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Identifying Opportunities for Addressing the Dimensions of STEM

ACARA's STEM Connections project aimed at investigating a transdisciplinary approach to the teaching of STEM. In collaboration with the Australian Association of Mathematics teachers, ACARA supported 13 schools from around the country to develop an integrated STEM project that had its basis in the real world and incorporated the Australian Curriculum learning areas of Mathematics, Science and Technologies. ACARA has continued to apply and develop the principles of this project through the Digital Technologies in focus project. The challenge for teachers has been to look beyond their own area of expertise, to find the time and other like-minded individuals to develop rich STEM projects. School executive support is essential for sustained implementation.

This workshop will focus on identifying opportunities for addressing the dimensions of STEM; considering how the dimensions of the STEM ways of thinking, knowing and doing are reflected in the Australian Curriculum; and identifying a connecting idea from up to three learning areas to be the focus for a STEM unit. A model will be provided as a starting point and new Illustrations of practice will be shared to stimulate discussion and to begin planning a rich STEM project.

Participants will explore the dimensions of STEM, discuss the purpose of a STEM project for their school and identify STEM connection ideas for the project in collaboration with others. They will develop a STEM connection, prepare and share a 'pitch' and provide feedback to others.