Innovation & Technology

Endless clichés have been used to refer to 2020. Despite the challenges of the pandemic, the IT Department was able to function effectively as a team player overcoming all the obstacles faced during the year. Teaching and learning have been vastly different to what we are used to. We have always known that we are preparing our students for jobs that have not been created and that workplace land space will be radically transformed. We would never have thought that our educational system had to undergo radical change overnight.

With COVID-19, we had to rapidly change the basic way to do our work mainly in Kindergarten and Lower Primary. It disrupted our lives and forced our students to open their laptops and learn from home. The school setting had to be recreated using synchronous tools such as Zoom and Google Meet. A huge investment has been made in upgrading our school computers and infrastructure to offer online education.

New learning paradigms were implemented at each educational level and teachers received constant training in the use of new technologies. We continued to focus on the Immersive Reader Project that was implemented for students with dyslexia in Primary and Secondary school.

We know that in Kindergarten children need to play, and they require a constant variety of social activities. There was no blueprint on how to start teaching/learning online in Kindergarten. We knew that this meant that we had to support not only our little ones, but also parents. Staff, especially teachers, and IT had to manage parent expectations of what an online school would be like for 2-to-5-year-olds.

The main synchronous tool to support remote teaching and learning was Zoom. The IT team provided constant support and professional development for Kindergarten staff to teach online and used several online tools for teaching: Genially, Google Slides, Canva, Wheel of Names, Bookcreator, Wordwall. All the online tools chosen were in line with the school safety policy.

To unlock creativity and reflection, Seesaw Activities were introduced to cater for students' individual needs, differentiate, and build on progress. Teachers were able to schedule Seesaw activities, and foster family engagement.
Workshop teachers and the IT team managed to successfully reinvent the Robotics and Programming workshops to be given online. They learnt about Computational Thinking through unplugged activities such as pattern recognition, Decomposition, Sequences and Algorithm thinking. They also explored augmented reality apps such as Quiver and Google and explored the Stopmotion technique using mobile devices and tablets.

In Primary we had to think outside the box! When going virtual, Y1, 2 and 3 students had to acquire the necessary skills to be able to use the tools to fulfil their activities in Seesaw. Up to then, Seesaw had been used mainly as a portfolio in the classroom

Digital Citizenship was reinforced throughout the Primary school based on different programs such as "Be Internet Awesome" and "Common Sense Organization".

There have been innumerable series of constant challenges and changes throughout 2020 and we have successfully introduced big milestones and generated new learning opportunities not only for our students but also for SASS staff.

In Secondary the IT team focused on assisting the school to go virtual and also implemented several projects. In changing times, a flexible IT curriculum was implemented.

In Y7 students started programming using Blockly and Minecraft for Coding. Y8 students worked with spreadsheets and combined their learning with video and audio software. We continued to enhance the curricula with HTML and CSS coding in Y9. Students created different websites to put all their knowledge into practice.
In Y10 the Entrepreneurial Economics Project continued virtually with the Business and Economics Department. In 2020 the goal was to design a product aimed at entertaining people, and the IT department helped our students with the statistical analysis of the results of the surveys using Excel, and guidance on how to produce prototypes and digital marketing. They also created apps with Android apps and used 3D software.

Y12 students focused their learning on sitting for the IB exams.

The IT department helped students in the In the Sea of Learning to design their ideal school using Google Sketchup.

We want to highlight some of our favourite moments from 2020 that show the spirit of our IT department focusing on inspiring creative and critical thinkers in the use of technology.

Our mission as an IT Team is to have the potential to transform and improve our curriculum so students can achieve more and develop valuable skills with better outcomes.

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and it turned into the main source of communication with their teachers. I Ready was used for Maths and Reading as an online adaptive platform offering personalised instruction according to the students' needs. As another reading input, Y1 and Y2 students had access to Bug Club, which was also new to them.

Learning on Zoom was also a great challenge: sharing screens, using the chat, muting themselves, pinning the speaker's video and joining Breakout Rooms. Y4 students had a bigger challenge as they were just beginning to learn how to use their email account when the lockdown started. Their independent use of technology was just beginning. They had to incorporate the use of Google Classroom and other Google apps through tutorials recorded by the teachers. Acquiring these skills in a virtual environment demanded a great effort for them, and we would like to stress their commitment to overcome these hurdles.

Y4, 5 and 6 students learnt to design and create stop motion videos, intervene images with different effects, design images using different shapes in Google Drawings, and produce storytelling videos using Spark Adobe. They also learnt to use other tools to show their learning as a final product in different projects by creating interactive presentations with Genially and Canva. Virtual Coding Club took place as well, where students continued practising their coding skills with Code.org and Scratch. This was also an enriching experience for many of them, as it was coding on a screen, not seeing the result of their code in a robot.