

# Bridge Building

Thursday 25<sup>th</sup> August

Our Investigations are held in the Bush Block every Thursday. During these sessions, the children are able to investigate the Bush Block and work on their own projects. The children run, climb, create, build, play games, write, balance, assess risks, cooperate and collaborate during these times.

Last week, I observed Toby, Ella and Scott working together near the soon-to-be creek. The three were working so nicely together, each with a very determined look on their face. Toby was stacking rocks up within the creek bed, while Scott and Ella were moving a very big log. Luckily they all had gum boots on; it was pretty muddy in there!

"What are you all up to?" I asked.

"We are building a bridge!" Ella replied.

"I'll get some cement," Ella told Scott and Toby. She reached down and grabbed big, squishy piles of wet mud and began squishing the 'cement' between the rocks.

"I will get some more cement, Toby, so you can stick it down." Scott said. He handed Toby piles of the wet mud and Toby began creating a wall, piling the rocks high on top of each other and using the 'cement' to secure it.

"I've got some, I've got some, put it (the mud) on the other side!" Scott exclaimed.

"I've got a BIG boulder!" Toby said, carrying a huge rock.

"More cement, more cement!" Ella said, "I'll put some more cement on these rocks."

"We need as many rocks as we can get underneath." Toby said.

"Why?" I asked.



"So we can put layers underneath so we can hold all the layers up. So the bridge can be stronger because the other layers will be holding the top ones up." Toby explained.

"Who are you making the bridge for?" I asked.

"For the people that don't have gumboots on." Toby said.

"The muddy boot people will need to walk through and the people with no gumboots can walk on the bridge." Scott added.

"We have cement boots on!" Ella exclaimed.

"It has been like half an hour for us to build it. Maybe even more than an hour!" Toby said.

"We need more cement for Toby. I'll go get it. Ella, you keep working there." Scott suggested.

At this point, Hamish came running down and ran straight over the bridge. Ella, Scott and Toby seemed worried at first, but as soon as they saw that the bridge was still standing I said, "Oh well, at least we know it works!"

"Yes, it IS strong enough! Thanks for testing, Hamish!" Scott said.

"Can we get everyone to test our bridge?" Ella and Scott asked.

"Sure!" I replied. I blew my whistle and told the rest of the class that they could test the bridge if they wanted to.

Toby organised the group- "Ok, everyone start on this side, and then go one at a time. You can walk over the bridge when the person in front of you is past half way."

Ella, Scott and Toby watched as everyone travelled over the bridge. The bridge was incredibly strong and it didn't even sway or tip! It was a huge success for the building team.

"What were the results, Ella?" I asked.

"Yes, the test is good! It was REALLY good!" Ella replied, excitedly.

### *What learning is taking place?*

Toby, Ella and Scott worked so well together today. Their interactions with each other were very positive and they listened to and responded to each other's ideas. Their idea to build a bridge was extremely creative.

The process involved thoughtful planning and consideration. They manipulated materials to ensure that their bridge was strong enough, and demonstrated excellent design skills. The test at the end showed me that they understand the importance of testing experiments to see if they are successful. Through this interaction, the children demonstrated an understanding of a wide range of curriculum outcomes!

### *Where to from here?*

I will continue to encourage the children to be creative down in the Bush Block. They are given the freedom to choose what they want to do and the projects they take on are always purposeful and engaging.

### *Australian Curriculum Outcomes*

#### *English*

Listen to and respond orally to texts and to the communication of others in informal and structured classroom situations (ACELY1646)

Use interaction skills including listening while others speak, using appropriate voice levels, articulation and body language, gestures and eye contact (ACELY1784)

### Maths

Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006)

Describe position and movement (ACMMG010)

### Science

The way objects move depends on a variety of factors, including their size and shape (ACSSU005)

### Design and Technology

Explore the characteristics and properties of materials and components that are used to produce designed solutions (ACTDEK004)

Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005)

Generate, develop and record design ideas through describing, drawing and modelling (ACTDEP006)

Use materials, components, tools, equipment and techniques to safely make designed solutions (ACTDEP007)

### Health

ACPPS004 Practise personal and social skills to interact positively with others

### Creative and Critical Thinking

In developing and acting with critical and creative thinking, students:

- Pose questions
- Identify and clarify information and ideas
- Organise and process information.
- Imagine possibilities and connect ideas
- Consider alternatives
- Seek solutions and put ideas into action.