# 21st Century Thinking - Technologies Curriculum

**Event Overview:**

The main thrust of the proposed new AusVELS Technology curriculum is the transition of our student from simply being users of technology to being creators of technology. In order for this occur our students need to be introduced to new thinking strategies which underpin both **Design and Technologies** and **Digital Technologies** which are now mandatory for student's F – 10 beginning in 2017.

These thinking strategies are interlinked across both technology subjects and consist of:-

- **Systems Thinking:** – A problem solving strategy in which students are taught to deal with a problem from a variety of perspectives to better understand the technical, social and logical elements required.
- **Design Thinking:** - A process of thinking and problem solving which directs students to explore new opportunities and directions in determining a solution to a challenge.
- **Computational Thinking:** – A logical approach to problem solving that directs students through a four step process which results in the creation of an algorithm that can be applied to other challenges.

It must be noted that these methods of thinking have been identified globally by Educational Experts such as Ken Robinson and corporations such as Apple and Google as essential skills for a modern society and workplace and are genuinely useful skills for any student and teacher of any age.

These methods can be applied to all aspects of the curriculum and can be enacted successfully with or without technology and the need for expensive resources.  We will not be having an intensive technology focus to this PL event.

If you are looking for other aspects of the new technology curriculum such as **coding and robotics** please view our other PL sessions on offer.

**Who can participate?**

This program will be offered in two formats during 2017 as follows;

1. Whole School. In this format the program will be conducted onsite spaced over three days. The three days may be broken up to include closure days, staff meetings or a combination of the two. The benefit of the whole school approach is that all staff members are able to engage in the new learning and support each other through the implementation phase

2. School Teams. In this format the program will be offered in central locations and require participants to attend three spaced learning days throughout the year. The school team approach would enable a selected section of the school to engage in the implementation of computational thinking and coding. In school support would be made available to participants who enter the program through this format

**How the program will be structured?**

The program will be structured as outlined above and will be coordinated by Kevin Cummins.

**The program has been designed to:**

The program is designed to support participants to understand and develop their skills and knowledge around;

- The new requirements of the AusVELS Technology curriculum
- Provide teachers with strategies and resources to teach these new methods of thinking within the classroom.
- Provide teachers with resources and contents to share this knowledge with peers.
- Developing practical opportunities for all children to be creators of technology

**What is expected of participants?**

All participants will be expected to attend all of the professional learning sessions as they are offered. It would be an expectation the all participants would engage in between sessions activities designed to consolidate their learning through classroom implementation.

**What is required of the principal?**

- Nominate and/or approve participants for this professional development
- Ensure they attend ALL days of the Professional Learning.
- Ensure participant is aware of all requirements
- Meet regularly with the participant to discuss the ongoing learning

**What you can expect from the CEOB:**

The CEOB will ensure that all we will deliver a program that is in alignment with the overview and goals provided. Kevin Cummins will coordinate the program across the diocese. The CEOB will manage the costs associated with the provision of this program however schools will be asked to contribute the regular professional learning fee that is used to cover venue costs.

**Registration:**

**Whole schools wishing to be a part of this professional learning program in 2017 are asked to contact their local Educational Consultant before the 10th October 2016. Please note that:-**

Registration for this program by **school teams** will be available online and will close on November 30th 2016.

Registration implies that participants have the full support as outlined of their school principal.

The early close off date will enable CEOB to determine the actual number of participants and the location of these participants which will support us in determining the number of programs that will be run next year and where.

Adherence to this closure date should make it possible to provide all participants with actual program dates and locations by Friday December 2nd.

**Endorsement**

Leigh Mitchell