EdTechSA Inc.

THINKING TECHNOLOGICALLY 2.0

State Symposium 2020
Tuesday 29th September
Online via Zoom

SYMPOSIUM PROGRAM

8:45 - 9:00 LOG IN AND WELCOME

Tina Photakis

9:00 - 9:45 SESSION 1

Learn from Alice Keeler
Alice Keeler

9:50 - 10:35 SESSION 2

Evaluating and Utilising Technology for Learning
Catherine Newington and Daniel Ingvarson

10:35 - 10:50 BREAK

10:55 - 11:40 SESSION 3

Level-Up Your Online and Blended Instructional Practice through the Lens of the SAMR Framework
Dayna Laur

11:45 - 12:30 CONCURRENT SESSIONS

SESSION 4A	SESSION 4B
What, how, do and so? *Paula Christophersen*	Robots in space – exploring spatial reasoning *Sam Fowler*

12:30 - 13:00 LUNCH

13:05 - 13:50 CONCURRENT SESSIONS

SESSION 5A	SESSION 5B
Revisiting the Key Ideas of the Technologies Curriculum *Leanne Cameron*	Game Development *Nathan Cini*

13:55 - 14:25 CONCURRENT SESSIONS

SESSION 6A	SESSION 6B
Robotics from K to 6 - a Score and Sequence *Fiona Holland*	Skill Strands in Computer Programming, how to teach and differentiate it *David Chu*

14:30 - 15:40 BREAK

14:55 - 15:40 CONCURRENT SESSIONS

SESSION 7A	SESSION 7B
Pandemic Problem-Solving Mandi Dimitriadis	Defence Industry - Technologically Focused Opportunities *Sarah Baker*

15:45 - 16:30 SESSION 8

How to Become a K-12 Cyber Security Education Champion
Rebecca Vivian and Thushari Atapattu

16:30 - 16:45 CLOSE

16:45 ONLINE NETWORKING, DRINKS AND PRIZES

OVERVIEW OF SESSIONS

Learn from Alice Keeler
Alice Keeler

Alice Keeler is the world's number one expert in teaching with Google products and Google Classroom. She is passionate about intentional use of technology for student centered teaching. It's not digital it's different. G-suite is not simply a tool to deliver content digitally. It is a tool that we can use to build relationships, collaborate, and give meaningful feedback. We get to re imagine the way we teach for today's context. Let's leverage the tools that we have to revolutionize the way that we deepen relationships with students, empower them, and spark curiosity.

Early Years | Primary Years | Middle Years | Senior Secondary

Evaluating and Utilising Technology for Learning
Catherine Newington and Daniel Ingvarson

This webinar will investigate how technology is changing the role of the teacher and our students' learning environment. With a current surge of technology used for learning, we take you through a process to help evaluate whether the technology is the right fit for it's purpose. It will also take you through steps to help you recognise how you can best utilise learning management systems (like Google Classroom or Microsoft Teams).

Primary Years | Middle Years

Level-Up Your Online and Blended Instructional Practice through the Lens of the SAMR Framework
Dayna Laur

Online or blended learning is here to stay, and we must embed high-level uses of technology in our instruction. Pedagogical shifts, designed as authentic project experiences in our virtual or face-to-face classrooms, have the power to move our students into a redefined level of learning. In this session, explore how online tools have the capacity to develop learner agency and support teacher practice through the SAMR Framework lens. The use of these countless free versions of online tools engages and empowers our learners to reach their full potential and become the innovative designers of our future.

Primary Years | Middle Years | Senior Secondary

What, how, do and so?
Paula Christophersen

In essence, Digi Tech is about students learning how to solve suitable real-world problems through computation. A simplified problem-solving model might help students frame their thinking and practices when creating these solutions. This session explores a simple four-word approach that can help structure students' thinking and prompt actions: WHAT - what is causing the problem and what will solve it? HOW - how will you design the solution? DO - do the coding and manipulating of data to create the solution, SO - so is the solution fit for purpose? The session also consider suitable ways of thinking questions for each stage.

Primary Years | Middle Years

Robots in space – exploring spatial reasoning
Sam Fowler

Spatial reasoning has been proven to be an important determinant in student success in STEM subjects. Digital tools offer unique ways of engaging students with this underappreciated part of the curriculum. This workshop will supply some simple but effective methods of using robots with various age groups to explore and embody aspects of spatial reasoning whilst engaging them with complex computational thinking. Examples are sourced from Ozobots, Spheros and Mbots.

Early Years | Primary Years | Middle Years

Revisiting the Key Ideas of the Technologies Curriculum
Leanne Cameron

With the Australian Curriculum currently under review, it is a good time to stop and consider the Key Ideas underpinning the Technologies Curriculum. How well are these ideas reflected in what actually happens in the classroom? In this presentation, Leanne will consider the fundamental understandings of the Technologies Curriculum and focus discussion on whether some refinements might be needed to both our practice and the curriculum to clearly focus our preferred futures.

Early Years | Primary Years | Middle Years

Game Development

Nathan Cini – Playford International College

This session is designed to demonstrate how teachers from a variety of curriculum areas can integrate the concept of game development as a way to engage their students in digital technologies. Learn how students can apply and evidence their knowledge by creating their own virtual worlds and create gamified programs accessible on any online device.

Middle Years | Senior Secondary

Robotics from K to 6 - a Score and Sequence

Fiona Holland

It can be difficult to know where to start with so many robotics products now on the market for schools. Budgets in a small school can be very limited so teachers need to choose products that provide a wide range of outcomes for a small cost as possible. Explore some of these robotic products as Fiona takes you through a scope and sequence for robotics in a small rural school.

Early Years | Primary Years

Skill Strands in Computer Programming, how to teach and differentiate it

David Chu

This session aims to provide some practical strategies and framework to structure a learning program to introduce computer programming and incrementally increase the interweaving complexity. The framework is adaptable and customisable to enable teachers a flexible teaching repertoire to teach secondary students in different contexts and abilities.

Middle Years | Senior Secondary

Pandemic Problem-Soving

Mandi Dimitriadis

The events of 2020 have highlighted, more than ever, how important it is to empower our young people as innovators, creators, and problem-solvers, who know how to make their world better. In this workshop, we will unpack the design thinking process as a problem-solving methodology students can use to develop designed solutions for issues that they care about. We will include practical strategies for developing students' skills for identifying and defining problems, generating creative ideas for solutions, and producing and testing prototypes. Hear some inspiring examples where primary school students have used Makers Empire together with design thinking to solve problems their families and communities have faced due to Covid-19.

Primary Years | Middle Years | Senior Secondary

Defence Industry - Technologically Focused Opportunities

Sarah Baker

Working with 24 core and 89 Affiliate/Associate Advanced Technology Program (ATP) schools across all 3 educational sectors to assist development of their STEM programs has been a fantastic way to investigate STEM and Industry links in South Australia. It's exciting to see the current and future opportunities in Advanced manufacturing, Aerospace, Cyber & Technology, Shipbuilding, Science and Space available locally, nationally and worldwide for our students. Digital and Technology skills are extremely important across all of Defence industry and this presentation will showcase how ATP provides student activities and teacher professional development opportunities to enhance STEM capability, education and enterprise skills as well as enhancing student engagement, participation and enrolment in STEM subjects.

Primary Years | Middle Years | Senior Secondary

How to Become a K-12 Cyber Security Education Champion

Rebecca Vivian and Thushari Atapattu

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