

2023

SCHOLARS

JOURNAL

Introduction

Roundwood Park Scholars are a growing community. At time of publication, there are currently sixty three Roundwood Park Scholars. These are students who display the Roundwood Park Aspire learning habits in abundance. They persevere to go above and beyond their classroom studies, they reflect on what they have learnt in a wide range of ways, seeking to constantly improve. They are responsible and communicate their love and passion for the things that they have discovered in presentations of their work. Despite the pressures of school work, the distractions of the modern world and their own personal commitments, they demonstrate resilience: they choose to read, to find things out and to learn. These habits will surely take them far.

It is truly an honour and a privilege to work with the Roundwood Park Scholars and to provide them with opportunities to broaden their learning beyond the limits of the classroom and the curriculum.

This journal is a compendium of some of their work this year. Some of it is work that they have done in their completion of the super-curriculum. Some of it is work that has arisen as a result of a competition entry, or it is as a result of some deep, big thinking after attending a Scholars Workshop this year.

Enjoy.

Lou Martin

July 2023

Chloe O - Year 8

Chloe made a video as part of her super-curriculum work. Find out how.

Behind the Scenes of Sonic's Paris Holiday

For my super-curriculum, I made a video of Sonic going to Paris. But how did I actually do it? It took longer than I expected and I spent a whole afternoon on it. I did it in four simple steps.

First I had to think about the plot. What was going to happen and what props would I need? After that I had to get the materials and props. I spent a lot of time trying to get Sonic's aeroplane right. The prop looked great but I couldn't hold Sonic, the plane and my phone at the same time. I figured out if I made a seat for Sonic on the plane I could balance him there. However cardboard wasn't as strong as I thought it was. After reinforcing it a few times it was up and working. This section took around forty five minutes.

Then I had to translate everything I had thought of for the plot into French and make sure I knew how to say everything. This section was by far the shortest as I referred to my French book as I thought of the plot. I would say that this took around fifteen minutes on this bit.

I then had to record it. This was hard as I had to get the props, the camera angle and Sonic all in the right place. I had to talk, move Sonic and hold my phone to record. If I got the shot, most of the time the angle cut off Sonic or my finger was in the shot. I figured out that if I recorded the video and then added the voice over on top that would be easier. With that knowledge, I filmed all of my scenes and made sure they were all good. This took between an hour and a half and two hours.

After I had recorded it, I had to edit it. This was the most time-consuming part. I added a voiceover, music and subtitles. I edited it on iMovie as that was the only video editing app I had. First I put the clips into iMovie, then I added voiceovers for the scenes that needed them.

After each video had sound, I added subtitles for each scene in English. I added finishing touches like sound effects and background music. This section took around two hours and a half.

That was my process for creating Sonic's Paris holiday video. I really enjoyed this project and it opened my eyes to making videos. I loved how the video turned out and next time I do super curriculum there's bound to be another video with Sonic in.

Rose G - Year 8

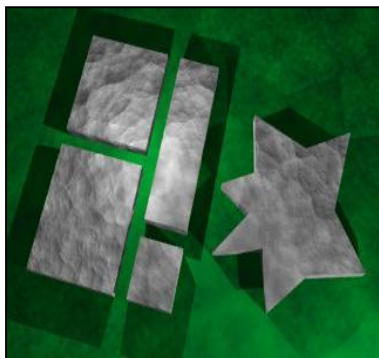
Rose entered a creative writing competition and this was the result:

A myriad of blues covered her wings. Every shade from the baby blues of innocent newborns' eyes to the dark blue of royals. Dazzling with its beauty but also commanding so much power. So strong and yet so gentle. They say every butterfly's wings are unique like a delicate snowflake. Her wings were so pure it felt all your sins were whipped away from just looking at them. Transfixed, I stared at her stunning reflection as if seeing it from a whole different world. I had never looked at something like this. It filled my body with a warm tingling sensation. Do you think she remembered her past of her being a caterpillar? It must feel like a whole life ago she was a caterpillar but does she even remember her life before she blossomed into a beautiful butterfly? When I grow up, will I remember my history? Fluttering her beautiful wings I hoped when I changed I would remember what had brought me so far. It was a surreal sensation of knowing you right now are history in the making. She fluttered away. I blinked and caught one last glimpse of her beauty. Will this moment change my history?

