3 March 2020

RE: ST PAUL'S SENIOR ROBOTICS PROGRAM 2020

Dear Parents and Caregivers of Year 3 – 6 Students

This note contains information for students that are interested in participating in 'Come and Try' sessions for the St Paul's Senior Robotics program in 2020. The 'Come and Try' sessions will run from Weeks 7-10. During this four-week program, students will be required to attend the full four weeks, to be immersed in challenges that give them a taste of what to expect in the Robotics program from Terms 2-4.

The 'Come and Try' four week program will cost $40 and will run on Thursday afternoons from 3:15pm – 5:15pm. Mr Josh Witham will be overseeing the St Paul's Robotics program this year and he has devised a special program for the four week 'Come and Try' sessions:

Week 7:
- Basic introduction to basic programming tiles, green (movement) and orange (flow control).
- Drive forward and stop on the line.
- Drive to the line, turn around and come back.
- Drive in a circle around a bottle.
- Add a touch sensor to the robot, just via cable.
- Drive forward until pressed, then reverse.
- Flipper – Keep changing between forward and reverse by tapping the sensor.
- Remote control - Drive forward while button is released, backwards while pressed.

Week 8:
- Remove touch sensor(s).
- Add a light sensor to the robot, attached at the front pointing perpendicular to the ground.
- Learn and practice how to take light readings.
- Measure green, silver, white, black to get ideas of reading levels.
- Drive to the line and stop.
- Leap of Faith.
- Random Search Pattern – drive around inside a circle, bouncing off the walls.

Week 9:
- Show boards.
- Explain rules.
- Show video for inspiration/explanation.
- Explain ultrasonic sensors and how they work.
- Add ultrasonic sensors to the robots.
- Create a sumo program.
- Design some attachments to assist your robot's sumo performance.

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Week 10:
- Show tiles.
- Explain rules.
- Show video for inspiration/explanation.
- Discuss different components of the program needed.
- Create a rescue program, piece by piece, line following and rescue, using all sensors.
- Add in extra challenges: water tower, speed bumps, roundabouts, shortcuts.

Throughout the 4 week 'Come and Try' program, there have also been various extension tasks planned for students that require extra challenge.

If your child is interested in the St Paul's Robotics 4 week 'Come and Try' program, **expressions of interest is <u>only</u> available electronically via Parent Lounge <u>*by Monday 9 March 2020*</u>. Parent Lounge can be accessed on the school website and the school app.** You will require your login details to access Parent Lounge. Please enquire at the School Office if you don't know these details.

Payment for the 'Come and Try' four week program can be paid via the **Xplor portal** at the following link: **stpaulslps.xportal.myxplor.com**, or via the School Office. **The school will accept payments until Wednesday 11 March 2020**, prior to the sessions starting on the Thursday.

After the 'Come and Try' period, students will be invited to apply for the Robotics program for the rest of 2020. Spaces are limited for this program and therefore a selection criteria process will be used to determine which students will be offered a position. **This letter and participation in the 'Come and Try' sessions does not confirm a place in the team.** The selection process will occur in at the beginning of Term 2, with students notified of their place in the 2020 Robotics program in Week 1, Term 2.

If you have any questions, please contact me via email curriculum@stpaulslps.qld.edu.au or come and see me.

Warm regards

Mrs Emma Bird
Head of Teaching and Learning
Senior Robotics Coordinator