STEM Learning Boosted in the Classroom with New Resources

Every Western Australian teacher, from Kindergarten to Year 12, will have access to a suite of new and innovative teaching resources with the launch of the STEM Learning Project today.

Designed in collaboration with WA teachers, the STEM Learning Project has developed 41 Curriculum Resource Modules to support the introduction of integrated science, technology, engineering and maths (STEM) learning aligned with the WA Curriculum and General Capabilities.

Teachers will also be supported with 15 Professional Learning Modules that explain how to implement the resources for a STEM enriched classroom.

Integrated STEM learning combines core science, technology, engineering and maths subject knowledge with the 21st century skills of collaboration, creative and critical thinking, problem-solving, reflective practice and communication.

This combination of skills and knowledge has been identified as being necessary to take on the opportunities of the future workforce that is becoming increasingly reliant on information and technology.

Kalien Selby, Scitech Chief Executive Officer said, “To foster integrated STEM skills and knowledge, it’s necessary to inspire educators to evolve their practice and teach in innovative and engaging ways that motivate their students.”

“The STEM Learning Project suite of resources focuses on solving open-ended, authentic real-world problems where students guide their own learning. This emphasis shifts the expectation away from teachers ‘showing’ the answers and enables students to acquire a deeper understanding through self-driven learning.”

Students are introduced to the design process of research, analyse, ideate, prototype and test. During the prototyping and testing phase, students are encouraged to trial and fail repeatedly, and to keep going until they find a solution.

Resources range from modelling a structure for animals to safely cross a road to designing a shoe with repurposed materials to exploring the declining honeybee population.

The STEM Learning Project was initiated in 2016 through a partnership between the Department of Education and the STEM Education Consortium, a collaboration between Scitech, the Educational Computing Association of WA, the Mathematical Association of WA and the Science Teachers Association of WA. It directly supports the WA Government’s State STEM skills strategy to strengthen STEM capabilities in teachers and students and boost participation in STEM education and career pathways.

The STEM Learning Project resources will be made available to teachers from all education sectors via the Department of Education’s public facing website: https://www.education.wa.edu.au/resources/stem-learning-project

For more information: scitech.org.au/2020/10/stem-learning-project/