Girl describes shark attack
By K.j. Williams
The Daily Reflector
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Six-year-old Lucy Mangum calls it her “first shark bite.” Her father calls it “a miracle story.”

Lucy was attacked in shallow water off Ocracoke Island on July 19 and transported by an EastCare helicopter to Pitt County Memorial Hospital. Since then she's been as busy with the attention the attack has attracted as she has recovering.

The Durham girl took part in a “Today Show” filming Tuesday with her parents, followed by a news conference at PCMH.

Still in a wheelchair due to the injury to her right leg and foot, Lucy will be able to walk after more treatment, said her surgeon, Dr. Richard Zeri, chief of plastic and reconstructive surgery at East Carolina University's Brody School of Medicine.

“I expect her to recover fully, and she'll certainly need some (physical) therapy,” he said. “She certainly has a significant injury.”

Lucy said she spotted the shark as she was playing with a body board with her sister. “I tried to swim away,” she said.

But she couldn't escape. Still, Lucy isn't holding a grudge. “He really didn't mean to do it,” she said.

The attack occurred in water about 1 1/2 feet deep. It was the first reported in the area since 2001, according to a National Park Service news release.
Dr. Craig Mangum, an emergency room doctor with WakeMed Health and Hospitals, was nearby, but it was his wife, Jordan, who had no medical training, who first reached their daughter after a shark measuring 4-5 feet in length bit Lucy twice and swam away.

“I heard her scream and immediately turned and saw the shark,” Jordan Mangum said. She held together the wide-open wounds on her daughter's lower leg and foot and got her out of the water. Then, Lucy's parents wrapped her leg in a T-shirt and called 911. They rushed her from the beach, and she was airlifted to PCMH, the closest trauma center.

Lucy asked her mother if she was going to die, and her mother reassured her that she would be OK. Then, Lucy told her mother that they should pray. “Her faith and stoicism was just amazing to us,” Jordan Mangum said.

Lucy's father said he's proud of how well Lucy has coped. “She's a strong little spirit, and this kind of proves that,” he said. “We feel like Lucy's story is a miracle story.”

He said they're now aware of the danger of shark attacks, and won't allow their four young children in the water after 5:30 p.m., knowing now that sharks come closer to shore to feed at that time. But with the proper precautions, the family will return to the island, and with time he expects Lucy will swim in those same waters again.

“We'll be at the beach. There's no reason whatsoever not to swim in the beautiful water off North Carolina,” Jordan Magnum said.

The Mangums thanked the medical workers for the care they provided for their daughter. And Craig Mangum said well-wishers had “buoyed us up as a family. ... We're grateful she still has a leg to walk on.”

During the news conference, Lucy smiled and sometimes hid behind her father's hand, or sprawled across her parents' legs as they answered questions from the media. A stuffed dog, given to her by some nurses, was at her side.

The family also has appeared on the “Early Show” and on “Good Morning America.” The family typically spends time on the beach when Mangum moonlights at the Outer Banks Hospital in Nags Head.

The attack occurred south of ramp 72 on Ocracoke, part of the Cape Hatteras National Seashore. The last known shark attack in the area occurred Sept. 3, 2001, on an Avon Beach, according to the park service. A Russian couple was attacked as they swam to an offshore sandbar. The man died, and his girlfriend was seriously injured.

Another girl was injured in a shark attack in June at North Topsail Island. The 10-year-old Pennsylvania girl survived the attack, which also occurred in shallow water.
Frank Schwartz, a scientist at the Institute of Marine Sciences at Morehead City, said that while people should be careful, shark attacks are rare and are more a matter of being in the wrong place at the wrong time than anything else.

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Friends, faculty and fans greeted East Carolina University graduate and best-selling author Ron Clark as he came to Greenville on Tuesday to celebrate the release of his latest book.

Clark, 39, a Beaufort County native, spoke at Barnes & Noble, where he signed copies of “The End of Molasses Classes: Getting Our Kids Unstuck — 101 Extraordinary Solutions for Parents and Teachers.” Clark, who founded The Ron Clark Academy in 2007 in Atlanta, Ga., talked with Kim Grizzard of The Daily Reflector about his the program that shaped his career path, his passion for education and his plans for the future.

