

Lesson 7

Design Technologies – Design Brief and Proposal

Townsville City Council Staff Participation

Content descriptors:
Design and technologies processes and production skills
Critique needs or opportunities for designing, and investigate materials, components, tools, equipment, and processes to achieve intended designed solutions (ACTDEP024).
Relevant elaborations:
<ul style="list-style-type: none"> Exploring the steps involved in the process to satisfy a design brief, need or opportunity. Investigating designed solutions from around the world to make suitable, quality decisions that meet the design brief, challenge, or scenario.

Learning intention:

By the end of the lesson, students will be able to:

- Critique needs or opportunity for designing changes to the weather station materials, components, equipment, and processes by satisfying a design brief and proposal.
- Investigate the weather station design brief and scenario to make suitable, sustainable and quality decisions to improve the design of the solution.

Summative assessment suggestion:

- Students fill in design proposal worksheet and present their ideas to the rest of the class.

Equipment list:

- Design brief pack – including design brief, design problem, interview worksheet, design proposal worksheet (one for each group)
- Butchers paper and markers (sets for each group)

Lesson outline (60 min lesson)

Introduction (10min)	<p>Students are provided with a design brief from Townsville City Council. The design brief outlines all the issues we have had with the weather stations.</p> <p>Students work in groups to develop ideas as to how to fix the weather stations. As a class read through the design brief. Put students into groups and hand out 'design briefing pack.' (students in 3 groups)</p>
Body (35 min)	<p>Each group will be assigned a member from TCC to work with. Each group will receive fact sheets and resources to complete the task, they will have the assistance of their TCC staff member and can ask questions. Students spend 25 minutes designing their solutions on butcher's paper.</p> <p>Students then spend 10 minutes finalising their designs (prompt questions from TCC staff to confirm they have met the design brief and how).</p>
Conclusion (25 min)	<p>One group at a time, students present their solution to the rest of the class. Students need to explain what problems they were aiming to solve, how they solved these problems, and determine if their solution is cost effective.</p>