acara AUSTRALIAN CURRICULUM, ASSESSMENT AND REPORTING AUTHORITY

DIGITAL TECHNOLOGIES IN FOCUS PROJECT PROPOSAL	
School name	Faith Lutheran College (Plainland)
School contact details	5 Faith Avenue, Plainland Qld 4341 (07 5466 9900)
School team members	**Role**
	1. College Principal 2. Deputy Principal 3. Lead Teacher (LT2) 4. Director of Teaching & Learning 5. Curriculum Leaders (Maths, English, Digital Technologies, Middle Years Coordinator)
School profile	Number of students: >600 Location: Provincial Sector: Independent School type: Co-educational Year range: Year 7–12 Proportion of students who are Indigenous: 4.9% Proportion of students with disability: 5.5% Proportion of students who are EAL/D: 0.9%
Year level(s) involved in project and reason for choice	Year 7 cohort – entry-level cohort into the College Faith Lutheran College currently enrols students from 31 small primary schools where engagement with Digital Technologies is diverse. In order to effectively differentiate and ensure students are challenged, a transdisciplinary approach to Digital Technologies in the first year of secondary education is proposed. Faith Lutheran College believes this is the best way to ensure the development of strong digital literacies and technology capabilities in both students and staff.
Number of students involved	145
Number of teachers involved	8–12

INVESTIGATING AND DEFINING

Proposal details

What is your research question? (Identify the challenge generally; refine the statement; get specific and express as a question.)

How can project-based learning, enriched by digital technologies, cultivate a love of learning and challenge learners to realise their potential?

What are your project aims?

1. Improve Year 7 staff capacity to implement Digital Technologies curriculum and ICT literacies
2. Establish curriculum links which allow for deeper learning needs of students, whilst balancing budgetary constraints
3. Empower and engage learners by augmenting the Digital Technologies curriculum with the Core Curriculum standards
4. Establish routines that encourage strong habits of mind such as growth mindset, critical thinking and collaborative learning

How will your school investigate the research question? (Consider literature review, connecting with other schools, working with members of your school's professional learning ecosystem.)

- **Map and compare** potential links between Digital Technologies and other core curriculum areas
- **Analyse and collate ideas** by exploring research to determine (i) problem-based learning best practices, and (ii) improve pedagogical approaches which support the development of digital technology skills.
- **Share links and opportunities** by visiting and reviewing how other schools have integrated problem- based learning and technology with the aim to developing a system that meets the needs of Year 7.
- **Collaboratively** planning problem-based learning units which are enhanced by digital technologies
- **Collaboratively** develop a professional development needs analysis which assists teachers in creating an action plan to improve their digital pedagogy
- **Complete a student needs analysis** which focuses on where our Year 7 students are in relation to their digital technology journey
- **Liaise** with local primary schools (Peace Lutheran Primary, Gatton) to audit and determine possible means of partnering, sharing devices and skills during this project (i.e. sharing staff skills, devices)
- **Implement** unit 1 term 1 week 5
- **Reflect on, review and adjust** the project-based model

Please briefly describe your project. Include an explanation of how your project links to the Australian Curriculum: Digital Technologies and how it helps you achieve existing goals for your school. Include references to your school plan.

The project will develop meaningful Digital Technologies understanding and skills by breaking the project into two stages.

- **Unit 1** – **Identity** – **Belonging to Faith** – Weeks 1–5 cross-curricular approach – As learners arrive at Faith Lutheran in Year 7, they will be explicitly taught and exposed to habits of mind which will help them establish routines as learners that allow them to belong to the Faith's digital technology community.
- **Unit 2** – **Belonging to a Community** – 15 weeks – cross-curriculum themed inquiry-based learning unit. Aim is to selectively integrate core subjects under the banner of the theme. The Year 7 Collaborative Learning Community will comprise:
  - **SOSE Team** – Explore Social Studies (History, Geography), English, Media and Drama: Where do I fit in? – How do we belong to communities?

