



Photo by Solana Cain

Resident clinic cat, Roger, spends his days pestering two zebra finches who also live at Bay Regional Veterinary Hospital. A study published last month in the U.S., says cats are responsible for killing close to 20 billion mammals each year.

## 'Cute and cuddly' natural born killers

By Solana Cain

Roger ducks behind a bookshelf, waiting for the twins to settle down. He listens to their squawking until finally a hush falls between them. Now is his chance.

He darts from behind the bookshelf, races across the room, jumps on the table and before either twin knows it, he's on top of them.

They screech and retreat. Roger trots back and lies once again behind the bookshelf. He'll do this all morning – hide, stalk, pounce.

Don't blame him though, it's in his nature. After all, Roger's only an orange tabby cat

A study published last month in the journal *Nature Communications*, estimates that cats kill in between 1.4 – 3.7

billion birds and 6.9 - 20.7 billion mammals a year in the United States.

Scientists credited both domestic cats, that spend part of the day outside, and stray and feral cats in the U.S. for kill rates that are "shockingly high", according to a news story published in the *Toronto Star*. The study positions cats as the leading human-linked cause of death for birds and smaller mammals.

Inside Belleville's Bay Regional Veterinary Hospital, Roger welcomes clients by jumping on their lap and rubbing against their leg. He lives at the clinic along with two identical zebra finches.

"Roger likes to try and knock over the bird cage," said Dr. Linda Hack.

Unsurprised by the results of the study, Hack says people often forget that cats are hunters because they're

"cute and cuddly". She says it's in Roger's nature to pounce on the caged birds in her clinic.

"Cats are hunters," says Hack. "In one day, a cat could eat eight to 10 mice."

Free-ranging domestic cats have contributed to multiple wildlife extinctions, according to the study, however, stray and feral cats cause the majority of this mortality.

"Songbirds' population have been directly affected by cats," said Nathalie Karvonen, executive director of Toronto Wildlife Centre.

Outdoor cats are responsible for millions of songbird deaths in North America each year. Currently, songbird populations are in decline throughout the country, said Karvonen

"I don't see why there should be dif-

ferent laws for dogs and cats," said Karvonen about owners that let their cats outside to roam free.

"I have a cat," she said, "I love cats but it's about responsible pet ownership."

According to Keep Animals Safe campaign created by Toronto Wildlife Centre and the Canadian Cats Indoors Alliance, cats have retained their instinct to hunt even with the influence of domestication.

Cats are a non-native species to North America as they are the descendants of the African wildcat and predation is inherent to their species, says Karvonen.

There are millions of outdoor cats in North America alone – not including strays and ferals – and when even well-fed cats hunt, the loss of wild animals such as mice, rabbits, birds, and squirrels

is vast.

In Belleville, there is a bylaw that states cats must be kept indoors or in a secure yard on your property.

Sheila Doyle, of Belleville, recently had one of her cats run off. She still has Yodie, a 22 pound white cat that "lives to eat."

Doyle never lets him outside, "he's probably bored but I'd rather him be safe than me picking him up off the side of the road," she says.

She also fears coyotes will attack her furry friend.

Doyle has decided to get another cat to keep Yodie company, she's at the Quinte Humane Society. Particularly smitten by one older black cat, Doyle gently scratches behind the cat's ear and coos, "I think you'd be a sweetie."

## Technology plays important role in school setting

By Justin Tang

There's nothing out of the ordinary when you first walk into Maureen Sheridan's first-year graphic design class.

Students sit casually, arranged in three rows that face a chalkboard. Three bell peppers—orange, red and green—sit upon a square sheet of tin foil at the front of the class, waiting to be copied, illustrated and interpreted. Sheridan lets the class doodle before they get to work.

But there is something different. Among the pencil crayons, sketchbooks and coffee tumblers, there's a new tool that's helping the creative buzz in the room. It's the iPad and it's changing the way students work and interact in the classroom.

"It's just a little gadget but it puts so much power into the hands of the students," said Lisa De Angelis, coordinator and professor at the brand new Loyalist College program.

Each student purchased an iPad as part of the program's consumables fee. De Angelis said there were no complaints about the \$710 total that included charcoal, paper, colour pencils and an iPad.

"It's the Christmas tree effect," she said, recalling the day the students opened their packages. "It's like a present. They loved it because it was something new [and then] they found out how many practical applications there are."

The mix between hands on and technology is an apt analogy of the program itself.

