



Invitation to the COSMOS final conference

Place and date: De Vereniging in Utrecht, the Netherlands, Friday 22 November, 2024

- The results of the three-year collaboration in the COSMOS project will be presented
- Workshops and round table discussions are on the program for teachers, school leadership, educational researchers and policy makers
- An opportunity to get to know:
 - COSMOS' pedagogy and framework for Open Schooling in Science Education
 - the school projects and their experiences with the COSMOS approach



Learn how we can grow to become more open in our science education by

collaborating with stakeholders in our community!

www.cosmosproject.eu

COSMOS consortium meeting at the University of Southampton

From 22nd – 24th May Dr Andri Christodoulou with Sam Weston and Prof Marcus Grace from the Maths & Science Education Research Centre at the Southampton Education School had the pleasure of hosting the fourth consortium meeting for the H2020-funded [COSMOS project](http://www.cosmosproject.eu). In total, we had 20 participants across 7 countries

and 13 partner institutions attending and working together on important next steps for our open schooling through science education approach.

The 3-day meeting focused on reviewing the work conducted in each national context for our second round of COSMOS implementation activities in primary and secondary schools as well as looking

ahead at the next 6 months as we focus on evaluation and finalising our project outcomes and deliverables. We discussed the process of finalising our



Our COSMOS team at Valley Gardens, University of Southampton



Dr Andri Christodoulou kicking off proceedings with a welcome talk

important progress in the planning of our COSMOS final conference, which will be taking place on 22nd November 2024 hosted by our coordinating institution, the University of Utrecht.

Conference, Events and Hospitality team, led by Vicky Gray, who worked closely with us ensuring that our participants had a seamless experience at Southampton.

COSMOS framework emphasising the interrelation of key concepts (socioscientific inquiry-based learning with communities of practice and our ecological model of open schooling). We have also made

The 3-day consortium meeting was supported by the FSS KEE & Events team, specifically Elisabetta Calamelli, and the University's



Our project coordinator, Dr Marie-Christine Knippels providing an overview of the work achieved thus far for COSMOS

Working together with societal actors in SSIBL: Pupils in action at Novaplust, school in Belgium.

SSIBL is a didactic approach to science education that has three distinct phases: asking questions about socio-scientific issues (ASK), conducting research to find answers to those questions (FIND OUT) and moving into action to take steps forward (ACT). Within the COSMOS project, we go one step further and deploy SSIBL as a methodology to engage in open schooling. An important aspect of this is that teachers, pupils and actors from society work together on the socio-scientific issue. They can do so within one or any phase of SSIBL, and a key challenge is therefore to identify and engage with these societal actors.

Novaplust, a specialised urban STEM school in the city of

Antwerp (Belgium), has developed its own approach to this. In this blog post, we reflect on how teachers Simon and Sasja, the Novaplust COSMOS team, go about connecting societal actors to the learning process of their students in science education. Novaplust is participating in COSMOS for the second year. Last year they were one of the project's pilot schools, and this year they are building on those experiences. Simon and Sasja both teach a STEM course to pupils in the third year of secondary education (grade 9, so 14–15-year-old). For Novaplust, student initiative and self-leadership are central pedagogical principles, which is also reflected in how they engage with societal actors in COSMOS.

For Novaplust, COSMOS is a semester-long project. At the start, the teachers chose a broad overarching theme: 'the green revolution'. Under their guidance,

students then explored the theme and identified topics that engaged them. Topics they want to know more about, that fascinate them so much that they want to work on them for several months, and in which they want to make a difference. In small groups, the pupils came up with themes such as healthy and sustainable nutrition, effects of light on the mental well-being, effects of (too much?) sport on the health of young people...

In COSMOS, as part of its open schooling approach, all schools work together with societal actors to explore themes further, to co-research and co-design actions. Simon and Sasja took their own approach to this, in line with their school's pedagogical vision. First, they encouraged pupils to further concretize their own themes: what is it exactly they want to study in their SSIBL project? What do they already know, what are still gaps? Based on this, the



teachers then went on to look for societal actors who can be meaningful in the students' learning process. For each group, they identified a partner: varying organizations such as the data service of the local government, a psychology professor, a dietician... The teachers did an initial briefing with these experts on the purpose of the COSMOS project and introduced them to the students' initial ideas.

The next step is for the students to engage in dialogue with the experts. To this end, Simon and Sasja coach them in two areas. First, they get the pupils to even further concretize their research theme: they work out an initial research question (ASK), make a first attempt to plan their research (FIND OUT) and also explore initial ideas for actions they could set up with the results (ACT). This also includes explicating their own motivation for asking exactly these questions, as a form of personal inquiry. The teachers also let their pupils think about what they want to get to know from their experts: do they want them to help refine their research question? Are they looking for

specific data to answer the question (scientific and social inquiry)? Do they need help with their research plan? Do they want to set up actions together? The students work out a set of questions and discussion points around which they will later engage with their experts.

Are you wondering how it went next? You can find this and also examples from other schools, e.g. from Sweden, the Netherlands, or Israel, on our blog:



Newsletter

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COSMOS – Creating Organisational Structures for Meaningful science education through Open Schooling for all

Visit our web page to find out more about the COSMOS project and its partners www.cosmosproject.eu

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