# GATE Newsletter 2018

## Sunnybrae Normal School, Term 4

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#### Who Are Our Gifted Children and How we cater for our GATE students Adults? at Sunnybrae Giftedness: high intelligence or aptitude. They are our artists, Our musicians, Talent: high level of performance. Our scientists, Our entrepreneurs, Gifted and talented students at Sunnybrae Our economists, Normal School have an aptitude or advanced Our philosophers, ability in academic, emotional, cultural, Our poets, Our writers, physical, creative and/or artistic pursuits. Our visionaries, Our entrepreneurs, Within the regular classroom we aim to: run an inclusive programme where gifted children Our uber-athletes, are not made to feel isolated. Where possible Our physicians, Our tinkerers, the teacher will adjust content, process and product in response to student readiness, Our caregivers, Our dancers, interests and learning profile. Our crafters. Our farmers. Outside of the regular classroom Our humanitarians, programme we offer Our actors, ☐ Future Problem Solving - Y5/6 Our astronauts, ☐ Maths Problem Solving - Y4-6 Our designers, Philosophy Y3-6 Our dreamers. ☐ Speech Y5/6 Our engineers, □ Choir Y3-6 □ Orchestral Group Y4-6 Our Math wizards, Our comedians, ☐ Uke Group Y6 □ Recorder Groups Y3-6 And our techno-savants Some are scholars: studiers of knowledge. ☐ Kapa Haka Y3-6 ☐ Sporting Representation Y1-6 Some are our hands-on-the-wheel, ☐ Solo Parts in Productions Y1-6 manipulate-it-to know-it geniuses. They are a curious, diverse and (potentially) ☐ Assembly Presentations Y1-6 very powerful tribe. ☐ Peer Mediator Programme Y5/6 And, they share a super-charged motivation to ☐ Student Council Y5/6 ☐ Kiwi Competitions - English, Science learn, to deeply understand phenomena = of all kinds and Maths Y5/6 To create, to connect, and to contribute. The Daimon Institute Highly Gifted

## Future Problem Solving (FPS) - Year 5/6

This year in FPS we have been researching infectious diseases, toxic materials and philanthrocapitalism. In Term 1, when we were studying infectious diseases, a special guest, Doctor Lawrey, came to talk to us about different illnesses and how they affect us and how they are treated.

FPS (future problem solving) is a great extension class especially if you like learning new facts about the world and the environment. Some skills we have learned are researching, bullet pointing, problem identification, teamwork, creative solution ideas and time management.

Firstly, we get into groups of 4 then we are given a future scene. We have to identify problems and create solutions. We rate our solutions to find the best one. We then have to write an action plan and draw diagrams to explain it. We have learned a lot from FPS which helps us at home and in class.

By Amy, Sienna and Grace.







## Philosophy Groups - Years 3-6

#### Aims:

- To develop higher order reasoning skills through discussion.
- To explain opinions and give evidence to support them.
- To discuss real philosophical ideas, e.g. "what does it mean to be free?"
- To discuss societal issues, e.g. the rights of children.
- To develop social skills, e.g. respect for different values and opinions.
- To reflect on the idea that there may not be a 'right' answer

### Comments from Middles Philosophy students...

I like Philosophy because....

- "We get to look at pictures and listen to stories and I get to say my own opinion."
- "We talk and think about what we think."
- "There are no right answers, just ideas."
- "I like to think hard and because we learn new things."
- "We learn how to listen and ask questions."

### Comments from Senior Philosophy students.....

We like philosophy because...

- "We get to listen to stories and poems and then reflect on their meanings, for example, Who owns the Moon?"
- "We can say what we think without being right or wrong."
- "You are right if you can explain why you think that way."
- "We have to really think hard and expand our thinking because Mrs Thumath and other people in the group keep asking questions!"

### Core GATE Y3/4

The Middles Core Groups' programmes are centred around experimenting, following a set scientific method, and researching using such skills as key ideas and bullet pointing. This year they have been experimenting with 'Air'. They have discovered what causes wind and the surprising strength of compressed air. The students have researched the problems of air pollution and have made suggestions as to how we could help to reduce pollution. In the photo on the left below, they are trialling the best material for parachutes.





#### GATE Maths - Y4-6

#### GATE Maths Year 4

Students focus on using the following skills and strategies for practical problem-solving:

- Working Backwards
- Drawing a diagram
- Drawing a table or chart
- Using concrete materials
- Guessing and checking
- Creating an organised list

#### GATE Maths Year 5

Students focus on using the following skills and strategies for practical problem-solving:

- Working backwards
- Drawing a diagram
- Drawing a table or chart
- Using concrete materials
- Guessing and checking

#### GATE Maths Year 6

We work on problem-solving strategies, cooperative problem solving and communication of strategies used

We then go onto preparation for the Otago Problem Solving Competition, designed for students Year 6 and up. The test is taken each month Looking for/following a pattern.

Once these strategies have been taught, students are given a variety of problems to solve. They work both independently and in small groups to select a strategy and solve each problem.

- Creating an organised list
- Looking for/following a pattern.

Once these strategies have been reviewed (from last year), students are given a variety of problems and must select a strategy. They then evaluate their learning by explaining why a strategy was chosen and deciding if it was the best way. Communication of mathematical ideas and processes is an important component of this process.

for 5 months beginning in April. To prepare, we work through old papers, discussing each of the problems and the strategies to solve them. Good communication of logical reasoning is a key element.