

Introduction

Who: Our students were Year 4 and 5 / Grade 3 and 4. Some of the attendees had used VexGo in their lessons, some were brand new to VexGo but had done some block coding. Everyone achieved success during the event.

Why: Robosaurus was designed to be a fun, engaging event to encourage students to apply their robotics knowledge and thinking skills. The mathematics involved and opportunities for communication and social skills was a bonus! Including alliance challenges meant students from different schools needed to communicate effectively. This was fabulous to observe.

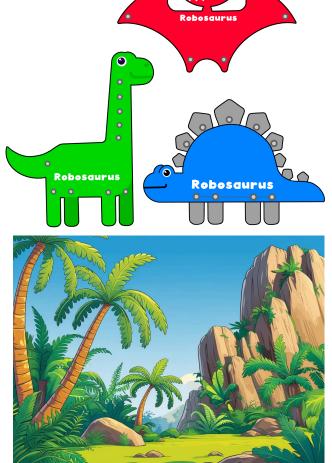
Extension: Any part of this set up could be taken and used as an individual activity within a classroom setting, or as extension activities. Amending challenges to involve the use of sensors, maybe even with a different codebase build could extend the learning and challenge for the students. We used the old codebase build but any would work!

We used Vex fields and blocks for this event but all could be set up with boxes and paper cutouts. You could also involve the students in designing challenges. Challenges were around 40 minutes.

Design: The graphics (dinosaurs) were created on the Procreate App with an original reference image form Envato Elements (paid account). As it appears there is a Robosaurus transformer in existence I have included graphics with and without the event name! This gives you the ability to give your event a different name!

We named the dinosaurs Bronwyn, Gary and Jasper. Can you guess which is which?

The dinosaur landscape background was created in Canva using an Al prompt.



Introduction

Setting the scene: We built stories into our event. Stories of dinosaur mayhem, inviting the students to accept the challenges and help us save the world! Their favourite part was the supercharged poo, of course...

Student log book: This was designed to track their progress and work out scores. We had a lot of very creative maths happening!

Scoring and winners: We provided team score sheets at each activity but these were only used at the speed challenge to record times. It would be feasible to have a leaderboard for each challenge but this would require more supervision where as we had a more student led event.

Preparing the kit: We were fortunate to be able to have a codebase for all of our teams. If you are asking teams to bring one, specify which build and have enough time to make changes if necessary. If possible have spare batteries on standby!!

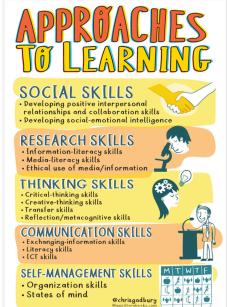


Trophies: We created some basic laser cut trophies for each school attending. A completion certificate would also have been a good alternative.

Reflection: Whilst our event was completely VexGo orientated the robotics was not our only key focus.

At the end of the event we gave an opportunity to focus on the IB ATLs (Approches to Learning).





Robosaurus: The big adventure!

Jasper's Flying Squad Touch as many Jaspers as you can +10 points for each

2. Bronwyn and Gary's Nursery

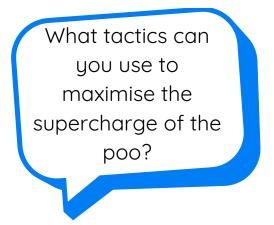
Do not touch any blue nursery spots -5 points

3. In The Poo

Poo is super charged. For each poo your robot touches you double your points! A golden poo triples your points. Max 5 poos...

This is an individual challenge.

Please treat each team with respect, help each other and take turns on the field



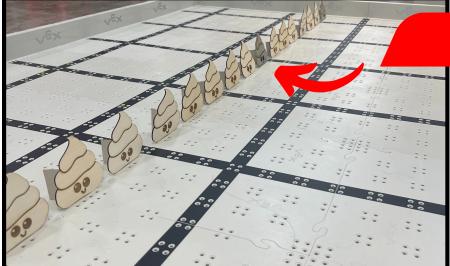


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What is the maximum number of points you can score?