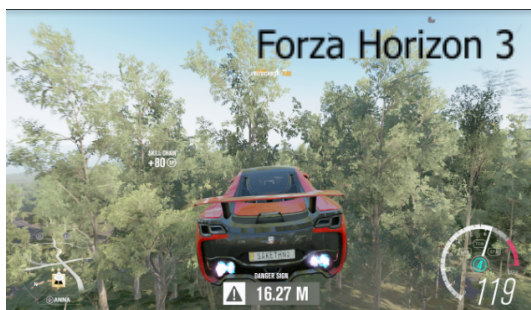
Saketh N - Year 10

The invisible maths behind video games

Maths and video games – two very different worlds. One full of fantasies, enjoyment, excitement and one that is seen by many as boring, hard and ‘*how will this help me in the future???*’. If this is you, then you will be surprised to find that maths does indeed help you in many places, and some unconventional places as well. Did you know video games are designed by maths and this is what drives all of the graphical and playable designs that are played by millions of gamers worldwide! Think about the last game you played and which map you were playing on. Most of those shapes are geometry, which means the maths of shapes and angles.



Developers, or *devs*, can spend days or even weeks, working on these shapes which can often be graphically beautiful and realistic. A huge amount of probability, trigonometry and game theory, not to mention other very interesting branches of maths, are implemented through what is called an *engine*. Below are some pictures that are real captures from gameplay. They all also include geometry and a huge amount of physics that determine every aspect of the background.



In terms of gameplay, every game has thousands upon thousands of lines of codes and algorithms implemented into it which can affect how the game runs. Using the picture (left) as an example, we can see Cristiano Ronaldo striking a ball and seconds before it nestles into the top corner of the goal.

Consider the animations of the football and the curling and angle that the player shot it at. Consider the goalkeeper's diving animations to attempt to save it, and consider the amount the net moves backwards as the ball hits the back of it. This is only a tiny fraction of what is included. Furthermore, the truly mind-blowing fact is that all of the games above were released more than 5 years ago. This just emphasises the advances in technology and even the advancement of realism and algorithms that make games truly immersive. And maths is the backbone behind all of this. So think about this when you are playing a video game and take a little bit of time to appreciate the maths that is seemingly invisible behind the fun and games.

Jessica L - Year 8

Jessica entered a competition with the Academy of Real Assets. This is her winning entry.

If this building could talk, one thing's for certain: it would not have pleasant things to say. Instead it would scold us. Rebuke us. It would moan, groan, complain. Partially under its own weight, but also under the stress of knowing what the humans are doing to it. To the planet. To themselves. Why? That is a simple answer.

If this building could talk, one thing's for certain: it would not be happy. Each morning it would wake up feeling as miserable as the last; each morning it would wake up wishing it hadn't at all, and it could just sleep through it all. Maybe it would have been better if it didn't have to see anything at all, if it was put into an eternal coma. The pain of knowing what lies ahead is too much to contain. Like a fire burning in the pit of its stomach, a storm brewing in the furnace inside of it, desperate to escape the brick walls imprisoning it. The building had kept quiet all this time. Still don't get why? I'll give you some hints.

In the UK, the average person emits 10 tonnes of CO2 per year. The average person drives 10,000 - 15,000 miles per year. 42 million trees are cut down per day. That's 15 billion per year. It is predicted that the amount of plastic in the ocean will double in 15 years, and plastic will out-number fish. 30,000 species are extinct due to poaching, and despite having this knowledge, what happens? In many countries thousands of endangered animals are killed every day. That's not to mention overfishing, paper waste, food waste overpopulation, meat consumption and various other problems we are facing.

