ANZAC Bridge

Year 8 Design and Technology

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Introduction

Bridges have been used in history, with the first bridges simply being a simple log. Bridges are used to allow people and transport to cross gaps and rivers. The design of bridges has had many changes from the primitive wooden bridges.

Suspension Bridges

Suspension bridges are bridges the use suspended cables to hold the deck or roadway over an opening or gap. Suspension bridges are built over canyons and have high pillars on each side of the bridge which hold ups the cables.

Examples of suspension bridges.

ANZAC Bridge

The Anzac bridge is located in the Sydney, close to the CBD between Pyrmont and Rozelle. The Anzac bridge is Australia's longest cabled-stayed bridge in Australia. Its exact geographical location is 33°52′10″S 151°11′09″E. The Anzac Bridge is 32.2 metres wide and contains a span of 345metres long. The Anzac bridge was built in 1995 to replace the Glebe Island Bridge which was a swing bridge that had been in use since 1901. The bridge was officially renamed the Anzac Bridge by former premier Bob Carr in November 1998.

Design Features and Construction Facts

The construction of the bridge has used a new invention called the formtraveller which allows easier construction of the bridge over water. The bridge deck was constructed in ten metre concrete segments. The does not depend on the horizontal beams of the towers. It is fully supported by the cables. The first segment was supported by scaffolding. Once the rower was completed the cables were installed. The cables connect to the decking at its furthest edge from the tower.

Uses of the Anzac Bridge

The Anzac Bridge is mainly used for vehicle transport and can also be used by pedestrians and cyclists. The Anzac bridge has eight traffic lanes. The bridge is connected to the Western Distributor providing an alternative to the Parramatta Rd and Broadway.

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Advantages of Suspension Bridges	Disadvantages of a Suspension Bridge
The advantages of suspension bridges are that suspension bridges can be built over long distances and can cope with small geological changes. Suspension bridges look more presentable than beam bridges.	Suspension bridges are not as strong as arch or beam bridges. Suspension bridges are more vulnerable to wild weather and can collapse more easily compared to other bridge types.

Bibilography

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