G.A.T.E.WAYS

invites gifted Year 1 and 2

children who love technology to

'MEET ROMO THE ROBOT'

G.A.T.E.WAYS is an independent organisation offering challenging and enriching activities and experiences to develop and extend highly able children. Established in 1994, G.A.T.E.WAYS runs a range of stimulating school programs as well as the Saturday *Brainwaves Club*. This *JOURNEY* for both girls and boys will run over four sessions. Robo is the curious smart phone robot you can train. With either an iPhone 4, 4S or iPod Touch (4th Generation) you can learn to program and code Romo. Complete missions, navigate mazes, pathways, directional language, respond to facial recognition and problem solve all with Romo. The vital aspects of coding and computer programming will all come together in one experience.

Requirements: In order for children to appreciate this unique educational experience, it is necessary for them to bring a **fully charged 4th Generation iDevice,** such as an iPod touch (4th Gen), iPhone 4, or iPhone 4S. ***(not an iPad, and not an i5 or 6 device – these cannot dock with the Romos).*** All iDevices to be used with the Romo base must have an Apple operating system of iOS 6 or newer to support the Romo apps. **Before attending the first session**, please also download the Romo app from the Apple App Store and test that it runs.. Bring an exercise book,a grey lead, a snack (no nuts please), a small photograph (of the enrolled child) and a stamped, self-addressed DL envelope for your report.

Session One: Meet Romo.

In this session you will get to meet your Romo and he will be very keen to get to know you. Facial recognition will assist in you getting to know your Romo and you will share your thoughts with the other Romo controllers. You will start to develop you coding skills by 'unlocking' some of Romo's first missions on Earth. We will look at movements and turns and some basic shape constructions. Clever Romo will be out to trick us too and we will have be super programmers and be aware of our own abilities to delete some of the programming provide for us.

Session Two: Delete the Code and make me Go!

We will move onto more missions in this session after we review what we learnt from session one. Once again we will order programming and 'correct' false programming statements. Romo will want us to tickle him, teach him to tilt and move his head at different angles whilst moving, and plan missions for him as he gets to know his way around his new planet. We all know what left and right is but will he be able to move in diagonals and repeat patterns? Geometrical shapes and degrees will be important for us to know and program. We will also learn that once we have mastered basic designs Romo will start to gather and expand on his vocabulary. All these activities will be important if we are to prepare Romo for the Robot Space Race in Week 4

Sessions 3: Left and Right – take me to your Maze!

Romo is becoming more confident and we will experiment and learn what colours he likes and show him how he can excel in 'non-verbal communication'! We will start to set challenges for Romo and see if he can orientate himself through mazes that we will create. We will also see what he and his fellow robots can complete as individuals and as a team. We will share programming plans with our classmates and combine our knowledge to ensure that the robots are fully functional. The learning of these skills and group cooperation will be extremely important as we prepare for the final session.

Sessions 4: Robot start your engines!

Romo and his friends will be ready for the ultimate test as they prepare to take on obstacle courses, More complex maze constructions, the Robot Space Race and even Space Soccer! Your knowledge of robots and coding will be important as we look to see if we can team up our robots for synchronised dancing and tests of strength. Romo will have comes a long way by the time this session ends. He may never want to leave our planet!

ABOUT THE PRESENTER

Tony Doyle is a motivational and dynamic presenter who has been involved in education for the past 30 years. As a classroom teacher, ICT Coordinator and Head of School, Tony has a great interest in how children learn and he has a real passion for Mathematics and its relevance and connection to today's primary students. Over the past decade he has published student and teacher texts on Assessing Number and Assessing Chance and Data – both for senior primary. Tony has also had a long association with Nelson Maths Australia and is the author of the national wide student workbook and teacher reference texts for Year 4. He has also worked on developing an online interactive NAPLAN material for Year 3 students.