  - **STEM Team** – Explore Science, Technology, Engineering (design process) and Maths: Where do I fit in? – What is our place in space?

- **Unit 3 – Connecting to a Community** – An interdisciplinary, problem-based project approach focused on exploring core content and developing stronger inquiry, computational and problem-solving processes. The use of workshops, lectures, seminars and learning activities will be embedded throughout the project to transfer knowledge and competencies across domains.
- **Unit 4 – Serving a Community** – By employing a transdisciplinary, problem-based learning approach students will identify, explore and make judgements on how to improve the liveability of a community via the application of scientific principles. During this project they will share their skills and understanding within the Faith Learning Community and with our partner school (Peace Lutheran) Year 5–6 students.

It is believed that a holistic collaborative learning approach will address the needs of our Learning Community. The College attempts to provide students with a curriculum that is relevant, progressive, and will prepare our students for future workforces and/or higher education. This project will also allow a comprehensive review of the current curriculum offerings, to ensure there are clear curriculum connections across the Year 7 transdisciplinary model. Furthermore, it will highlight the need of the College to invest in certain staff training/s and digital technologies infrastructure/software.

The College also hopes that this project may inform other approaches to curriculum beyond Year 7, including determining whether there are other possibilities for a transdisciplinary approach to enhance student learning.

State your criteria for success.

- Increased student engagement (students being empowered to learn new skills through Digital Technologies, such as displaying key learnings/ways of thinking made available through this curriculum (i.e. systems and computational thinking))
- Students displaying an increased sense of enjoyment, an inquisitive mind and competitive spirit through the shared learning opportunities the transdisciplinary unit will provide
- Increased staff engagement (utilising key learnings from provided training across other teaching/curriculum areas)
- Increased use of technologies (which would be captured with analytic data) to deepen learning opportunities for the Faith community

GENERATING AND DESIGNING

How will your project be delivered? What actions are planned?

- Establishment of project taskforce and a regular meeting schedule for key staff
- Determine timetable implications
- **After 23 November 2017** – Investigate a variety of digital technologies devices to incorporate within the project-based units, which considers available budget, current IT platforms, as well as the ability of these devices to cater for varying types of student interests and abilities
- Continue to build partnership with local primary school (Peace Lutheran Primary, Gatton)

Are you collecting data? How do you plan to do this?

- Yes. Data collection will include staff and student surveys, with both groups to be surveyed at different stages and on multiple occasions to help track and measure level of engagement with digital technologies.
- Other data instruments are yet to be determined; however, the use of further data methods is very likely.
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COLLABORATING AND MANAGING

Identify the resources you will need for the implementation of the project. (Include your key stakeholders/how ACARA can offer assistance/what will impact your capacity to deliver.)

- Devices to complement the implementation of digital technologies, including staff training to learn how to best utilise these devices to promote student learning
- Support from ACARA to determine the most suitable learning activities and devices to best assist with the implementation of digital technologies at the College. Further support regarding staff training, or at least suggested organisations/trainers to approach for this training, may also be useful.
- It may also be helpful for ACARA to provide some assistance with mapping certain elements of the Digital Technologies curriculum with other curriculum areas included within the transdisciplinary unit. It is acknowledged that some of these mapping tools already exist from ACARA; however, due to the nature of mapping across numerous curriculum areas, some support through reviewing our College's mapping documents will likely prove useful.

Identify the potential risks your project may face. (Include risks, such as lack of resources; lack of interest by teachers, students, community.)

- Funds available to sufficiently resource the Digital Technologies curriculum (within the transdisciplinary unit) with suitable devices, particularly based on there being so many students in the Year 7 cohort (145 students each year)
- Timetable constraints
- Staff capacity/training required to deliver Digital Technologies curriculum
- Varying levels of students' prior learning experiences (in primary school) with Digital Technologies curriculum

Consider the deliverables and timelines for this project (progress reports, webinars, podcasts, final report). What are the milestones for your school's project?