Q: Is running your own school what you thought it would be?

A: Oh my gosh! If I thought on a scale of one to 10 it was going to be a 10, it's a million. I never in my wildest dreams (knew). I have a new appreciation for administrators. I'm used to spending a lot of time uplifting my kids. I didn't know how hard it is when you have to uplift adults as well. It's a lot of work. All I want to do is teach all day, but I spend the majority of my time actually not planning lessons and not working with the kids, but fundraising. We have to raise about $3 million a year to not only educate our kids here at RCA but also to train 3,000 educators who visit from around the world. It's an expensive program. It's stressful, especially in these economic times. That's one of the reasons I decided to write the book because the proceeds of the book are going to fund scholarships and our educator training program. I put in the book that running this school is like playing Whac-A-Mole. As soon as I hit one, the next one pops and then next one pops. I'm constantly putting out fires and keeping everything together. Part of my problem is I'm a perfectionist. When you add up all the classrooms of children we've affected, it's over 10 million children that our school has affected around the world.
When you do something like that and you're a perfectionist, it'll kill you if you're not careful. I'm thankful that I have a wonderful staff. This is not a one-man job.

Q: Do you still love it?

A: I feel like I'm so driven for the purpose of getting funding for this school, educating students, educating visiting teachers, working with parents, I feel like sometimes I'm working like a machine. But I will say this, When I'm in the class and I'm teaching, I love it just as much as I did the first day. There's no experience like that. If I could only teach all day and if the school had the money it needed, I would be the happiest man in the world. But, unfortunately, you have to do what it takes sometimes to make a dream come true and right now it means the funding has to come, so it means that part is a necessity for now.

Q: I'm sure you are aware of the state's decision to begin phasing out the Teaching Fellows (scholarship) program. You attended ECU as a Teaching Fellow. How do you feel about this decision?

A: It's a travesty. I've had the opportunity to travel to every state in the country to talk about education. One of the proudest moments of my life is when I get to tell people I'm from North Carolina and I get to talk about the North Carolina Teaching Fellows program because people see that as one of the premiere programs in the entire country. It devastates me (to see it go). I pray that our legislators will find a way to put the Teaching Fellows program back in place. It's a program that helps us all because it helps our children. It puts the best and the brightest in each of our classrooms. Ending that program would be something that would be a detriment to us all.

Q: Would you have been a teacher if it hadn't been for Teaching Fellows?

A: No. I did not want to be a teacher, ever. The only reason I took the scholarship is because my mom and I sat at the kitchen table and we couldn't figure out how I was going to pay for college. That's why I decided to be a Teaching Fellow. Then I just loved it. That's the same case for many Teaching Fellows. They're extremely intelligent and they have all the options in the world. Then what happens is they get this scholarship and they go into the profession, and they find out they love it, too.

Q: What's next for you?

A: There's a factory beside the school. We wanted to buy that factory and convert that into an addition to the school for educator training. The problem was we couldn't afford it. The company that owned it was foreclosed upon. We found out that the CEO of BB&T is an ECU grad, so we reached out to him, and he said we'd love to work together to support a fellow Pirate, and they gave us the building for free.

We have educators who come from all over the country, about 3,000 a year to sit in our classrooms. We cannot meet the demand (for educator training) We book out for teachers that want to come here six months in advance. We can't take anymore. If we have 6,000
teachers a year come, that would double our revenue. We would be making $2 million a year. I would be in a much better place where I didn't have to feel like I was killing myself to have to fund raise so much. That's our goal right now.

For more information, visit www.ronclarkacademy.com or follow Ron Clark on Twitter: @ronclarkacademy
Lucy Mangum, 6, answers questions from her wheelchair during a news conference in Greenville.

Durham girl in good spirits after Ocracoke shark attack

BY JERRY ALLEGRO - Correspondent

GREENVILLE—Sitting in a wheelchair with a colorful bandage from her right knee to toe, 6-year-old Lucy Mangum expressed no fear or anger toward the shark that mangled her leg while she was swimming at Ocracoke last week.