Do you get it now? Has it taken you this long? The building knows what we've done. It has witnessed it all. It has given up telling us - there's no use. What will we do about it? It's laughing at us now. It laughs and laughs and laughs, a ringing in my ears. It mocks us, and points fingers at us. And the most embarrassing part, it rightly laughs. It's been sitting back this whole time, a menacing smile growing on its face. It towers over everyone who walks by, knowing what lies ahead. It knows our future. It knows.

Perhaps it doesn't matter. Perhaps it is best if we learn on our own, and face the consequences. Perhaps we are already doing as much as we can to help. Perhaps it's not too late. Is there any hope at all?

But the building thinks otherwise.

It would reach inside of us, and shake us. Shake us until we wake up. We brought this upon ourselves, and despite having the knowledge about it, what do we do? Nothing. The building would shout, roar, howl, longing for someone to hear, but to no avail. The burning itch for someone to listen grows ever stronger. It aches and throbs, a constant internal pain, but nothing would happen. We deserve this. It's our fault.

'What will it take for them to do something?' It would cry. But its voice would be lost in the crowds. A distant memory. More like an echo. 'They need to change. Change to energy efficient appliances. Use smart thermostats. Use eco friendly cleaning products and biodegradable household supplies' It would scream, more desperate this time. But what is the point? No one will listen. It's just a building.

With each day, month, year that goes by, the humans grow older and more frail, but not the building, except maybe the occasional spot of rust or dirt. But either way, it continues to watch the humans. Watch us. Watch us make our stupid mistakes that will cost us our lives. With each step someone takes up the towering staircase of the building, it is just a constant reminder that there is nothing the building can do about it. After all, humans are the bosses. What they say goes. They can trample all over the building. Mess up the freshly vacuumed carpet, just for it to be hoovered again, and again and again.

If this building could talk, it wouldn't say much. Perhaps mutter a few words that would get blown away by the wind. Lost in the labyrinth of towers and skyscrapers. Maybe someone would notice, but it's unlikely. Even if they did, the words would flow in one ear and out of the other, they would be meaningless, pointless, ineffectual. Even if everyone heard, what would they change? They would carry on with their lives, as if they had heard nothing.

If this building could talk, it would refuse. Not utter a word. It wouldn't dare. It's too late now. There's no turning back.

Isabella T - Year 9

Isabella wrote the following after an inspiring Scholars Workshop with Mr Connor

THE NEXT STEPS OF HUMAN EVOLUTION

What's the next step in human evolution? Will we grow gills, maybe lose limbs or gain the ability to fly? Well, we don't actually know, however we can predict what will happen next.

It's a well known fact that we are slowly killing ourselves. Generation by generation we are polluting the earth, creating technologies to undermine adaptations and facilitating lifestyles where we practically de-evolve. One of the most major forms (if not the) of pollution is air pollution.

Technological advancement is the backbone of our civilization, and since the industrial revolution, we have built it upon fossil fuels; coal and oil powers our machinery while gas converts into electricity. While we are now focusing on a greener future, the amount of carbon dioxide in the atmosphere has increased by around 200 parts per million since pre-industrial revolution. That's a raise from 280 ppm to 480 ppm in the past 262 years.

But why is this so important?

Not only is the carbon dioxide accelerating the natural process of the greenhouse effect to an alarming rate (destroying our planet while we can't ship a replacement in time), it's also making the air we can breathe less and less 'pure' (oxygenated). That is why I believe that our bodies will evolve accordingly. Whether this is lungs that have a greater capacity, the body becoming more efficient to need less oxygen or some sort of other adaptation, I believe that we have been causing our own need to adapt.

We know that these adaptations are possible, from the Bajau people. This tribe have lived in water for centuries, and have developed a higher lung capacity, larger spleen and even slightly webbed feet; all to facilitate hunting in water. I believe that the larger population may gain the same/similar adaptations (minus the webbed feet) to live in our polluted world.

