

CREATIVITY

Australian Supplement to the Character First Education Curriculum

I Will:

- Use my talents for good
- See things from more than one perspective
- Use principles to solve problems
- Learn all I can
- Look for new ways to be a person of character



Definition

Approaching a need, task or an idea from a new perspective

Illustration

Common brushtail possums are nothing short of inquisitive. They are content to live anywhere, even inside the roof or walls of a house! Brushtail possum's aren't always welcome guests, however, as shown in the nature story where you'll find a family and a creative possum named "Archie."

From an early age, Alfred Traeger was fascinated with electrical gadgets; in fact, at age 12, he constructed a telephone from the tool shed to the house using bits and pieces he'd scavenged from around the farmyard! Little did he know that his love for electrics would take on a much greater purpose when he partnered with John Flynn in creating a 'Mantle of Safety' through the Flying Doctor and its wireless network. The history story analyses the creativity Alfred Traeger showed to produce his greatest invention – the pedal wireless.

Creativity in Nature

The Common Brushtail Possum

Click. The last night light went out and the house was swathed in darkness. The dad was tired, and the warm bed covers felt good after a hard day's work.

He was just dozing off when he heard a funny noise. "Pitter, padder, pitter, padder, scratch, scratch." Something was climbing up there on the roof!

Quietly, the dad reached for his torch on the bedside table and stalked silently over to the window. He could feel his heart pounding within his chest as he reached to draw back the curtain. Gripping his torch like a club, the man carefully pulled back the curtain.

AHHHHHHH!

There, just outside the window, were two bright red eyes staring back at him! In fright, the dad leapt backwards, tripping over a shoe that had been left on the floor, and sprawling to the ground. Trembling, he staggered up and tentatively pulled the curtain back for a second look. The red eyes were still there, but this time they sat clinging to a nearby tree branch. The big, round eyes belonged to a Common brushtail possum, about the size of a housecat, with a coat of soft gray fur and large triangular pink ears.

The family saw more of the same brushtail possum over the next few days. They were new to the

neighbourhood and the sight of the agile possum with its long, bushy tail and watchful dark eyes enchanted the children. The family decided to call him Archie, and they would often leave pieces of fruit out on the veranda railing for him to eat.

However, unbeknownst to the family, the problems with sweet-looking Archie the possum were only just beginning.



Archie was an inquisitive and opportunistic possum, who emerged after dark each night to feed. One night, the mum made the biggest, most delicious chocolate mud cake for a picnic in the bush the next day. She covered the whole thing in rich chocolate cream and topped it off with strawberries. Covering it with a cloth, she left it on the counter for the night.

With the household fast asleep, Archie crept across the tin roof and down to the window. He was out to get himself some dinner!

Sitting by the window, his big eyes sighted the chocolate mud

cake sitting on the bench. Oh, now *that* looked good to a hungry possum!

Archie looked over the window, and noticed it hadn't been closed properly. His nimble paws worked their way into the opening, and wiggling it back and forward, he managed to pull the window open just enough for a curious brushtail possum to squeeze through. Pulling back the cloth, Archie began helping himself to the mud cake until he'd finished nearly half of it!

Looking about himself, Archie then noticed a whole bowl of fresh fruit sitting nearby! Oh joy! Apples, pears, bananas, grapes! Quickly, he scampered over to get a closer look. However, as he attempted to climb in to indulge himself in fruit, Archie upset the bowl! Archie, the bowl and all the fruit went tumbling to the ground with a jarring *CRASH!*

Lights went on throughout the house. The family rushed towards the kitchen in various nightwear, bumping into each other to get there first. My, what a sight! The fruit bowl lay in pieces on the floor, bits of apple, pear and banana strewn around it. "My cake!" cried the mum as she rushed to inspect it. Half of it was gone. Meanwhile, Archie had silently slipped out the window and into the night, satisfied with his belly full for one night.

The problems with Archie didn't end there. Come autumn, the family decided to establish for themselves a vegetable garden. They could hardly wait for springtime to arrive, when the plot would be filled with rows of sweet corn, shiny red tomatoes and a colossal passionfruit vine. The family members licked their lips as they anticipated the taste of the ripe fruit and vegetables in the spring and summer.

Archie watched as the family turned the soil, planted the seeds and waited all through winter as the seeds grew into healthy bushes, yielding the delicious crops of fruit and veggies. Come spring, they were almost ready for harvest.

However, Archie had his eye firmly fixed on the passionfruit vine. It grew as a thick, green curtain, covering the fence along one side of the garden. As the warm months of summer approached, the vine began to burst forth with plump passionfruit that slowly transitioned from dark green to a rich purple.