"He didn't mean to do it," she said. "I tried to swim away."

But she also told her parents at one point, "I should have kicked him in the nose."

Lucy and her parents, Jordan and Craig Mangum of Durham, described the attack during a news conference at the East Carolina Heart Institute at Pitt Memorial Hospital, where the girl has been treated.

Joining the family were doctors who said Lucy and the Outer Banks beaches should recover from the incident that attracted national attention.
Lucy was at least the second girl bitten by a shark along the North Carolina coast this summer. A 10-year-old Pennsylvania girl was bitten on the leg at North Topsail Beach last month.

Such attacks are rare.

Nationwide, the U.S. averages fewer than 40 shark attacks a year, according to the International Shark Attack File, housed at the Florida Museum of Natural History.

Jordan Mangum said the family rode the ferry from Hatteras Island to Ocracoke Island to get to their favorite Ocracoke beach. They had been on the beach a couple of hours, with the children playing with boogie boards in shallow surf when Lucy screamed.

"I turned and immediately saw a shark, and it was shocking to me in itself," Jordan Mangum said, adding that her instinct was to run over to get her daughter out of the water.

She did not realize at first that Lucy had been bitten, but then she saw that the girl's right leg was "completely open" from calf to ankle.

Jordan Mangum cupped the wounds with her hand and called to her husband, who is an emergency physician.

Craig Mangum said he knew the wound was significant and would require more than one surgery.

While working with emergency personnel on the island, they called for the EastCare helicopter to transport Lucy to the hospital in Greenville, a regional trauma center. Craig Mangum said the helicopter ambulance arrived within 35 minutes and had Lucy at the hospital in another 35.

Jordan Mangum said she could see part of the shark and estimated it was four to five feet long.

Witnesses said it appeared to be a black tip shark.

The Mangums said Lucy was very aware of what was going on around her. Her father said she asked, "'Am I going to be in a wheelchair? Am I going to walk again? Am I going to die?' "

Jordan Mangum said Lucy was excited but not unduly frightened. She told medical staff, "This is the first time I've ever been bitten by a shark." Nor did the helicopter flight alarm her, except when it landed.

Her mother said she asked, "Who's driving this thing?"
Doctors said Lucy suffered extensive damage to muscle, ligaments and blood vessels but luckily avoided major nerve damage.

Dr. Richard Zeri, chief of plastic and reconstructive surgery at the East Carolina University medical school at Pitt Memorial, said the case was the first shark attack his staff had treated. He noted that they have treated hundreds of dog bites.

Zeri said his young patient was remarkably calm.

"I haven't seen a single tear she's shed," he said.

Lucy wiggled and scooted around in her wheelchair while the adults talked to reporters.

She clutched stuff animals, one of them a large blue dolphin.

At the prodding of reporters, she said she likes dolphins better than sharks.

Jordan Mangum made it clear the family had no intention of staying away.

"It's a good ending," she said. "She's going to be running and dancing and twirling just like before."

Shark attacks

Shark attacks are rare. Fatal shark attacks are even rarer.

• The chances of dying in the United States from a lightning strike is 30 times greater than that from a shark attack, according to the International Shark Attack File, housed at the Florida Museum of Natural History. Bees, wasps and snakes are responsible for far more fatalities each year.

• In North Carolina, there were five shark attacks in 2010, according to the ISAF. From 1935 to 2010, there were 41 confirmed shark attacks in North Carolina, with Onslow and Carteret counties seeing eight each.

• Only three fatal attacks have been recorded for North Carolina, including one in Onslow in 1935, one in Carteret in 1957 and one in Dare County in 2001.

Jerry Allegood
An ECU student athlete assaulted Monday morning was walking from Jones Hall and suffered minor injuries, but few details beyond that have been released as campus police continue to investigate.

The 17-year-old woman, whose identity has not been revealed by the police, was heading from the College Hill dorm to an early workout at nearby Minges Coliseum. She was physically assaulted by two unidentified men near the intersection of 14th and Berkley streets, ECU assistant police chief Dawn Tevepaugh said.

