

THE EDUCATION UNIVERSITY OF HONG KONG  
FACULTY OF LIBERAL ARTS AND SOCIAL SCIENCES

**Research Output/Impact/Knowledge Transfer Prize**  
**for the Dean’s Research Fund 2019/20**

**Brief Introduction of Awardee’s**  
**Research/KT Publication/Study/Output and Future Research/KT Development**

<b>Awardee (Dept):</b>	Prof So Wing Mui, Professor (SES) Dr Li Wai Chin, Assistant Professor (SES) Dr Cheng Nga Yee, Assistant Professor (SES)
<b>Publication Title/KT project:</b>	Teacher Professional Development Programmes with special school teachers for Students with Intellectual Disabilities on Learning Progression Framework and STEM education

A. *Briefly introduce your research/KT publication/study/output for which you have received the prize.*

In 2017-2019, the team successfully conducted three tendered teacher professional development programmes targeted at developing special school teachers’ capacity in the “Learning Progression Framework” and implementing STEM education for students with intellectual disabilities in special schools.

Based on the adapted GS Curriculum for students with intellectual disability which was developed by the same project team and had been implemented since 2014, the team developed and validated the “Learning Progress Framework” of the GS curriculum for students with intellectual disabilities. The framework facilitated teachers’ review of their teaching design in order to improve teaching and learning of the GS curriculum. All GS teachers in special schools can benefit from this framework.

STEM education has received much attention in Hong Kong since 2015. Under the principle of ‘One Curriculum Framework for All’ put forward by the Hong Kong Curriculum Development Council (CDC) in 2001, children with special educational needs (SEN) should also be provided with the same opportunities to be engaged in STEM experiences for nurturing their collaboration, creativity and problem-solving skills. With reference to Learning Progression Framework the team developed and implemented since 2014, the Project Team worked further on two projects to implement teacher professional education and develop resources for STEM education for use in special schools. The projects comprised workshops and learning circles which benefited around a hundred teachers from more than twenty special schools. The workshops focused on a) enhancing teachers’ subject knowledge of science and technology, and professional competency in implementing STEM Education and b) developing sets of learning and teaching materials. The learning circles focused on a) sharing good practices of implementing STEM Education through supporting teachers’ collaborative lesson planning, lesson observation, discussion, and reflection and b) developing 8 sets of exemplars for implementing STEM Education in special schools.

*B. How you used/will use your prize and perhaps its usefulness to your research/KT development?*

The prize will mainly be used in the employment of a research assistant to continue with writing proposals for future funding applications, and dissemination of project outcomes as newsletters and/or conference/journal articles.

*C. Expected research/KT outcomes/outputs/impacts arising from this prize.*

It is expected that the project team will be successful in receiving future funding to continue with teacher professional development in STEM education, and the dissemination of good practices would be published as newsletters and/or conference/journal articles.