Six Reasons Mcor 3D Printers are the Best Choice for Education

mcor technologies

unfettered innovation™

Introduction

Educating students of any age and in any discipline, you know you can use 3D printing as a core part of your curriculum to excite your students, enrich their learning and encourage their advancement.

Yet, you have a dizzying array of 3D printers and technologies from which to choose. It's tempting to immediately gravitate to the 3D printers you hear a lot about in the media. And the low initial purchase prices of plastic-based hobby-grade 3D printers certainly make them interesting.

However, as an educator, you aim to make professional-quality 3D printing technology fully accessible to your students, easy to use and maintain, and safe and affordable for the school and your students on an ongoing basis.

Consider the six reasons why Mcor 3D printers are a better choice than hobby-class plastic-based 3D printers for use in educational institutions

1   Mcor 3D printers have a lower operating cost

Archeology model 18.6in3 (304cm3) in size 3D printed from paper in full colour on an Mcor IRIS 3D printer and cost just $13.06 (€10.05).

Mcor 3D printers use ordinary letter and A4 copy paper, the kind you already keep well-stocked in your supply cabinet, so the cost-per-model is 10%-20% of other technologies and the ongoing cost is one-fifth of any other 3D printing technology.

Mcor's lower operating costs mean more students can 3D print more models more often. That results in better

prepared students who can include numerous 3D printed models in their portfolios. Even if your students need to print hundreds of models, it's affordable to do so with Mcor 3D printers, while the cost is prohibitive with most other machines.

2   Mcor 3D printers are safer and more eco-friendly

Mcor 3D printers use regular paper, water-based adhesive and water-based ink. So Mcor 3D printers are perfectly safe for students to use daily in their classrooms.

There are no chemicals, odours, toxic air born particles, special disposal facilities or sharp cutting tools in the Mcor 3D printing process. And there are no toxic fumes emitted from melting plastics, a topic that has gained considerable media attention.

In contrast to other printers' plastic material, Mcor 3D printers use regular paper, water-based adhesive and water-based ink. So Mcor 3D printers are perfectly safe for students to use daily in their classrooms.

Mcor's process and materials are also green and eco-friendly; the paper, glue and ink can all be fully recycled; even the 3D printed models themselves can be fully recycled. So not only is the process safer than 3D printers that require plastic, using Mcor technology teaches students a powerful hands-on lesson about environmental responsibility.

3 Mcor 3D printers are easier to use and maintain

Students quickly and easily peel the supporting paper away from the part. This can be accomplished with bare hands and ordinary tweezers; no need for chemicals. The Mcor model emerges from the 3D printer as a tough, durable model; no need for infiltration.

This enables students and teachers to focus on generating ideas and improving designs. It takes students only minutes to remove a model from the surrounding paper after printing simply with their bare hands and a pair of tweezers. And, Mcor 3D printed models require no post-processing after printing. Students can handle them straight out of the machine immediately after printing.

In addition, Mcor 3D printers are highly reliable. So your students can spend more time designing and 3D printing with Mcor 3D printers vs. spending a lot of course time tinkering with hobby 3D printers in order to keep them running.

4 Mcor 3D Printers are professional-class

Mcor models are cut to a precision of 0.0004in (0.012mm) and a dimensional accuracy of 0.004in (0.1mm).

Mcor's professional-class 3D printer resolution is 12μ, 12μ, 100μ (0.0004 in, 0.0004 in, 0.004 in), which means your students can produce realistic models with fine detail, hollows and moving parts. Mcor enables your students to make the kind of models they need to include in their portfolios, prepare for careers and advanced educational programs.

5 Mcor 3D printers print in *True*, accurate, realistic colour

Realistic figurine 3D printed on an Mcor IRIS.

Only Mcor 3D printers provide over 1 million colours (CYMK – 4 cartridges including black) and 5760 x 1440 x 508 dpi

colour resolution. And the Mcor IRIS is the only 3D printer to include the global standard ICC (International Colour Consortium) colour map for unprecedented colour accuracy.

True colour 3D printing capability enhances communication and understanding and increases student excitement and involvement in learning about the subject matter, especially when students can personalise their projects. For example, imagine your students 3D printing their own faces on a mobile phone design assignment. They can do that with an Mcor 3D printer, but not with a hobby-class 3D printer.

Ink is designed for paper and Mcor's patented ink penetrates through the paper, resulting in high colour fidelity and realistic models in any colour anytime. It's the colour you expect from your 2D printer, but with Mcor, you get it in 3D.

6 Mcor 3D printers are ideal for every department

Since they print in True colour, Mcor 3D printers can be used by students in various departments, from product design and engineering to architecture, medicine and fine arts.

"Mcor 3D printing technologies are helping us engage these students early in a meaningful way so they can go on to create their own opportunities – and make the most of them."
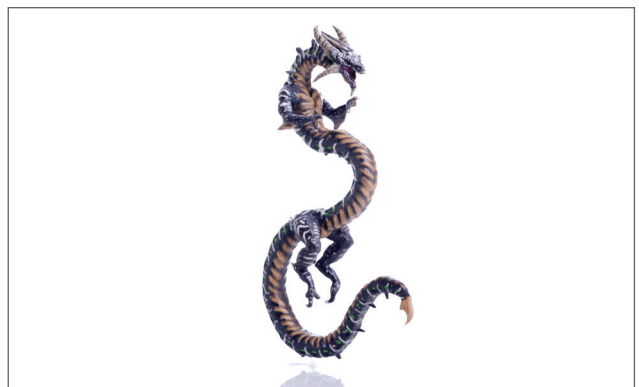
- Adam Truncale, Lee High School
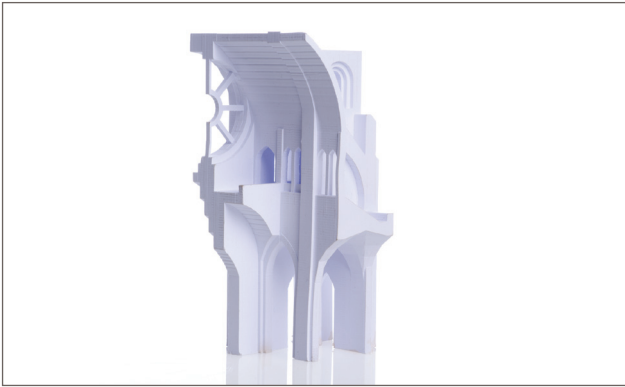

Engineering and Mechanical Design

Tooling

Medicine

Fine Arts

Architecture

Geospatial

"We haven't come across anything it can't do. Educators evaluating a machine on a material-cost-per-printed-part basis will see the Mcor 3D printer is very cost-effective, just as we did. Add in the green factor and it's a no-brainer."

- Tom Danielsen, Vincennes University

About Mcor Technologies Ltd

Mcor Technologies Ltd is an innovative manufacturer of the world's most affordable, full-colour and eco-friendly 3D printers. They are the only 3D printers to use ordinary business A4 and letter paper as the build material, a choice that renders durable, stable and tactile models. Established in 2004 with a talented team of specialists in the area of 3D printing, software and CAD/CAM, Mcor's vision is to make 3D printing more accessible to everyone. The company operates internationally from offices in Ireland, the UK and the US.

www.mcortechnologies.com.