THE NEW GENERATION



A LOOK INTO THE NEW SCHOOL BUILDING

As we all know, A block is a new part of the school that is undergoing construction right now. We had two reporters get a look inside and this is what we saw. Read more on page one.

HOW TO GET TO SPACE

WHEN NOT TRAVELING IN A GIANT METAL CAN FULL OF EXPLOSIVES Space travel is notoriously very, very difficult. Rockets have to reach a speed of 40,000km per hour to even have a chance of leaving the atmosphere, as many people would know due to the recent developments in space travel thanks to entrepreneur; Elon Musk. Read more on page three.

THE INVISIBLE TRUTH

WILL THE BLM PROTESTS ALLOW VOICES TO FINALLY BE HEARD?

In the past few months of America, protests all around the nation have sparked after the tragic death of George Floyd was caused by police officers. The incident occured in Minneapolis, Minnesota yet the outrage from it has caused the respark of a former movement called "Black Lives Matter". Read more on page two.

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Another game, but it's not the same. Pg

A New St Patrick's Dundas!

As we all know, A block is a new part of the school that is undergoing construction right now. Due to the recent Pandemic, the construction of the new building was delayed slightly but now we are on schedule. It was delayed due to the government restrictions of how many people could be on a worksite. Some new students and many year sevens are very new to coteaching.

If you are not already aware, co-teaching is where two classes are in one larger classroom, and the two teachers work together to create a more open, and collaborative learning space for students and teachers alike. Two reporters recently took a tour around the new building and were pleasantly surprised by the classrooms. They include multiple breakout rooms and even some outdoor areas where lessons can occur. Group work and workshops can happen in the multiple breakout rooms.



What was wrong with the old building?

We asked Mrs Kelly, teacher and member of the CLT, this question and she answered with "We wanted to have more agile flexible spaces so we can do different things with our learning, and accommodate all of our learners." There has also been a large push over the last few years within the Catholic Education Diocese of Parramatta and within other dioceses across NSW. Mrs. Kelly said "It's about future proofing our students because we want to develop 21st century skills of collaboration and creativity, group work, leadership and things like that. These new spaces will allow for that".

When will the building be in operation you might be asking? The project manager and Mrs Kelly predict that it should be finished and in full operation by the end of the term. The project has been in the works for over 12 months and the Site manager, Tom is hoping to be finished by the 22 of August. He also added that it was a more difficult build because of the already existing school, as well as the residential area right nearby there were certain guidelines that they had to abide by.





WILL BLACK LIVES MATTER FINALLY ALLOW VOICES TO BE HEARD?

By Peta Turner

In the past few months of America, protests all around the nation have sparked after the tragic death of George Floyd was caused by police officers. The incident occured in Minneapolis, Minnesota yet the outrage from it has caused the respark of a former movement called "Black Lives Matter". BLM for short. It has meant that people of colour who have experienced some sort of injustice due to their skin colour have begun to speak out and make a statement.

These protests are not limited to America though, as in Australia we have also had multiple protests. Not only are they in support over the injustices in America, but Aboriginal people in Australia are speaking their stories. We as a nation are in no way clean from racial discrimination, but with the advancement of these movements we hope to build a new nations way of not only dealing with discrimination but also eliminating it.

The people at our school also have their own way of showing their support for the movement without going to the protests. For example, Lily Dorranian from 9Paul sent an email out to a wide variety of students providing them with links to petitions which are in support of the movement. They brought awareness and really showed students' voices through this. I also emailed Lily myself with some questions about her part of the movement, and I received a very educational and strong response.

When questioned by me over their feelings of the movement, she said that she "most definitely supports it with every fibre of my existence". They not only sent the email out but have also been using other forms of media such as Instagram to spread awareness and educate people. As many people have, they have seen their fair share of racial discrimination. Not only directed towards themselves but friends and family too.



Now the official Black Lives Matter movement was founded on the 13th of July 2013 after another innocent person's death due to only their skin colour. But people speaking out about this injustice is not new, yet it seems that only in the past few years they've been heard. Some early examples of the movement is the United States Civil Rights movement in the 60's. The aim of this was for black Americans to have the same rights like their fellow white Americans.

The result was successful and racial segregation became no longer legal. Yet people still stigmatise others based on race and act out on it after all the fights for justice and equality they've had to have. Us younger generations need to break these ideas so we can create an equal world where people are judged fairly. It's up to us now even though it should have been solved centuries ago.

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HOW TO GET TO SPACE

When not travelling in a giant metal can full of explosives

By Arli Pan



Space travel is notoriously very, very difficult. Rockets have to reach a speed of 40,000km per hour to even have a chance of leaving the atmosphere, as many people would know due to the recent developments in space travel thanks to entrepreneur; Elon Musk. They are made mostly of massive fuel tanks and engines, with a small area for other payload. This is terrible for interplanetary travel. There have been many fictional designs to get to space, for example: The Space Elevator. But many of these have been tested and calculated, and have been found to not work. Luckily for us, there has been one simple method that has been tested by scientists and doesn't require materials that we don't have. This is known as a Skyhook.

A Skyhook is made of two main parts, a cable and a weight. These form a tether. These are designed to help small spacecrafts travel from low orbit to shoot them to a high altitude. A counterweight holds the long cable in place while it rotates to help maintain the position of the spacecraft. The tether slows down at the bottom, near Earth, and speeds up when it's at its furthest from Earth. This allows it to transfer orbital energy to the shuttles and sends them flying through space at a calculated route with almost no propellants needed from the spacecrafts.

A challenge that could occur is catching the end of the Skyhook. There is a short window of time, about 60-90 seconds, for a shuttle to catch a small item moving at great speeds in the sky. A potential solution is to add another thing on the end of it, similar to a fishing line, it would be around 1km in length and it would end with a small drone which would be able to seek out the spacecrafts and help them attach to the tether.

Another possible challenge would be to keep it in orbit, it transfers its orbital energy to the spacecrafts, therefore losing energy itself. If the Skyhook loses too much energy it will fall down to Earth. This can be solved by balancing this, the Skyhook would lose energy when throwing spacecrafts out to space, but could gain back energy when slowing down spacecrafts to bring back to Earth. If it still loses too much energy with this solution, we could simply put some small engines on the Skyhook, constantly correcting its position and adjusting its speed. With the idea of this method of transport, we could open up a new world of interplanetary travel.

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The spacecrafts would bring materials to the planet, and begin to build another Skyhook, this time, located on one of Mars' moons, Phobos. Phobos is very heavy, 10,700,000,000,000,000kg to be exact. It is also the closest moon to its planet. This means that Phobos has an almost infinite amount of orbital energy, and is the perfect place to use for a base. Using Phobos as a base, we would have the opportunity to make super tethers. These would be 6,000km long, reaching to both near Mars, and getting near Deimos. This would open up the entire solar system to space travel. This would give humans the chance to get materials from all types of planets, and allow incredible opportunities for human kind to take. This is the basis of a zero propellant transport system around the whole solar system. A system that we already have the knowledge and materials for today, with the correct funding and efforts, humans could manage a safe and reliable method of space travel.

Humanity is already evolving in this field at a fast pace, even though the recent developments of disease, there is at least one company still advancing humans knowledge of space travel; SpaceX. Space travel and exploration is our future, this is the perfect way to open a door to that future.