The incident occurred at 5:35 a.m., Tevepaugh said. The two men fled on foot, she said. It's unclear if the student was robbed and no description of her alleged attackers has been released.

The woman sustained minor injuries, according to the report filed by Officer D.C. Arnold. Information released Monday incorrectly indicated that the Greenville Police Department was investigating the incident.
The post office near East Carolina University is on a list for possible closure.

The U.S. Postal Service released a list of 3,700 post offices Tuesday that it will study as part of its effort to downsize its 32,000 retail locations across the country.

“The list is only those locations identified to be studied for discontinuance,” said spokeswoman Monica Robbs. “This does not automatically mean that they will close.”

Operations at the ECU Station post office, located on 10th Street, will continue as usual through the study. The postmaster there declined to comment on the study or give his name.

However, he did say the ECU Station is one of the busiest of the three Greenville locations in terms of foot traffic.

The station, which is separate from the internal campus mail system, is a full-service office with post office boxes, stamps and packaging. Built in 1963, it is the oldest post office location in Greenville.

About 20 offices are on the list in North Carolina. Offices were placed on the list for several reasons, according to Robbs, including revenue trends, expenditures and proximity to other locations. The feasibility study, which began Tuesday, will last up to 140 days, Robbs said. Later in the process, there will be time for public input.

“We're doing everything we can to make certain this will not impact our customers' use of post offices,” Robbs said. “This is our attempt to remain viable amid dire financial straits.”

As more customers choose to conduct their postal business online, on smart phones and at shopping destinations, the need for the USPS to maintain nearly all its retail offices — the largest retail network in the country — diminishes.

With more than 70,000 third-party retailers selling postage stamps and providing expanded access to other postal products and services, customers have about 100,000 locations in all.
“Today, more than 35 percent of the postal service's retail revenue comes from expanded access locations such as grocery stores, drug stores, office supply stores, retail chains, self-service kiosks, ATMs and usps.com, open 24/7,” said Postmaster General Patrick Donahoe. “Our customer's habits have made it clear that they no longer require a physical post office to conduct most of their postal business.”

“The Postal Service of the future will be smaller, leaner and more competitive and it will continue to drive commerce, serve communities and deliver value,” Donahoe added.

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July 31, 1961, I arrived in Greenville. Sunday marks 50 years here for me. Been quite a ride. The industrial park had just opened (read online the fantastic “Economic History of Pitt County 1690-2010,” with mind-blowing entries — try 1776, 1839, 1853, 1867, 1884, 1907, 1931, 1959, 1970, 1980 and 1995, though 1934 is regrettable). I've watched Greenville go from 22,000 to 85,000 folks, from ECC's 5,000 to ECU's 27,000 students.

Local schools prepared both my children for Ph.Ds. Other highlights: I represented ECU on national TV (1966). Based here I've known eminent people — Tinsley Yarbrough, Stanley Riggs, Raymond Smullyan, Manfred Kochen, William Whyburn, Jerome Hines; organized symposia on Vietnam and on science; been featured after cycling tours abroad and as a “humanitarian citizen;” been advised regularly by a peer writers group; and been enriched by bosses (Davis, Pignani), colleagues (John Davis, Price, Wirth, Saunders, Clyde, Whitley, Gross, Lowry, Adler, Watson, Steele ...), activists (Mulholland, Lofquist, Cavellini, Robinson, Rector, O'Neill, Sobel, Jerry Paul, Edith Webber, Kilcoyne), leaders (Dews, Garrett, Gaskins, Stasavich, Tennent, Byrd, Gray, Shank, Maxwell, Woolies, Ames, Alsentzer, Leech, Dunn, ...) and artists/musicians (Purrington, Hause, Stine, Donohue, Hamer, Wacker.).

Great people. We all owe both Jenkineses, Jack Edwards, Rudy Alexander, Aronson, Chaffee, Brody, Scales, Minges, Laupus, Schenck — plus the Whichards, Clark, Raynor,

We owe both industrialists (that above-mentioned piece) and union organizers. Shame on the Chamber of Commerce's boasting of union weakness here, but I have pride in Greenville's Horizons plan, which includes becoming an L.A.B “Bicycle-Friendly Community” helped by Friends of Greenville Greenways and L.A.B.-affiliated Velo Cycling Club.