Another interesting concept is not how we will evolve, but how an adaptation may affect us. Imagine Covid. A disease that has taken over 6.5 million lives. Now imagine the bubonic plague; a disease that killed around 200 million people. Now imagine a new disease. One 20x more deadly than the plague and covid multiplied together. One that will kill victims almost instantly and is airborne (the reason why covid spread so quickly). Only, it needs the receptor CD4 (like HIV). Well, in places where HIV is a larger problem, people are already evolving to not have that receptor. So if everyone with that receptor died (largely in HIC's) the effect of the adaptation would be a movement of where the people are. The economic capital of the world would move from New York to Mbabane (Eswatini) or Harare (Zimbabwe). As previously stated, this adaptation has already started.

Liswati people have evolved.

Zimbabweans have evolved.

We will evolve, but how? Well, we don't know just yet.

Ella B - Year 8

Ella wrote this essay for the Big Oxplore Essay Competition

Should The Purpose of Charities Be To Make Themselves Redundant?

Charity is an innate desire in humans and deep down there is a good samaritan inside every one of us. That desire does not stop once you have helped one person, instead it magnifies. Society is a team and charity is the team spirit that binds us together and brings out our best qualities.

In England and Wales there are 180,000 charities, with over 6 million volunteers, all trying to improve the lives of others. These charities have different goals and purposes, some aim to cure heart disease or stop cancer and others have ongoing commitments like education or building conservation. There is a diverse and vibrant array of problems that these charities provide services to the public in order to solve.

The Charitable Commission in England and Wales was set up by the government to manage all charities and keeps a record of the charities' governing documents, which include their stated aims and purposes, known as 'The Charity's Objects'. For example, the ninth largest charity in England and Wales is Cardiff University, spending £604 million a year. Cardiff University has six Objects and their major one is 'To Advance Knowledge And Education By Teaching and Research'. Advancing knowledge is a purpose more than an aim as the University can conduct research to build knowledge and create new ideas and technology but it is not possible to complete all potential research. There are so many ideas to research that there is no way to conduct every possible avenue. Teaching is similar, especially as the amount of knowledge that needs to be taught grows. There will always be new students to teach and educate, so the University will not complete that purpose but they will be able to fulfil it on an ongoing basis. Therefore, Cardiff University has an ongoing purpose rather than a specific goal and should never become redundant.

Conversely, one of Cancer Research UK's Objects is an achievable goal 'To Research Into The Nature, Causes, Diagnosis, Prevention, Treatment And Cure of All Forms of Cancer'. There are many types of cancer and many different causes of cancer, though *theoretically*, it could be possible to cure all forms of cancer and if that objective is achieved, then the charity could be dissolved. In this case, the aim of Cancer Research UK should be to make themselves redundant.

Culturally, redundancy is an interesting concept, because it is commonly seen as 'unsuccessful', yet if a charity completes its objective, and makes itself redundant, it would be a success. If we saw redundancy more as a victory in different walks of life, rather than a failure, then society could take great leaps forward, because people would plan to finish their task, rather than contribute to its slow progress.

For me, if I was a scientist working for Cancer Research UK, and my goal was 'To Cure All Cancer', then I would be inspired to work harder towards it. Even if the Object is not immediately achievable, I could say that my job was to cure cancer. Perhaps all charities should consider making their Objects inspiring rather than attainable. In practice a Charity could have a mix of inspiring and achievable objectives.

Now the question arises: why is there such a difference between the future of the two charities? An aim is a goal that can be achieved and with a good plan will be completed. For instance an achievable aim could be to vaccinate everyone in the world against polio. This is an aim of the Bill and Melinda Gates Foundation and it is achievable, because since 1988, the incidence of polio has decreased by 99%. By comparison, the largest charity in England and Wales is the Charities Aid Foundation, whose Objects are 'To Benefit Any Charitable Institution, To Use Its Funds For Any Charitable Purposes Wheresoever In The World', they support all charities in managing their finances. That Object is a purpose rather than an aim. The Charities Aid Foundation should never aim to make itself redundant because it is instrumental in supporting other charities with their finance.

The very best Objects for a charity should include a combination of the achievable and the inspirational, creating a working environment that is focused and driven. Some charities should have Objects that plan to make themselves redundant, but other Objects support ongoing purposes.

