



Promoting Youth Scientific Career Awareness and its Attractiveness Through Multi-stakeholder Cooperation

Newsletter 2
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Welcome to the 2nd MultiCO project newsletter

Coordinator:

Professor Tuula Keinonen

University of Eastern Finland/
School of

Applied Educational

Science and Teacher Education

tuula.keinonen@uef.fi

Partners:

Professor Shirley

Simon

Institute of Education/
University College

London

shirley.simon@ucl.ac.uk

Professor Annette Scheersoi

University of Bonn

Fachdidaktik Biologie
a.scheersoi@uni-bonn.de

Professor Miia Rannikmäe

University of Tartu/

Centre of Natural

Science Education
miia.rannikmae@ut.ee

Professor Costas Constantinou

University of Cyprus/
Department of Education

c.p.constantinou@ucy.ac.cy

Dear MultiCO friends,

Our project is over its half-time and thus far we have carried out many interesting studies related to the use of career-based scenarios as to promote students' interest towards science.

The first article has now been published in a science education journal and concerns Finnish students' perceptions of working life skills. As a consortium we have a great collaboration and many other articles are on the way to publishing.

Fortunately, we still have most of the teacher and student participants in our project and hopefully, will keep us company also in the third year of our longitudinal study. The teachers, in spite of their hectic schedule, show excellent commitment to the project and they are willing to share their ideas about the development of the career-based scenarios. The students seemed to be excited to participate in a teaching context other than the 'conventional' even though filling in questionnaires was not an entertaining task.

In ESERA 2017 we will have a MultiCO symposium where some of the project studies are presented. These include the following: students' interest in science in the five MultiCO countries, evaluation of student motivational, career-related context-based scenarios, and one case study in using scenarios as to enhance students' interest in science and to promote career awareness. Several other oral presentations also concern studies in the context of MultiCO project. You are more than welcome to join us in Dublin and discuss ideas about the project and its findings.

Greetings from the 24 hour bright Joensuu.

Tuula Keinonen

Coordinator

Inside this issue:

Students' perceptions of working life skills	2
Career-based scenarios incorporated into teaching units	2
Experiences from the interventions: "Can't see the forest(er)..."	3
Experiences from the interventions: "Acoustics Club"	4

Experiences from the interventions: "Can't see the forest(er)..."



The forest as an ecosystem is a subject of the 8th grade biology curriculum in Germany. As the profession "forest engineer" has been identified as a modern career within the framework of the project, a scenario was developed and conducted in two school classes in one of our partner schools.

In order to encourage the students to think about their image of a forester, they were asked to draw a forester at the beginning of the scenario, and compare their results. The classes were then taken to the forest to meet a real forester. The students learned about the difference between the profession of the forester and a forest manager. Subsequently, in the forest, they carried out investigations in small groups which are typical for this professional field (e.g. the determination of soil organisms, the survey of trees and the exploration of a soil profile). Back in school, the students again drew a forester and discussed their experiences.

At the outset, the students had a relatively stereotypical image of the forester profession (old man with a dog and a rifle).

This changed through the encounter with people who work in this professional field. In that way, the students discovered that women also work in forester professions. The students especially liked the practical work in the forest and the use of authentic tools/equipment: *"It was nice that we were outside, but also that we had to work technically. So, we didn't have to sit inside all the time, listening to instructions. Instead, we were outside digging everything up with shovels."*



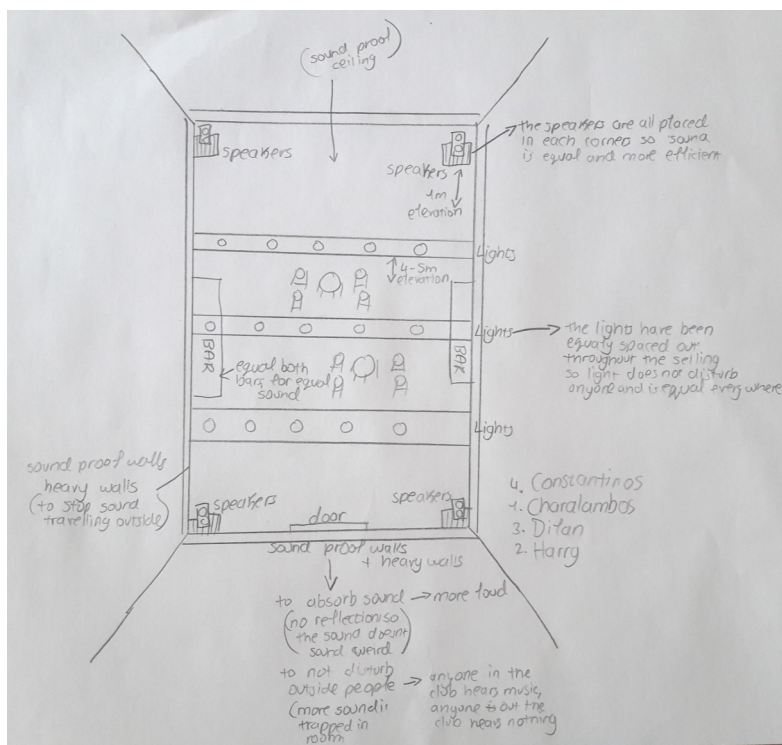
Forester drawing before the intervention



Forester drawing after the intervention

Experiences from the interventions: “Acoustics Club”

The “Acoustics Club” is a career-based scenario embedded in the teaching unit of Waves and Sound in 8th grade in Cyprus as to address the problem of noise pollution. The story is as follows: *“The president of the youth club has decided to turn the squash court into a club as to create a safe place for teenagers’ Saturday night out. However he worries about the quality of the sound as well as neighbours’ complaints about the noise. So, he decides to hire the services of an Acoustics Consultants Company.”*



Students’ mission was to take on the role of acoustic engineers and design the club considering two parameters: (a) the club should have a good sound quality and (b) there should be noise control.

During the teaching sequence, the students were taking notes and by the end of the unit they designed their sketches. After this, the director of the Acoustics Consultants Company visited the students and provided feedback on their sketches and more information about sound as well as the working field in general. Then, the students revised their sketches and sent them to the director to choose the best sketch.

The interaction with the practising scientist seemed to enable the students to link theory to practice and understand real-life applications with

respect to the concept of sound. This finding could usefully inform the principles for the development of career-based scenarios as to be more relevant and interesting for the students.

about MultiCO

MultiCO is a three-year project and has started in August 2015. The University of Eastern Finland acts as the project coordinator and the consortium partners represent the following European universities: University College London (UK), University of Tartu (Estonia), University of Bonn (Germany) and University of Cyprus (Cyprus). The main goal of the project is to promote students’ awareness about possible career choices in science and technology. [Learn more...](#)

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