With space I'd name thrice as many. I'll end with the greatest Greenvillian of all, Robert Lee Humber. Like some above, he's gone. Everyone should visit his grave in Cherry Hill Cemetery (west of post office, obelisk left of entrance) and read what's inscribed.

CARROLL WEBBER, JR..
Greenville
ACE: Dana Gray is off to a United States university on a tennis scholarship.
Photo / Stephen Parker

**Rotorua teen lands US tennis scholarship**
By Alison King

A United States university has served up a treat for former Western Heights High School head girl Dana Gray.

The 19-year-old is off to East Carolina University in North Carolina on a full four-year scholarship based on her tennis achievements. Dana has been a New Zealand age group champion, and will be a member of the university tennis team.

Her scholarship pays for her tuition fees, board, food and tennis costs.

"It's something I've always wanted to do," Dana said. "I want to see how good I can be. I'm going to be playing all the time and I've not had that opportunity in Rotorua."

"It's been good here but there's not that focused environment and I'm looking forward to that. They're trying to get everything out of you. It will be intense but I'm looking forward to it."

Dana leaves for the US on August 15. Her first year will be general studies and from there she can decide what she wants to major in.

She said she still hadn't decided what she would like to focus on and the first years would be an eye-opener as to what was available.
She took the first steps in May last year while in Year 13. She had to sit SAT tests, the US university entrance exams, and she went through a recruitment agency in Auckland to find a university that would be the best match.

She also had to make a video of herself playing tennis and upload it to YouTube to allow tennis scouts to watch her.

After weighing up her offers she chose East Carolina. The university is based in the city of Greenville, which has a population of 85,000. The university accounts for 25,000 of those.

"I'm getting nervous but I'm also really excited as I just don't know what to expect."
McDaniel returns to work with Pirates

By Nathan Summers
The Daily Reflector
Wednesday, July 27, 2011

Although times have changed in many ways since Emmanuel McDaniel was giving opposing quarterbacks and receivers fits as a defensive back at East Carolina, it's refreshing to know that some things haven't.

McDaniel, who led the Pirates in interceptions in 1993, '94 and '95, is back in purple and gold, and it appears his intensity and attention to detail are every bit what they used to be.

“I don't think anything has really changed,” said McDaniel, who went on from ECU to an eight-year career in the NFL, including stints with the Carolina Panthers, Indianapolis Colts, Miami Dolphins, New York Giants and Arizona Cardinals. “Hard work pays off.” With that approach, it's no wonder why head strength coach Jeff Connors recently hired McDaniel to help bolster his staff.

On Tuesday's final day of formal summer workouts, McDaniel and Connors patrolled both the weight room inside the Murphy Center and the Cliff Moore practice field as three sets of players went through their final reps of the offseason training period.

“Obviously, we've got a bigger facility to work out in now, which is nice, but as far as the training part of it goes, the hard work is eventually going to pay off,” McDaniel said. “I think the hopes of me, coach Connors and everybody is to try to make every sport here better. I'm trying to make track the best it can be, trying to make football the best it can be.”

McDaniel garnered extensive playing experience after ECU, including being on the starting roster as a nickel back when the Giants played the Baltimore Ravens in Super Bowl XXXV.
His winning mentality was undoubtedly sharpened at ECU under Connors and former head coach Steve Logan. The near obsession with winning the fourth quarter that defined the Pirates during Connors' initial decade-long stint with the program is something that McDaniel experienced first-hand.

Now, he's charged with helping to instill the same type of mentality and physicality into this year's edition of the Pirates.

“I just try to relay some of the stuff that we went through and where East Carolina came from, from back when I came here in '91,” said McDaniel, a Griffin, Ga., native who finished his collegiate career by winning the Liberty Bowl in '95. “I tell these players, ‘You guys are blessed. You've got a lot going for you. Take advantage of it.’”