Lastly, the fire in the core of all our beings is charity. As you feed it more fuel it burns stronger and inspirational aims are the oxygen lifeline to it that make it burn brighter. We should never try to restrict the desire to help people but instead we should feed it with the best support and make us all good samaritans.

Georgia K - Year 8

Georgia enjoyed discovering Grace O'Malley during her super-curriculum work

Grace O'Malley: the fearless pirate queen of Ireland

Who was she?

Grace was born in Ireland around 1530, and was the daughter of Irish Chieftain, Eoghan Dubhdara Ó Máille and Margaret O'Malley. They were a seafaring family, and her father was known to travel a lot, setting them apart from many other clans. Legend says that she wanted to travel on an expedition with her father when she was young, but when she was told she



couldn't go as her long hair would catch in the ship's ropes, she cut off most of her hair which earned her the nickname "Gráinne Mhaol" which means Bald Grace. She would not allow her gender to stop her from following in her father's footsteps, and becoming a force to be reckoned with at sea. Then in 1546, Grace married Donal O'Flaherty, the heir to the O'Flaherty clan and became active in Irish politics. Her husband taught her the arts of pirating, giving her the skills to take back his castle after he was murdered by a rival clan. Folklore also suggests that Grace was pregnant while at sea, defending her ship from attack from Algerian pirates within an hour of giving birth and leading to the capture of the pirate vessel. Grace was raised at Belclare castle, and acquired many more throughout her reign, through conquest and marriage, showing just how successful she was as a female pirate.

How Far Did She Break The Stereotype Of Women During The 16th Century?

Despite being largely left out of Irish history due to being a pirate (and a woman), Grace O'Mally still left a great legacy behind. She definitely broke the stereotype of women in the 16th century, who were expected to look after a household or work simple jobs. Grace instead got involved with jobs many people didn't think a woman could do, like going on voyages, pirating, and capturing castles. These are very physical, and aggressive tasks, things people didn't think women could be in the 1600's.

She also broke this stereotype when she was young, cutting her hair off to be allowed on an expedition with her father. This shows a determination that people didn't expect in women, and also surprised many, as she didn't bother about how she looked.

On the other hand, she did fit the stereotype, as she did get married and have children. This was considered a woman's main role in life, and she did do those things. But, despite doing things that fit the stereotype of women at the time, she did it in a way people didn't think possible of a woman. The man she married allowed her to become involved in politics and encouraged her voyages, teaching her the art of pirating and fighting alongside her. And, her pregnancy did not fit the norm either. Legend says she gave birth at sea while defending her ship from attack, fending off Algerian pirates within an hour of giving birth. This shows that even while building a family, she proved to the men at the time that she could do as much as they could.

Throughout her whole life, Grace O'Mally fought against the way men thought of women at the time, breaking the stereotype that held many back and proving that women were fearless, strong and capable.

Rose G - Year 8

Rose also entered the Big Oxplre Essay Competition.

Should billionaires be expected to engage in philanthropy?

The rich today are expected to give, to share their huge amount of money. The common assumption is that philanthropy automatically results in loss of money - this idea is wrong. A lot of elite philanthropy is about elite causes. Elite philanthropy is giving on a large scale. Elite philanthropy reinforces the world as it is. Philanthropy very often favours the rich but no one holds philanthropists to account for it. Ultimately that means so called philanthropists could be using the money that they have given to work for them probably even resulting in more money. Just to "donate" it again. Subsequently making their money work more efficiently. It is obvious that not many of us on the planet are billionaires but should the mega rich be expected to give. It is not obvious to everybody what is the right choice to answer this question but I strongly believe that billionaires should share their money, learn how to empathise more, see things from others point of view and if that does not work we can always tear their empire down!

Some people believe that the billionaires only do these things to shadow their true selves and make them more likeable, more able to sell a product or to gain popularity . On the other hand, some people believe that some billionaires give out of the kindness of their own hearts. I believe that it is almost impossible to distinguish the two apart. These CEOs that lie and cheat their way to victory also have another reason that billionaires donate lots of money is because they can write it off in their taxes and get a quarter of what they donated back.

