Technology a class act

Revolution in distance learning

GONE are the days of only sending schoolwork and assignments in the mail to distance learning students. While internet access has revolutionised the world as a whole, distance education in remote areas has forever changed thanks to changes in communication between remote students and their teachers.

Students at the Katherine School of the Air now have access to learning with their teachers and peers in real time, in their interactive classes, which have been enhanced through the introduction of green screen technology. All this is possible as the families are provided with hardware and software including satellites, routers and laptops if needed.

“We use satellite technology and a software package developed in the NT that allows two-way audio and video between the students and with their teachers,” principal Jen Coulia said.

“Green screen gives us the capacity to bring the real world perspective into the classroom through the use of mobile devices and other technologies,” senior teacher Kate Francis said.

“The opportunity for students to collaborate using technologies enhances the students’ engagement in learning, and green screen technology is the newest tool we use. For example, students in the Middle Years learning about ancient Egypt have taken a virtual tour around the pyramids using green screen capabilities.”

Assignments and students’ work can be sent through online applications and the interactive online Moodle program used at the school.

“The potential now is that we have the capability to support students to learn anywhere, anytime ... students aren’t as isolated any more and they have the opportunity to learn and do all the things students in Darwin schools can do,” Ms Coulia said.

“For students who are disengaged or can’t attend conventional schools, this is an option to be successful and to find future pathways.”

But for all the technology that is making a difference to learning, both Ms Coulia and Ms Francis said any face-to-face interaction was still an essential aspect of building relationships.

“We have whole school events that are divided between both primary and middle years,” Ms Coulia said.

“Students can attend camps at Batchelor Outdoor Education facility, Instschool week in Katherine learning in a conventional classroom environment, VET Residential in Darwin and swim school at the end of the year with a concert and awards evening.”

“Being face to face enhances the relationships between students and with their teachers, to continue connections when they go home.”

Crafty lessons a cut above

THE rapid advancements in CAD and 3D printers are making an impact on the learning of Darwin High School students.

They have moved from producing 3D plans through a milling machine to using the school’s two 3D printers with organic and plastic filaments.

“The way these printers actually make models is like squeezing out toothpaste from a tube,” design and technology teacher Peter Coulter said.

“This wasn’t possible so many years ago but it’s quite defining now, and it’s just the tip of the iceberg.”

Darwin High School has also used the technology to integrate classes for the benefit of assessment.

“We send computer-based classes to websites to pick designs, then design classes to come up with the model and print it,” Mr Coulter said.

“They’re now creating something with great detail, with exact precision.”

A bracelet would take about 15 minutes to make, while a complex motor would take a number of hours.

Students first learned how to make items using the model of a shaver, first constructing the head and then the body before connecting them.

Ryan Riedel, 16, said the printers had made his work as a student a lot easier.

“It enables us to make things that otherwise you would be building with your own hands for hours – things that only quite skilled people can do,” he said.

Ryan enjoyed using the printer to make unique items as part of his school assignments.

“I’ve made a mount and frames for GoPro sports cameras,” he said. “Inventing things is a lot easier as well, printing something out you can see it in action straight away.”

Chatterbox with Nakara Primary School: What’s the best thing about having technology in class?

To use it for research purposes and type up assignments. It’s an available resource.

It makes life easier - most people are faster at typing than writing.

Having computers and iPads is good because they have lots of programs.

You can learn while having fun - it’s a fun way of doing things.

You can use computers easier than reading through a whole book.