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Colleges Join Plan for Faster Computer Networks

By JOHN MARKOFF

A coalition of 28 American universities is throwing its weight behind a plan to build ultra-high-speed computer networks — with Internet service several hundred times faster than what is now commercially available — in the communities surrounding the participating colleges.

The project, which is named GigU and will be announced on Wednesday, is meant to draw high-tech startups in fields like health care, energy and telecommunications to the areas near the universities, many of which are in the Midwest or outside of major cities. These zones would ideally function as hubs for building a new generation of faster computer networks, which could make the United States more competitive internationally.

For now the plan is a work in progress, with the universities reaching out to telecommunications companies for suggestions and to corporations and nonprofits for business ideas. The institutions involved include Arizona State University, Case Western Reserve University, Howard University, Duke University, the University of Michigan, the University of Washington and the University of Chicago.

"We’re not asking for government money," said Blair Levin, a fellow at the Aspen Institute who is heading the project. "We believe the right approach is to have the private sector fund the networks.”

By offering one-gigabit network connections — fast enough to download high-definition movies in less than a minute — not just to scientific researchers and engineers but to the homes and businesses that surround universities, the group aims to create a digital ecosystem that will attract new companies, ideas and educational models.

"It’s a sandbox for the research community and the residents, too,” said Lev Gonick, chief information officer at Case Western in Cleveland.

Last year, Case Western set up a pilot program in a several-block area near campus, he said. The Case Connected Zone offers one-gigabit fiber-optic networking to 104 homes adjacent to the university. Within three months of its birth, Mr. Gonick said, three startups moved to the neighborhood.
“We believe a small amount of investment can yield big returns for the American economy and our society,” he said.

The GigU members come mainly from the heartland — states like Indiana, Kentucky, Missouri, Montana and West Virginia — where they can potentially have a big impact on midsize communities across the country. The biggest universities already have access to higher-speed networks.

The colleges are preparing to talk to big telecommunications companies about ways to attract new ventures to their neighborhoods through super-fast computing. Then, they will seek out business proposals for building the networks, “not decades hence, but in the next several years,” the group said in a statement.

Although the United States pioneered computer networks from the 1960s through the ’90s, in recent years it has fallen behind other nations in deploying and improving network technology. A recent study by the World Economic Forum found that while the United States ranked fifth in overall network “readiness” — a broad index comparing countries in the digital era — it came in 30th in network bandwidth available to the population.

In 2010, before joining the Aspen Institute, a policy research group, Mr. Levin was the staff director of the Federal Communications Commission’s National Broadband Plan, which aims to make high-speed Internet service available throughout the United States. After leaving the agency and talking to researchers at universities around the country, he came to believe that the United States needed to find a strategy for continuously improving the quality of its Internet technology.

“It’s the difference between seeing it as a race-to-a-tape versus creating a constantly evolving ecosystem that is improving our networks,” Mr. Levin said.

The research community must still counter skepticism about what some technologists call a “build it and they will come” mentality. Some technologists say that once faster networks are deployed, new uses will emerge that cannot be foreseen today. Others argue that high-resolution video is the only current general application for the highest speed network technology.

“The concept is laudable, but the real question is for what purpose?” said Michael Kleeman, a computer network designer and telecommunications policy strategist at the University of California, San Diego.
Innovation in Education

Bill Gates' favorite teacher

Khan turns out thousands of videos from a converted walk-in closet in his Silicon Valley home. By David A. Kaplan, contributorAugust 24, 2010: 5:53 AM ET

FORTUNE -- Sal Khan, you can count Bill Gates as your newest fan. Gates is a voracious consumer of online education. This past spring a colleague at his small think tank, bgC3, e-mailed him about the nonprofit khanacademy.org, a vast digital trove of free mini-lectures all narrated by Khan, an ebullient, articulate Harvard MBA and former hedge fund manager. Gates replied within minutes. "This guy is amazing," he wrote. "It is awesome how much he has done with very little in the way of resources." Gates and his 11-year-old son, Rory, began soaking up videos, from algebra to biology. Then, several weeks ago, at the Aspen Ideas Festival in front of 2,000 people, Gates gave the 33-year-old Khan a shout-out that any entrepreneur would kill for. Ruminating on what he called the "mind-blowing misallocation" of resources away from education, Gates touted the "unbelievable" 10- to 15-minute Khan Academy tutorials "I've been using with my kids."