In history there has always been a divide between the rich and the poor. The rich were at the top of the hierarchy and they were not expected to give but recently the times have changed and the rich are now expected to give. However we no longer enslave people, the survival rates have gone up and most people now have access to health care. Ultimately these factors mean most people don't need charity to survive. However I believe that people with extra money must support the percentage of people that are fighting for survival. The ones drowning in a sea of inflation, scamming and low wages. Fighting for every breath ,every penny they have to spare and every last way to make ends meet.

Essentially, if all people are equal why are billionaires expected to give shouldn't we all? The question of whether billionaires should be expected to engage in philanthropy leads to many other questions such as: Should everyone be expected to give? Should anyone with disposable income have to give?

It seems like everyday you see super rich CEOs promising to give away some of their fortune to charitable organisations. Sometimes people wonder why that CEO is giving to that charity. What are the connections between what they have chosen and their lives? However the answer is big CEOs sometimes pledge money to fix problems their companies caused - A term that has been adopted for this scheme is philanthrocapitalism. Is this what really happens though or is it just corporate hypocrisy? An example of this is the fact that Jeff Bezos has pledged to give most of his money to charities and to help people. Let's analyse this - Jeff Bezos is giving away most of his fortune: 118 billion of 120 billion. This still leaves him 2 billion which is way more money that anyone needs to live a good life. It is sad that billionaires don't want to donate for the good of their own hearts but just to cover problems exacerbated by the way in which they allow their companies run and what allowed them to accrue their wealth.

Essentially, using stealth politics, billionaires make sure their voice is heard. Stealth politics describes when people (especially rich people) influence the politicians - usually by becoming top campaign donors. Billionaires use stealth politics because what they want is different to what the middle class and the rest of the country want.

Using everything I have ever been told, seen, learnt or what is felt in my heart I believe that the issues in this question are beyond billionaires. We are talking about charities that help people who are escaping war, living in poverty and so much more. So open your hearts, let them feel compassion, open your heart to others so the big questions in life are no longer should billionaires be expected to engage in philanthropy, but instead why shouldn't everybody that can be expected to engage in philanthropy?

Ultimately, I understand that billionaires should be compassionate, thoughtful and after looking at all the evidence I still feel that billionaires should be expected to engage in philanthropy.

Erin O'B - Year 7

This is Erin's super-curriculum work. A beautiful collage on 'The Giver'.



Emma W - Year 8

Beheaded (A Creative Writing Competition Entry)

The crowd gathered around the small wooden stage, bearing a guillotine and a man with a hooded cloak. As Anne walked up the stairs where death awaited her, she pleaded and pleaded her innocence but it was too late for her now - her fate was sealed, and there was no getting out of it. I knew there was nothing I could do to stop this from happening, nor could anyone else in the crowd - so we might as well watch. The rain poured down, despite it already being May. Her neck was forced upon the guillotine, as she pleaded her innocence over and over. I looked around me to see what others were doing - some looked happy to see Anne get beheaded, after all, she had been accused of high treason. Others did not look as happy, presumably because this is the second time Henry had moved on from his wife, and couldn't be at the beheading because he was with Jane Seymore. The crowd went silent as the executioner raised his axe in the air, the raindrops dripping off of it onto Anne's quivering back, as he swung the axe, and with one cut, Anne had been Beheaded.

Anya S - Year 7

A Creative Writing Competition Entry

One chance. That's all I get.

My heart races, what could this feeling be? My eyes sink to the floor. Wishing they hadn't. One chance. One chance Two words constantly echoing around my head. I need someone, anyone. Where are they? Please help. I feel like I can't see reality anymore. Is this even real? One chance. One chance. Help. My legs buckle underneath me. I fall to the floor. Tears pouring out of my darkened eyes. I sink to my knees. What has become of me? One chance. Nobody will think twice about what happened to poor Alica Hart.