Oh, how Archie loved passionfruit! The previous house owners had built a fence around the vine, but had torn it down just before they left. The new family was keeping a keen eye on the vine, too, but it had no idea that Archie's favourite food, beyond chocolate mud cake, was passionfruit!

Finally, after waiting and waiting, the first of the passionfruit crop was ready for harvesting. They say that the "early bird catches

the worm", and Archie wasn't going to let anyone touch the first of the passionfruit. Stealthily, he jumped through the tree branches to the vine, where he grasped the first ripe fruit and dug into it with relish. Once he'd finished that one, he took another, and another, until Archie had devoured four of the passionfruit! Feeling satisfied, the mischievous brushtail possum scampered off into the trees.

The next morning, the family was eager to pick its first helping of the passionfruit. But when they got to the vine, they found not one single ripe fruit! The family stood there staring, mouths hanging wide open in amazement.

"Who would've done such a thing?" the mum finally spluttered out.

The dad scratched his head. "Let me guess," he said. "A possum—Archie, no doubt. Brushtail possums love passionfruit."

With that the dad resolved to protect the plant from any further marauding possums. He erected a wire fence around the passionfruit vine. "That ought to stop him," he thought decidedly.

The fence worked for a few weeks—that is, until the next batch of fruit became ripe. In the middle of the night, Archie crept toward the fence. He looked up and down it, thinking creatively of a way to get in. It didn't take long for him to simply scale up and over the fence, his able paws easily gripping the wire.

The family was astounded that Archie had gone to all that trouble, just to eat a passionfruit! Their next strategy was to put their family dog, Kelly, in the enclosure with the vine. Surely Archie wouldn't want to risk going past a dog!

Alas, Archie got by. Using all his creativity, he snuck through the overhanging branches into the fenced-off area. Although Kelly barked and jumped about ferociously, Archie was more than safe sitting at the top of the vine.

This went on for weeks. Archie got by any obstacle placed in his path, and every time, the family tried something else to block the opportunistic brushtail possum. They dug the fence down deeper, they trimmed the overhanging branches, they put metal guards on the fence to stop Archie climbing on that. But to no avail - using his imaginative mind, Archie succeeded in wolfing down those purple passionfruit.

With the summer almost ended, and the passionfruit crop next to nothing, the worn-out family decided to plant for itself another passionfruit vine further away. They named the old plant "Archie's Vine", which the possum enjoyed for many seasons to come.

When you're faced with a problem, don't give up, but look for a new way to solve it. Remember to use creativity like Archie and choose to look at something from more than one perspective.

Creativity in Australian History

The Pedal Radio Man

"Mum! Dad Look at this!" cried the 12-year-old boy.

Mr and Mrs Traeger hurried onto the farmhouse veranda. "Take a look at what?" Mr Traeger asked.

Alfred Traeger grinned from ear to ear. "Come down to the tool shed and see," he said.

His parents followed him to the shed. "It's a telephone," said the boy, standing proudly next to an upturned kerosene tin. "I invented it."

Alf explained how the strong magnets were made by wrapping wire around the broken prongs of a pitchfork and electricity passed through the wire. The vibrating diaphragms of the microphone and earpieces were the old tin lids of a tobacco tin. Crushed charcoal created the resistance needed for the microphone. Put it all together and it connected the shed to the house by phone!

"Alfred Hermann Traeger, you're a wonder!" Mrs Traeger exclaimed, ruffling her son's black hair.

Alf grew up on a farm and was always interested in batteries and electrical gadgets. From an

early age, he sought to learn all he could about the fascinating field of electricity.

Did you spot the "I will"? Alf sought to learn all he could about electrics.

Alf chuckled as his mind floated



back to the present. Fields of banana trees and sugarcane flashed past his window. He was on a train bound for Brisbane, then Adelaide. He, John Flynn, and several other radio fanatics had been testing wireless equipment in north Queensland, for use in a Flying Doctor network.

"There just has to be a cheap, easy way to bring wireless to the pioneers," Alf thought.

Back in Adelaide, Alf set himself a structured daily schedule. He would have to work extremely hard, if indeed an easy wireless

was to be invented. At daylight each morning, Mrs Traeger would wake Alf and give him a hamper of food for the long hours that were now the regular programme. With the crisp air nipping at his cheeks, Alf set off to the workshop, eager to begin another day.

Did you spot the "I will"? Alf looked for new ways to become a person of character by being disciplined and rising early.

"Good morning, fellas!" Alf greeted his brother Jack and two other assistants helping at the workshop.

"Good morning!" they replied. Alf put his lunch down and immediately set to work.

