The Marine Zone Virtual Project develops scientific inquiry knowledge, skills and confidence. Students learn to work scientifically using inquiry skills to identify questions, explain phenomena, draw conclusions and solve problems with responsible environmental decisions.

Marine Zone Virtual is a UNIFY Project for students in Year 4-5-6. It is available in Round 3. Schools can include students from one year level or form a composite group across Year 4-5-6.

The target group includes students who would enjoy and benefit from extension in an environmentally-themed scientific inquiry project. Many schools use this project as an extension program for high achieving or gifted students. It can also be used as a tool to engage students who are coasting and may respond to a challenging science program.

### Content & Assessment Guide

<table>
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<tr>
<th>Week</th>
<th>Lesson Focus</th>
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| 1    | Project Introduction, Technology Introduction  
Introduction to the project content and web conferencing technology. |
| 2    | IMPACT and Introduction to Scientific Inquiry Skills  
Introduction to IMPACT workflow via an introduction to scientific inquiry skills.  
eLearn tour. |
| 3    | Pre-assessment  
To be advised. |
| 4    | Introduction to Scientific Method & Study Area  
Overview of scientific method of investigation. Interpretation of data with a focus on observation skills. Introduction to the Great Barrier Reef. |
| 5    | Data & Questioning  
The role of data in Science and varying types of data collection. Formulating a scientific question (hypothesising & predicting). |
| 6    | Data Collection Processes  
Exploration of various processes used to undertake effective scientific investigations. This lesson will include an additional focus on the effects of climate change on the Great Barrier Reef. |
| 7    | Data Analysis  
Identifying differences between validity and reliability and how to identify these concepts when analysing data. |
| 8    | Research Project Completion  
Completion of a multi-modal research project under the supervision of the project teacher. This lesson will include an additional focus on the effects of water turbidity on the Great Barrier Reef. |
| 9    | Research Project Completion  
Completion of a multi-modal research project under the supervision of the project teacher. This lesson will include an additional focus on manipulating and presenting data (tables & graphs) and determining patterns, trends and anomalies. |
| 10   | Research Project Completion  
Completion of a multi-modal research project under the supervision of the project teacher. This lesson will include an additional focus on drawing conclusions, evaluating collected data and experimental design. |
| 11   | Post-assessment  
To be advised. |
| 12   | Where to From Here  
Review, consolidate and extend on project learning. Celebrate success. |

**NB: This is a guide only – there may be minor changes.**

### Key Points

- Students participate in a 1 x 60-70 min web conference per week and access online extension activities any time.
- Students connect with university and industry representatives via a special online event each round, including representatives from the School of Biological Sciences from the University of Queensland.