Title: Digital Technologies – An introduction to coding@home TV

URL: <https://www.youtube.com/watch?v=TLUiL5eOEmo>

Duration: 03:47

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[Calm music]

NARRATOR 1

The Australian Curriculum: Digital Technologies empowers students to create digital solutions for preferred futures.

This segment will highlight how the coding@home TV suite of resources can support the implementation of Digital Technologies in and out of the classroom.

So, what is coding@home TV? Well, it was originally designed to provide continuity of learning during lockdown and support students to create entries in the Premier's Coding Challenge, but it's so much more.

Coding@home TV is designed to progress students through an iterative process to develop a digital solution. From ideation to algorithms, coding basics, branching and repetition, self-evaluation and even how to deliver a video presentation.

The series was produced in collaboration with Network Ten and broadcast on free-to-air television during the initial learning from home period in May and June, 2020.

There are five episodes for primary students and five episodes for secondary students.

Episodes are student-centric and are designed to support self-paced learning with explicit opportunities for skill development.

And students will be inspired by seeing how coding is applied in the real world and how skills in this industry will prepare them for the 21st century from home-grown industry experts right here in Queensland.

Coding@home TV covers the following topics:

* Identifying an audience and designing a product specifically for them.
* Writing algorithms and representing them with a flow diagram.
* The basics of coding using Scratch for primary students and Python for secondary students.
* Programming, repetition and branching in Scratch and Python.
* Tips and tricks to plan and record a video presentation.
* And you'll also hear from previous student winners of the Coding Challenge.

Let's take a quick look at coding@home TV in action.

[Intense Beats]

NARRATOR 2

If you've ever asked Siri, Alexa or Google a question, then you have used a chat bot. But a chat bot like Siri is a very complex one. Our version will be a lot simpler and it will only be able to answer a few questions. But why would a chat bot be a good digital solution to our problem?

Well, let's take a look at the difference between a human helper and a chat bot.

NARRATOR 3

One of the easiest ways to add more interaction to our chat bot, is to add more IF statements that ask our user questions. In this case, we're going to be using cyber security questions. How about we ask our user if they know what a phishing email is.

NARRATOR 2

[A] key focus of Scratch is the use of sprites. They're the characters you will see on screen, like these ones.

We can use our block coding to give each one of these sprites a list of instructions to perform. This is a sprite. This is a sprite. Even this is a sprite.

It's a bit like a movie set where each one of the sprites is an actor and they have a list of instructions for what to do in each scene.

NARRATOR 1

You can watch a whole episode or just parts of it, to support skill development for students and teachers, to support students working on individual projects, or to provide differentiation or co-curricular activities, to assist with continuity of learning, or to present STEM career pathways through real-life application of lesson content and interviews with home-grown industry experts.

All the coding@home TV episodes can be accessed on the Department's learning@home website or via the coding@home TV playlist on the Department's YouTube channel.

To find out more about the Premier's Coding Challenge, visit the official website: qld.gov.au/codingcompetition.