

## 2026 Queensland Quantum Challenge - Curriculum Alignment to Australian Curriculum V9 – General Capabilities - Critical and Creative Thinking (Years 9 and 10)

The General Capabilities – Critical and Creative Thinking introduction, sub-elements and levels provided below align to the 2026 Queensland Quantum Challenge.

<https://www.australiancurriculum.edu.au/curriculum-information/understand-this-general-capability/critical-and-creative-thinking>

### Introduction

Critical and creative thinking represent 2 important ways of thinking that work together to help students inquire into the world around them.

Critical thinking involves students analysing and assessing possibilities against criteria for judgement. They construct and evaluate arguments, and use information, evidence and logic to draw reasoned conclusions and to solve problems.

Creative thinking involves students learning to generate and apply new ideas, and see existing situations in new ways. They identify alternative explanations and possibilities, and create new links to generate successful outcomes.

Dispositions such as inquisitiveness, reasonableness, intellectual flexibility, open- and fair-mindedness, and a readiness to try new ways of doing things are enhanced by critical and creative thinking. Students consider alternatives and develop persistence throughout the learning continuum.

### Sub-elements and Levels

<b>Level 6 (Years 9 and 10) General Capabilities</b>	
<b>Sub-element</b>	<b>Level 6 (Years 9 and 10)</b>
<b>Inquiring</b>	
Develop questions	develop questions to investigate complex issues and topics questions developed facilitate increasing understanding of abstract ideas and concepts
Identify, process and evaluate information	identify and clarify significant information and opinion from a range of sources, including visual information and digital sources evaluate the information selected to determine bias and reliability

<b>Generating</b>	
Create possibilities	create possibilities by connecting or adapting complex ideas and proposing innovative and detailed variations or combinations
Consider alternatives	consider alternatives by creatively revising and modifying ideas and recommendations when circumstances change
Put ideas into action	put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations
<b>Analysing</b>	
Interpret concepts and problems	identify the objective and subjective aspects of a complex concept or problem, with sensitivity to context
Draw conclusions and provide reasons	draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations
Evaluate actions and outcomes	evaluate the effectiveness of a course of action to achieve desired outcomes and suggest improvements, including using a personally developed set of criteria to support judgements and decisions
<b>Reflecting</b>	
Think about thinking (metacognition)	reflect on the thinking and processes used when completing activities and drawing conclusions  identify possible limitations in their own positions by considering opposing viewpoints, reasonable criticism and feedback
Transfer knowledge	identify, plan and justify opportunities to transfer knowledge into new contexts