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Digital Technology,
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Deliver STEM Through Telecommunications

In 2020, 10,000 students received specialist STEM lessons in either their classrooms or homes through the new STEMLinc program at Ecolinc. This workshop focuses on the exponential growth of STEMLinc, understanding the key elements of effective interactive video conference provision and the new STEMex industry focused extension to STEMLinc available to schools in 2021. In 2019 all Victorian government schools gained access to CISCO Webex equipment and software.

In June, 2019 Ecolinc decided it was timely to add video conferencing to its popular suite of on-site, LMS, and outreach programs. Underpinning all Ecolinc programs is a desire to create STEM learning experiences otherwise unobtainable in the classroom. Ecolinc has a collection of live animals featured where possible. We also felt best practice would involve as much remote hands-on interactivity as possible so, our STEM-IN-A-BOX idea was born. Presenter 'Professor Noah Lott' came to life in the home-made green screen studio.

Two curriculum programs were initially developed for the Professor's delivery, 'Fantastic Beasts: Animal Adaptations' and 'Continental Drift'. We sought out some additional quality third-party providers to add depth of content to the early STEMLinc suite. How did early responses from schools change when the Pandemic crisis hit and where are we today? Teachers will be asked to reflect on any changes to their telecommunication skills and attitudes to distance learning delivery over the past 15 months. STEMLinc programs and presenters go through strict quality control processes.

This part of the workshop involves teacher participants learning what to look for in a quality video-conference learning experience. Teachers will be involved in the hands-on evaluation of a series of short recorded extracts using a rubric. In 2021 we are implementing a fortnightly program of live links to STEM industry experts. STEMex allows classrooms to connect with STEM experts as they share their knowledge and experience in applying science to real world issues.

Run on a fortnightly basis, STEMex takes the form of short, powerful talks followed by a Q & A session. A range of popular topics provide unique opportunities for students to develop a deeper understanding of the significance of STEM in their world. STEMex aims to build a community of inspired thinkers empowered to make a difference.

Teachers will be given time to explore the free suite of programs available to schools through STEMLinc and Learn onLine and to provide feedback on any additional useful content ideas.

Preparation Material:

<https://static1.squarespace.com/static/5e66dc90e39c7d4b7cf9cb10/t/615e260fd556c53336b0847e/1633560080248/Joanne+Tate.pdf>