

## **Proposal for Video Presentation**

### **Developing 21<sup>st</sup> century competencies in pre-service and in-service teachers through design thinking: A cross-university approach**

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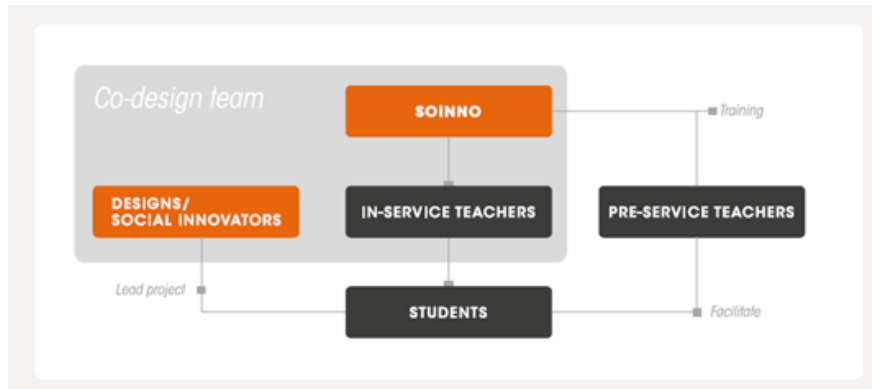
#### **Abstract**

Design thinking (DT) is a human-centric, iterative and interactive problem-solving process that captures how designers innovate and problem-solve. Such important skill set has become one of the most crucial skill set in the knowledge society of the twenty-first century (OECD, 2015). Thus, DT has been widely applied in business education and social innovation, and a similar trend has also been observed in the field of education (Carroll et al, 2010) and yet, there is a paucity of study that try to understand the important learning outcomes of such application (Taheri et al, 2016) and to empower teachers to adopt DT as a pedagogy (Panke, 2019).

This presentation highlights a cross-university collaboration on nurturing 21<sup>st</sup> century skills in pre-service, in-service teachers and students with an experiential learning process through DT workshops (see figure 1).

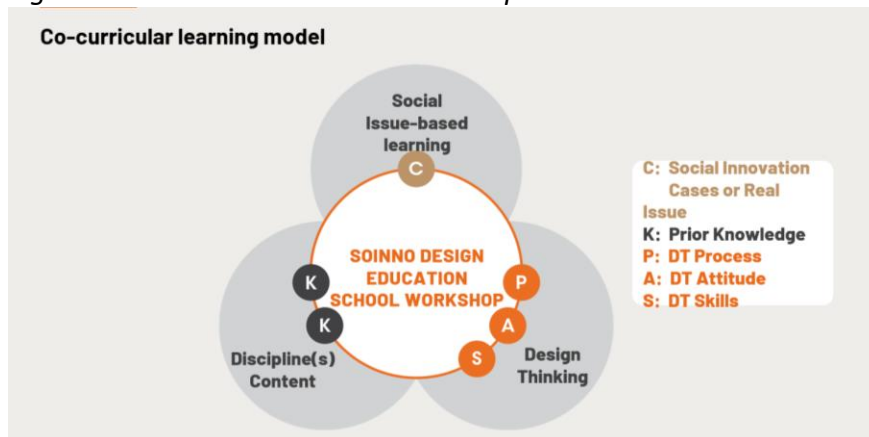
*Figure 1. The implementation model*

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These co-curricular workshops (see figure 2) targeting on secondary school students, are designed by a group of experienced designers with constant feedback from in-service teachers while the pre-service teachers also receive training from the experienced designers and participate in these DT workshops as facilitators. In this way, pre-service teachers and in-service teachers all go through this experiential learning process together with their students and our initial findings also confirm the development of important twenty-first century skills among these educators including an open mindset that allows risk-taking and making mistakes. This presentation will share the implementation model and curriculum design of these co-curricular DT workshops. The challenges and important lessons learnt through this collaboration will also be disseminated. The current presentation advances practice that promotes cross-university collaboration in applying DT to a wider community.

*Figure 2. The co-curricular DT workshop*



**Keywords:** *Cross-university collaboration, design thinking, experiential learning, teacher education*

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**References:**

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