"The Magic of Lenticulars & Anaglyph" (1 session)	Interactive public lecture	Constructivists (interactive)	University of Bristol, open day for A-level students (2009)

I have created and coordinated the development of the courses indicated in the table above, targeting both undergraduate as well as graduate level students (Master and PhD programmes).

The Introduction to Human-Language Technology course aimed at familiarising the University of Eastern Finland graduate students with the analysis of human language from the perspective of emotions and opinions. It covered the deployment of natural language processing (NLP) algorithms and techniques to accomplish practical applications, including the identification of the gender of the author of a piece of written text and the analysis of customer's feedback.

As a visiting lecturer in Tanzania, the 2 courses that I imparted aimed at supporting the transversal skills needed in academic activities (such as scientific writing and qualitative research methods) of the participants interested in joining a PhD programme. The participants acquire practical and theoretical knowledge on the topics of the courses based on the contextual applications of the research they were interested in pursuing.

In addition, as a visiting lecturer in Venezuela, the 2 courses I developed were framed within a capacity building and sustainable development project funded by the Ministry of Finance of Finland. The participants in the course were lecturers from the Universidad de los Andes, who obtained support to deploy eLearning solutions contextually through the capacity building action. In a similar fashion, the course I delivered in Kenya was part of a capacity building North-South-South project on the topic of qualitative data collection methods (i.e., interviews) and how to conduct them.

The course for Nasa Epic Challenge was part of the teacher training study program, as my practical work as a lecturer. The course was multi-disciplinary as well as open to the entire community in the city, including high school students, undergrad and post grad students as well as vocational school students and people working in industry. Due to the diversity of knowledge and expertise in terms of breath and depth of application, care was taken to design a course in which the potential of all the participants was maximised. Teamwork and cooperation were fundamental skills that will be learnt during the course. The course aimed at tackling epic challenges related to sustaining humans on Mars. To accomplish this goal, the students needed to generate inventive solutions by learning and immersing themselves in the innovation processes and methods (Innovative Concept and Engineering Design – ICED; and Technology Readiness Levels – TRLs) used by NASA. The course had a duration of 8 weeks and has a group work collaborative structure that is established at the beginning of the course. I was part of a team of mentors and lecturers that designed, implemented and delivered this course.

The Innovative Pedagogies for STEM Education - Open Science Schooling and Female Students Science Engagement course aims to explore the innovative pedagogics of Open Science Schooling (OSS) as a teaching framework that makes learning STEM (science, technology, engineering, mathematics) education attractive to female students. During the course, present gender inequalities and gender biases in STEM education in Europe will be explored and their underlying reasons studied. Students will be acquainted with the key principles and practical application of the OSS pedagogical framework and how it can be used in fostering and creating new images of science that may sustainably attract more female students to STEM, while supporting new opportunities for male students as well. The course is to be delivered to the YUFE university networks in Spring 2022.

Similarly, the Digital Fabrication and Making in Education course explored the practical implementation of craft- and project-based pedagogics when bringing into the classroom digital fabrication and making tools including microcontrollers, recycled materials, CAD software and visual programming environments such as Snap4Arduino. The course was delivered during the Summer School of the University of Eastern Finland in August 2022.