Planning process for the project, which are largely investigative, will follow the following process. See figure 1. Any findings from this process are likely to influence the overall direction and deliverables of this project.

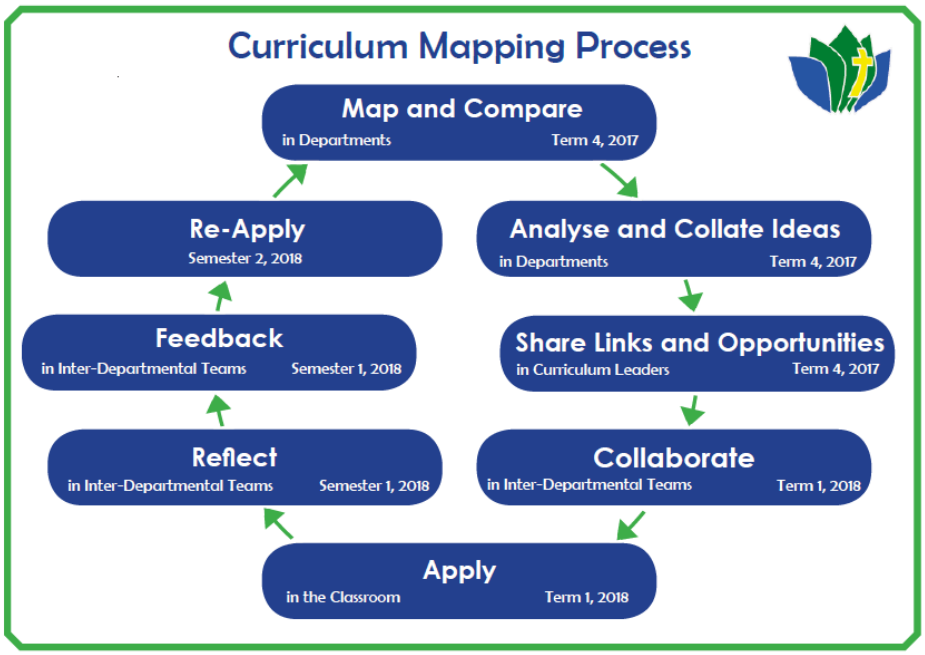

Figure 1: Curriculum mapping process

PRODUCING AND IMPLEMENTING

Describe how Digital Technologies will be implemented in your school.

Year 7 – Core curriculum areas 2018

- 2 units of interdisciplinary foundational learning enhanced by digital technologies
- 1 unit of deep learning that authentically embeds the Digital Technologies curriculum

Year 7 – Experience curriculum areas 2018

- Augmented links to Digital Technologies curriculum

Year 8–10 – Core curriculum areas 2019

- Augmented links to Digital Technologies curriculum
- Digital Solutions an elective subject
- Extra curriculum activities – Critical Thinking and Robotics Club

EVALUATING

ACARA will be assessing students at the beginning and at the end of the project in terms of ICT literacy and computational thinking skills.

What additional evidence will you need to collect in relation to your school's specific action research question? You may like to consider:

- Collecting student work samples
- Recording student voice
- Recording an illustration of practice
- Digital portfolio of student work samples
- Student focus groups to discuss level of engagement, depth of understanding and any weaknesses of program
- Student data (growth mindset survey?)

ACARA will be surveying teachers at the beginning and at the end of the project in terms of their ICT literacy and their confidence in teaching Digital Technologies knowledge, understanding and skills.

What additional evidence will you need to collect in relation to your school's specific action research question?

- Reflective blogs/journal entries from teachers to monitor growth in digital technology skills and pedagogy
- Annotated documentation of planning
- Marked student scripts/collections of works
- Interviews to discuss and consider the level of engagement and depth of understanding achieved
- Minutes of planning meetings

Please add any other comments about your project that you would like to make.

An authentic project-based approach will develop higher-order thinking and encourage the expansion of digital literacy across curriculum areas as our students become digital learners.

Thank you for your time and commitment to the Digital Technologies in focus project.