BE3D EDEE CASE STUDY

MLC CASE STUDY

3D printing enhances innovative learning at Methodist Ladies' College.

CUSTOMER PROFILE

Methodist Ladies' College is one of Australia's leading independent girls' schools, internationally renowned for its extensive curriculum choice, cutting edge approach to education, varied learning experiences, and outstanding academic and co-curricular results. With more than 138 years' experience in educating girls to be well-informed world citizens, the College continues to challenge and innovate as an educational leader.

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THE CHALLENGE

A part of the vision at MLC is to lead by engaging with new technology and incorporating innovation into learning. The College had previously introduced 3D printing machines to give students access to innovative technology. However, the requirement that a trained operator be present when the machines were in use meant the printers had to be installed in non-classroom areas such as the library and Art House. This had some effect on student engagement with the technology as they were required to book in a time to print when a supervisor could be present as a safety precaution. The small number of 3D printers was also unable to support larger class-sized projects.



THE SOLUTION

MLC began to trial the YSoft be3D eDee 3D printing solution, which is designed specifically for schools' unique requirements. The eDee 3D printer is a smaller, compact machine that is easy to use, fast at printing, and uses safe materials that are free from harmful chemicals. With a comprehensive service offering, any problems are taken care of by trained technicians who can be on site next day.

Students can print safely as it features a lockable printing chamber when in use, meaning students no longer require supervision and can access the machine more freely.

James Berry, Corporate Services Director, MLC, said, "Student safety is a priority for MLC and so is providing innovative technology to benefit students' learning outcomes. YSoft be3D eDee delivers on both of these fronts. Being able to have it in a collaborative space in the school is also contributing to the more frequent use of the machines and the incorporation of 3D in the classroom."

MLC installed a bank of five be3D eDee printers in the school after the trial was complete, and these are becoming increasingly popular among teachers and students in a variety of disciplines.





Using 3D printing gives students the ability to visualize and see a physical model of their creation. It lets students problem solve and start thinking about innovative ideas of the future. Having access to this technology and the YSoft eDee 3D printers has certainly enhanced the quality of innovative education MLC provides students.

Simon Corkeron

Learning Technology Consultant, MLC



CUSTOMER BENEFITS

The size and mobility of the be3D eDee machines meant they could be placed in a collaborative, engaging location, which students and teachers could easily access. Because the college was already using Y Soft print management technology, this meant that students could easily upload their designs into the 3D printing queue, and access their job when at the printer by scanning their existing ID card. It also means that the 2D and 3D fleet can be managed using the same print management software.

Now that the printers are easier to access and use, 3D printing has captured the attention of many more students across various disciplines who are finding creative ways of using it in their projects. One student designed and printed a 3D model of a castle in England, based off satellite images, as a part of her history assignment.

Simon Corkeron, Learning Technology Consultant, MLC, said, "3D printing has certainly brought out the creative side in both students and teachers. Students are coming up with ways to use 3D printing or adding it into projects that we never thought possible."

Teachers are also finding their own creative ways of incorporating 3D printing into classroom activities.

One subject saw students use 3D printing to make mini robots. A digital fashion class saw students print 3D jewellery, which they then fitted with electronic gadgets. Elective classes, such as robotics and prosthetics, also used 3D printing to foster an environment where students could consider solutions for real-life situations, such as designing and constructing a prosthetic arm.

An upcoming project in Year 9 science will focus on the nervous system and the effects of different diseases. Students will research a disease and create a device or solution, using 3D printing, which will assist people living with the illness.

One of the largest 3D projects the College has undertaken so far involved a cohort of Year 7 students who, working in teams, were tasked with building a mini city. The students came up with the ideas and design of the city, and used the YSoft be3D eDee printers to help bring the cities to life.

Simon Corkeron said, "Using 3D printing gives students the ability to visualize and see a physical model of their creation. It lets students problem solve and start thinking about innovative ideas of the future. Having access to this technology and the YSoft be3D eDee printers has certainly enhanced the quality of innovative education MLC provides." Student safety is a priority for MLC and so is providing innovative technology to benefit students' learning outcomes. YSoft be3D eDee delivers on both of these fronts.

James Berry

Corporate Services Director, MLC