First, he had to remodel the radio receiver and transceiver into a compact "baby" set. The pioneers would use this to contact a "mother" station in an emergency. Alf and his mates



Traeger's 'miracle' pedal wireless instilled a sense of security in the outback in that people weren't cut off from the outside world.

constructed a neat cabinet made from pine wood, which had a hinged lid in case the "baby set" needed repairs.

"Fantastic," Alf said. "Now we can work out how we're going to produce enough electricity."

This was a tricky one. Alf and his team thought about it, then experimented with different options. It was clear that batteries weren't practical for the isolated pioneers.

Did you spot the "I will"? Alf looked at the problem of generating electricity from more than one perspective.

The next few weeks were a flurry of long hours at the workshop. They could see that the hand-operated method didn't seem right, but what else could they try?

"I don't know where to go with this one," Alf said to Jack one day as they ate their lunch in August 1928. "I mean, how will bush mothers be able to tap out a message in Morse code *and* operate the hand-driven generator?"

The two men fell silent. Suddenly, Alf sprang to his feet. "I'm going to buy bicycle pedals!" he declared.

Alf returned an hour later with a pair of bike pedals. Jack and the two assistants craned their necks as he placed them on the greasy bench. "This is our answer!" he exclaimed. "We'll attach these pedals to a generator bolted to the floor, while freeing up the operators hands!"

Did you spot the "I will"? Alf used the principles of physics (physical energy to generate electrical energy) to overcome the obstacle of producing electricity.

Alf assembled the first complete baby transceiver and fixed it to the floor. Its shiny pedals glistened. Neatly boxed, control knobs correctly labelled, easy to use by an operator, ready for any kind of conditions, with a range of 300 miles, the 'miracle' pedal wireless was born.

It was late in the day, 11th November 1928. "Victory at last," he mumbled under his breath.

He wrote a quick note to his boss, John Flynn, urging him to come and see his latest accomplishment. John arrived at Alf's workshop, from Sydney, a few days later.

It was a triumphant moment in Australian history. Alf greeted his boss with his shy, cautious smile and said simply, "Well, there it is!"

"How easy is it to use?" John asked.

"Women and children should be able to generate power," Alf replied.

John was too overcome with emotion to say anything for a minute. Finally, he replied with his classic statement, "Mobs of thanks."

Alf only smiled shyly. After all his hard work, the 'dumb' bush would finally have a voice and the Flying Doctor experiment could proceed.

Did you spot the "I will"? Alf used his talents for good.

The first baby set was installed at a station in far north Queensland in June 1929. It was a success.

The silence of the bush had been broken, thanks to one man's creativity. Said Pastor Albrecht of Hermannsburg mission, Northern Territory, *"Never in my life shall I forget what he (Traeger) meant to me. He was a man who brought me a wonderful comfort and feeling of relief because we knew that were not cut off any longer and we had a new sense of safety."*

References:

Traeger, the pedal radio man: he gave a voice to the bush and the Flying Doctor
Fred McKay
Boolarong Press 1995

John Flynn: Of Flying Doctors and Frontier Faith
Ivan Rudolph
Central Queensland University Press 2000



Project Ideas

Language

Do a definition scramble in a creative way – maybe a scavenger hunt or words in a balloon, with a prize for the quickest team.

Creative writing is all about creativity! Write a short story, poem, limerick or chapter book on a topic of your choice.

Maths

Creativity can be exercised in maths, as you look at 'old' problems and solve them in a 'new' way. Try come up with as many fresh ways as you can to solve maths problems.

Science and Technology

Periscopes help submarines to see targets from a 'new perspective'. Do a project on other creative ways the defence forces have invented to 'spy' on the enemy.

Visit a local zoo or wildlife park and study the brushtail possum.



Society and Environment

Research Alf Traeger's revolutionary pedal wireless. Study outback communication today vs. Morse code. Construct a model pedal wireless.

Find out about School of the Air for isolated children of the outback and how the pedal wireless paved the way for such communication. Your class may even want to write to a child in the outback who is part of SOTA.

Health

Sports drills can often seem repetitive. However, creativity looks for new ways to make old exercises fun and exciting. How many 'new' variations for old drills can you come up with?

The Arts

Give your students a rubber band, popsicle stick, paper clip, twist tie and a button, along with scissors, tape, glue, pencils and crayons. Using the resources provided, tell them to invent something with a purpose, e.g. car, boat, bike. Let their imagination run wild!

Think back over the different character qualities you have studied over the past months. Come up with a creative way to present them to another class or parents. Plan this together with your class – the possibilities are endless!





Alf Traeger

How old was Alf Traeger when he invented his first telephone? _____

What was Alf Traeger's goal?

How did Alf overcome the obstacle of generating electricity? _____

What was the new device called? _____

Write down two circumstances in which YOU might need to show Creativity...

1. _____

2. _____



He gave the bush a voice

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