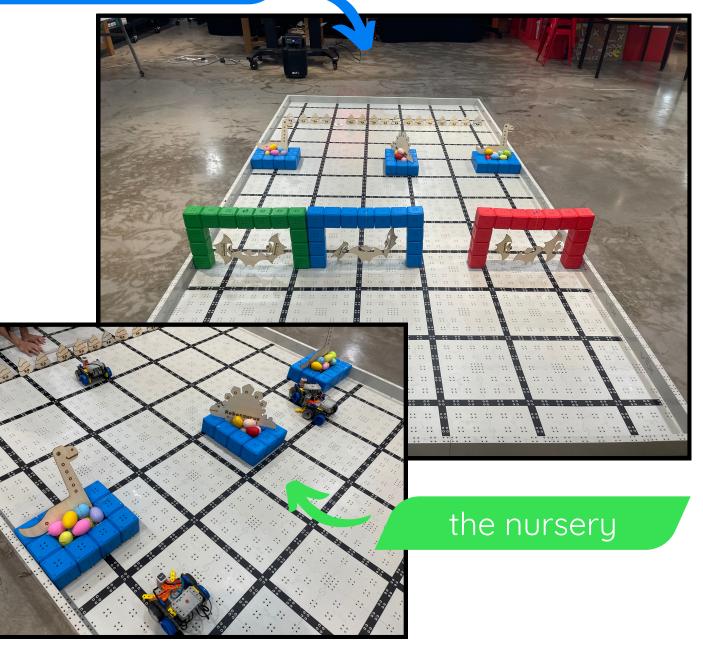
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Robosaurus Adventure



golden poo

the full challenge



Under control: Alliance coding task

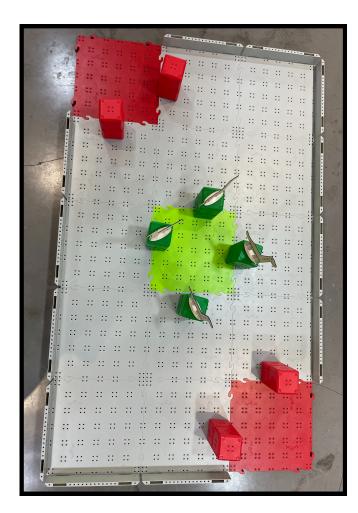
1. Push the red buildings off the field. If the robot follows the block and leaves the field your team challenge must restart.

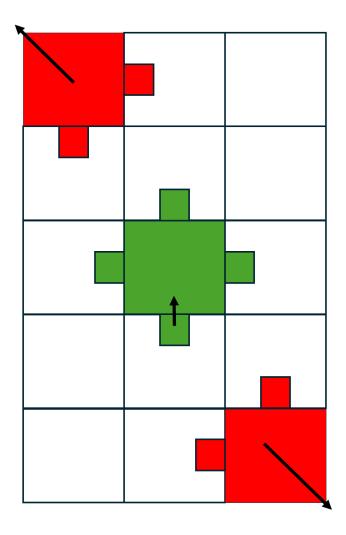
2. Push the green buildings into the park

Each completed task is worth 10 points.

If you use a sensor, you double points for your entire challenge. You can start anywhere.

This is an alliance challenge. You are working together with the other team on your field. Each team keeps score for their part of the challenge then at the end the scores are combined.





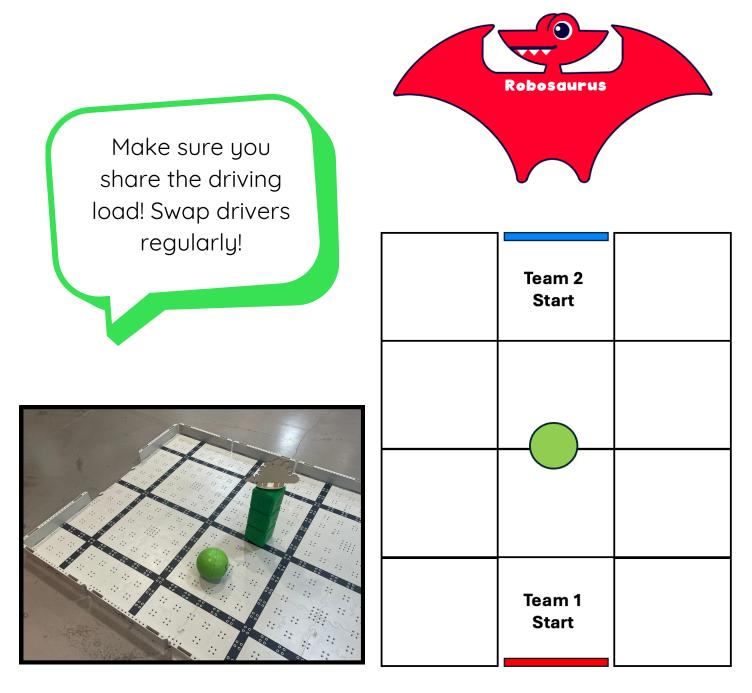
Drive for your life!

Score a goal in your opponent's goal.

Each goal is worth 25 points.

If the ball is stuck in a corner, one member of the team may place it back in the middle.

A dinosaur has strayed on the pitch. You may not touch it with your hands, only a robot. If you knock it over it's minus 5 points (-5 points) This is an individual team challenge.



The need for speed!

This is a timed challenge.

Go from Start to finish as fast as you can.

If you knock any dinosaurs off their mountains, you get a 5 second penalty added on.

You can use the timer on the Drive mode window.

Be careful, the dinosaurs have chewed some of the track...

