

## Yr. 1 Short Report Sustainability Education: Continuing Professional Development for k-12 School Teachers & Faculty

Primary schools are formative environments for building the capacity of individuals to create changes toward sustainability. Professional development is an essential mechanism for enabling educators to understand and teach sustainability principles and practices, but many programs are outdated and overly theoretical.

The goal of the Sustainability Education project is to work with teachers to effectuate changes in k-12 education, resulting in a generation with deeply rooted sustainability competence.

In year one, the competencies-oriented approach to teaching sustainability (developed by Dr. Redman) was adapted within three different international contexts where Continuing Professional Development (CPD) workshops following a 'transmission-transformationtranslation' model took place: Ireland, led by Dublin City University (DCU); Germany, led by Leuphana University Lüneburg (LUL); and, Mexico, led by Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) and Arizona State University (ASU). The CPD workshops (totaling 60 hours across the three locations) engaged teachers in tangible and interactive ways, focusing on increasing their competence and confidence in teaching about sustainability.

Project partners collaborated with the participating primary school teachers and supported them in developing their Pedagogical Content Knowledge (PCK) in sustainability to enable them to become leaders of change in their schools. Partnerships were developed with  $\sim 80$  teachers from 30 schools. By the end of the project, the teachers will implement sustainability curriculum and projects in their schools.

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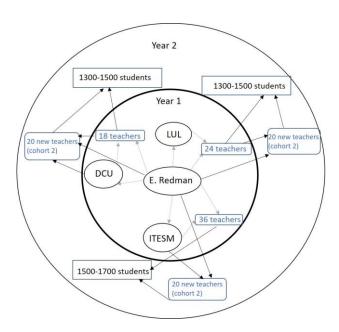
Year one's activities helped project partners to better understand the suitability of the content and structure of the CPD program within the three contexts. Drawing on the experiences and evidence from the evaluations, the team plans to further refine the CPD program, so that the model can be implemented and scaled effectively. It was anticipated from the onset that the participation of teachers in the CPD program would result in positive impacts on the younger generation, however, this has not yet been examined. The impact assessment of the teacher's participation in the CPD program on their student's learning, and on their peers, is the focus of the year two.

The following are reflections and insights on the project process and outcomes from year one:

The pre-program survey results demonstrated that there is a great need for sustainability CPD. Teachers express a desire to educate for sustainability but a lack of confidence, knowledge, and skills to do so.



- Traditional CPD focuses on the 'transmission' phase and rarely spans into the 'translation' and 'transformation' phases targeted in this model. Hence, in moving into those phases, the teachers struggled with the idea that the goal was not simply to hand them ready-to-use curriculum.
- Building partnerships with the local government to support the sustainability CPD requires significant time and preparation. But, this ultimately results in a better program through supporting the teachers' professional advancement.



Sustainability Education Project Year 1 and Year 2 teacher/student participation