"You never lose the importance of paper, pencil and brain," De Angelis said. She points to her head. "This comes first, always. Then you move it to the iPad or computer."

De Angelis gives an example. Students had five minutes to research a cereal brand and another 25 minutes to sketch an equal number of mascots for each brand. Even through a simple project like



Photo by Justin Tang

Loyalist graphic design student Chelsea Mannik, left, gets advice from Professor Maureen Sheridan as she photographs the peppers she will later sketch. The graphic design program, in its first year, included an iPad in its consumables fee and makes intensive use of the device in its curriculum.

this, the iPad shines.

"We're way more connected. We're doing stuff together more. I can speak, they can listen, they can research, they can draw."

De Angelis said she believes the iPads will have an impact on her students' success.

"Graphic design is as much about research and creativity," she says. "I believe they have become better designers because their research is more sound."

The iPad has also been a hit with high school students, perhaps no more so than in Kyle Pearce's ninth grade math class at Tecumseh Vista Academy in Tecumseh, Ont.

Pearce was awarded a Teacher Learning and Leadership Program grant through the Ontario Ministry of Education in 2011 that helped fund a 1:1 iPad

classroom.

A cart of 30 iPad 2s greets each of Pearce's 160 Grade 9 students when they come into class. The group is divided so each student has a device in hand during class.

The key to Pearce's approach has been the daily use of the devices—and it's changed the classroom's dynamic for the better, he said.

"I'm walking around and I'm working with different table groups. I'm not stuck at the front in a traditional style," he said.

The proliferation of technology also has added benefits. Pearce uses digital files to cut down on paper and copying. The students are able to mark up the files and save them on a digital drop box. Apps like Dragonbox, a math-based game, help entrench learning through an addictive and fun game.

"We're cutting the hassles out of learning," Pearce said. "Any student can write notes but it's not engaging." With the iPads, the content is available and user friendly.

Pearce is able to beam a student's iPad screen up onto a projector through Wi-Fi

and an Apple TV.

"We're letting the students lead the lesson," he said. "They can explain their thinking with the rest of the class. In the same amount of time it would take one student to write on the board, I can look at five or six ways of how they solved the problem."

The iPads have been part of a pedagogical shift: a drive to move away from copying approaches and simple note taking and instead, using logic to find multiple ways to problem solve. Pearce believes students are coming out stronger.

In the first year of the 1:1 program's existence, every Tecumseh Vista student except for one achieved his or her Grade Nine credit. Pearce's students, in both applied and academic

streams, achieved significantly higher results in Education Quality and Accountability Office (EQAO) standardized testing than the provincial average.

"Is it all attributed to the iPads? Probably not," Pearce said, "but the style of learning and teaching is probably associated. It indicates that we're on the right path."

There has been a cost—the first set of 30 iPads cost around \$20,000—but Pearce argues that the iPads present a major cost saving in the long term.

"It's more bang for your buck," Pearce said, pointing out that traditional costs are considerable.

"Textbooks cost close to \$100 each, but the iPad essentially replaces them, clicker devices, graphic calculators and paper."

The iPads have found traction in the Hastings Prince Edward District School Board as well. Communications officer Kerry Donnell said the majority of the district's 42 elementary schools and eight secondary schools are using some level of

"iDevice" integration.

"We've seen a great growth in educators wanting to use the technology in their classes," Donnell said.

The introduction of iPad and iPods is part of an evolution of classroom technology, from fixed computer labs of old to more modern carts of laptops, nicknamed "computers-on-wheels" (COWs).

"Now we have schools requesting iPads in addition to COWs, and we're seeing tremendous use of iDevices as teaching and collaborative devices in the classroom," Donnell said, noting that the costs are included in the school board's technology budget.

The school board has been conducting an iDevices pilot project this year, pairing students identified with autism spectrum disorders with iPads. The pilot project uses an app called Proloquo2Go that helps with social learning.

"We have found that students with special needs respond very well to working with iDevices," Donnell said.

The devices have changed the way modern classrooms function. Pearce can't imagine going back to an iPad-less world. It's the visitors to his class that remind him how much technology has advanced his class.

"People are amazed at how on task we are and how much content we can get through. If we were to take the iPads out, we would get through half as much content and have less students involved," Pearce said.

De Angelis calls the advantage the iPad brings a "no brainer."

"If most profs sat down and connected the dots, they'd see a clear correlation to its usefulness in teaching and having fun in the classroom. It's like we're more engaged because we have this."

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Teacher Kyle Pearce