



KONICA MINOLTA

Customer Success Story

Konica Minolta 3D printing solution gives Marist College Ashgrove students an education in innovation



Challenge

- Deliver innovative STEM curriculum
- Reliable 3D Printing technology and Service support



Client benefits

- Reliable and cost-effective production of full colour functional 3D prototypes in Industrial Design Subject
- Transform teaching and learning by giving students access to professional-level, cutting edge technology
- Prepare students for real-world applications and teach them how to innovate using design thinking principles
- Differentiate the school based on its approach to teaching STEM subjects using technology like 3D printing



Solution

- Project 660 Full Colour 3D printer
- Cost-effective high resolution 3D parts
- Rapid Service Support, Installation and Flexible Financing

Industry: Education

Location: Queensland

Marist College Ashgrove (MCA) is a Catholic boys' school for years 5 to 12 located in Brisbane, Queensland. Founded in 1940, the school has more than 1,600 students, including 180 boarders. The College offers both OP and VET subjects, preparing boys for a broad range of post-school paths.

MCA students are encouraged to demonstrate good scholarship, a love of learning, independence in thought and action, and the readiness to take responsibility for their own formation.



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“Konica Minolta has been very helpful in getting this project off the ground. The team was knowledgeable about how to set up and use the printer for the best educational outcomes.”

Andrew Devoy, Marist College Ashgrove



The challenge

With the growing importance of science, technology, engineering, and mathematics (STEM) subjects, Marist College Ashgrove (MCA) needed to review its 3D printing capabilities. Having had 3D printers for the best part of a decade, the College was committed to preparing its students for real-world applications such as industrial design.

Furthermore, the impending adoption of a new curriculum meant tech studies and senior graphics were being merged into a single subject. For the College to maintain strong educational outcomes and be competitive, it needed to ensure it could offer students the latest in colour 3D printing.

Marist College Ashgrove's ITD Coordinator and Senior Supervisor, Andrew Devoy, said, "In the old days students would be lucky to access a laser printer. Today, it's essential for them to be able to see and use technology. Australia is a design-focused country because our manufacturing industry can't compete on cost, so we need students to be well-prepared for ongoing innovation and change."

Without a robust and reliable professional-level 3D printer that produces high resolution full colour parts, MCA wouldn't have been able to offer a rich, experience-led program for students, and bring to life innovation principles such as design thinking.



The solution

After investigating options, MCA chose the ProJet 660 3D printer as it ticked the College's boxes; a fast, productive, high-quality printer that lets students and teachers provide vibrant 3D parts at a low cost.

Andrew Devoy said, "Cost was a main factor as this was a big leap of faith. We didn't know how successful it would be but now it's clear we are only just scratching the surface. Konica Minolta's excellent service levels have given the College confidence that we can get the help we need whenever we need it to ensure the 3D printer is performing to the highest level."

"Konica Minolta provided some instructions to begin with and then followed up with materials that we could print out and display near the printer so everyone knew they were using it properly."

"Importantly, the Konica Minolta printer supports the College's BYOD approach, where we use a mix of Macs, PCs, iPads and software including Autodesk Fusion."

The ProJet 660 deliver reliable production of full CMYK integrated colour parts at a resolution up to 600 x 540 dpi. Highly productive runs of nested models can be achieved in the large 281 x 381 x 203 mm build chamber at a verticle build rate of 28mm/hr. The intuitive 3D System Sprint print further extends productivity with easy to prepare, evaluate, alter and submit 3D CAD data that minimises print failure.



Client benefits

MCA kicked off its use of the Konica Minolta ProJet 660 3D printer by tasking Year 9 students with creating a branded memory stick to be used by students across the College. The students designed variations of the memory stick and were able to have their visions realised via the 3D printer.

Andrew Devoy said, "The students were excited to be able to take their projects home and show their families. Being able to print their visions in full-colour 3D has brought the project to life for the students. This is the next generation of manufacturers, designers, and engineers, so we're giving them the best possible start. It lets teachers deliver information in a new way, transforming learning outcomes. This more than adequately bridges the gap between secondary and tertiary education."

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"Being able to lease the machine over five years rather than buy it has also been instrumental in going ahead, since it reduced the costs and the risks. As everyone gets more experienced with the technology, the sky is the limit in terms of what we can produce and how we can apply it to different subjects. The art department is already showing interest in using the technology."

Contact us for more information:

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Giving Shape to Ideas