



Australian Government

# THE PRIME MINISTER'S PRIZES FOR SCIENCE



## BRETT CRAWFORD

### PRIME MINISTER'S PRIZE FOR EXCELLENCE IN SCIENCE TEACHING IN PRIMARY SCHOOLS



#### A school where everyone teaches science

Mr Brett Crawford has transformed science teaching at Warrigal Road State School in Brisbane. All the school's 50-plus teachers now actively teach science in their classes.

Warrigal Road is a large primary school in Brisbane with more than 1,300 students. The students are from 54 cultures, English is a second language for 60 per cent of them, and there's also a cohort of hearing-impaired children.

The local high schools have recognised that Warrigal Road students come to them curious about the world and ready for secondary science. Test results back that up, showing the school's science performance is well above national averages.

Brett is the lead science teacher at the school. He believes that science teaching in primary schools is easy.

Primary school students are curious about the world. You can engage them with simple, inexpensive experiments.

But Brett also knows that many primary school teachers are anxious about teaching science.

So, at Warrigal Road he lead a program in which he spent two days every week mentoring his fellow teachers.

The results speak for themselves and other schools are now picking up his ideas and programs.

For creating an environment in which every teacher is engaged in science, Brett Crawford receives the \$50,000 Prime Minister's Prize for Excellence in Science Teaching in Primary Schools. Brett is the lead science teacher at Warrigal Road State School in Brisbane.

Brett went into teacher training straight from high school at the age of 17.

"By the age of 18 they'd thrown me out because I was no good at it," he says.

"I agreed with that completely. I went to get some life experience. I worked in different jobs and I worked with a youth group that taught me how to actually communicate with children. When I went back to teaching five years later, I understood the role that I was going to have as a teacher. And that I was able to do it," Brett says.

"Primary school teachers can be scared of science if they haven't had a good science experience themselves in primary school," Brett says.

"So we show them how to frame a scientific inquiry that the students and the teachers can use, and I go into the classroom and demonstrate how to do a science lesson."

Brett starts with the idea that science is the easiest subject to get a student interested in.

"Kids have the two basic qualities you need for good science: they want to know everything about the world, and they want to play with really good toys."

Brett emphasises that those toys don't need to be expensive.

"I can teach a science lesson on a \$10 budget and have students understand things about chemistry. I can teach students why cyclones spin with a Lazy Susan and a glue stick."

Brett's innovative methods are also spreading beyond Warrigal Road. He has developed connections with Griffith University, CSIRO and local businesses, and works with teachers from neighbouring primary schools to pass on what he has learned.

"It's important for science and teaching to take a collaborative approach," Brett says.

Local high schools have taken note of Warrigal Road students' knowledge and enthusiasm for science and want to see where it comes from.

"One of the things I'm most proud of is when teachers from the local high schools come to us and ask for ideas on how to teach science to their students," Brett says.

At the root of all Brett's work, either in the classroom or as his online character 'Professor Zaccheus', is the simple joy he takes in sharing science with his students.



"I like the experiments you can do with the simplest things and get the biggest wow factor: you can teach students about the density of gases by getting a soap bubble to float in mid-air and their eyes light up because suddenly they're seeing something they didn't believe was possible.

"Then you explain to them that it's not magic: it's science," Brett says.

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### Further reading

<https://warroadss.eq.edu.au/Pages/default.aspx>

## Career profile: Brett Crawford

### QUALIFICATIONS

1992 Bachelor of Education

### CAREER HIGHLIGHTS

2018 Year 6 School Science Lead Teacher, Warrigal Road State School

2016–2017 School liaison / Coordinator for Robotics Program, Warrigal Road State School

2016–2017 Science Coach / Curriculum Advisor, two days per week, Warrigal Road State School

2015 Guest Presenter, STEM competition, University of Queensland

2015 Review consultant for How to Teach Science online modules

2012 Science in Action, Griffith University

2011–2012 South East Region Science Coach and Curriculum Advisor, Science Spark

2011–2012 Guest Lecturer on Science Education, Griffith University.