With admiration and surprise, the world's second-richest person noted that Khan "was a hedge fund guy making lots of money." Now, Gates said, "I'd say we've moved about 160 IQ points from the hedge fund category to the teaching-many-people-in-a-leveraged-way category. It was a good day his wife let him quit his job." Khan wasn't even there -- he learned of Gates' praise through a YouTube video. "It was really cool," Khan says.

In an undistinguished ranch house off the main freeway of Silicon Valley, in a converted walk-in closet filled with a few hundred dollars' worth of video equipment and bookshelves and his toddler's red Elmo underfoot, is the epicenter of the educational earthquake that has captivated Gates and others. It is here that Salman Khan produces
online lessons on math, science, and a range of other subjects that have made him a web sensation.

Khan Academy, with Khan as the only teacher, appears on YouTube and elsewhere and is by any measure the most popular educational site on the web. Khan's playlist of 1,630 tutorials (at last count) are now seen an average of 70,000 times a day -- nearly double the student body at Harvard and Stanford combined.

Since he began his tutorials in late 2006, Khan Academy has received 18 million page views worldwide, including from the Gates progeny. Most page views come from the U.S., followed by Canada, England, Australia, and India. In any given month, Khan says, he's reached about 200,000 students. "There's no reason it shouldn't be 20 million."

His low-tech, conversational tutorials -- Khan's face never appears, and viewers see only his unadorned step-by-step doodles and diagrams on an electronic blackboard -- are more than merely another example of viral media distributed at negligible cost to the universe. Khan Academy holds the promise of a virtual school: an educational transformation that de-emphasizes classrooms, campus and administrative infrastructure, and even brand-name instructors.

**Quick, free, and easy to understand**

Distance learning and correspondence courses have been around since the invention of mail. And private, for-profit schools flourish; the University of Phoenix has half a million students enrolled, most of them online. Other private operations, like the Teaching Co., specialize in amalgamating "great courses" from nationally known teachers: the 12-hour Game Theory in Life, Business, and Beyond, from one academic star, costs $254.95 on DVD.

What's remarkable about Khan Academy, aside from its nonpareil word of mouth and burgeoning growth, is that it's free and prizes brevity. Remember your mumbling macroeconomics teacher whose 50-minute monologue in a large auditorium could bore the dead? That isn't Khan. He rarely cracks wise -- if you want shtick, check out Darth Vader trying to teach Euclidean geometry on YouTube ("The Pythagorean theorem is your destiny!") -- but in less than 15 minutes Khan gets to the essence of the topics he's carved out.

Online critics question whether he amounts to a dilettante who's turning learning into pedagogical McNuggets. But while you obviously don't learn calculus in one session -- the subject is divided into 191 parts, which doesn't include 32 more in precalc -- Khan's components seem to hit the sweet spot of length and substance. And he covers an astonishing array. There are the core subjects in math -- arithmetic, geometry, algebra, trigonometry, calculus, and statistics -- and the de rigueur science offerings, like biology, chemistry, and physics. But Khan also gives lessons in Economics of a Cupcake Factory, the Napoleonic Wars, and the Alien Abduction Brain Teaser.
The seeds of education

Like so many entrepreneurial epiphanies, Khan's came by accident. Born and raised in New Orleans -- the son of immigrants from India and what's now Bangladesh -- Khan was long an academic star. With his MBA from Harvard, he has three degrees from MIT: a BS in math and a BS and a master's in electrical engineering and computer science. He also was the president of his MIT class and did volunteer teaching in nearby Brookline for talented children, as well as developed software to teach children with ADHD. What he doesn't know he picks up from endless reading and cogitation: His gift, like that of many teachers, is being able to reduce the complex. "Part of the beauty of what he does is his consistency," says Gates. Of Khan's capacity to teach, Gates, who says he spends considerable time trying to help his three kids learn the basics of math and science, tells Fortune, "I kind of envy him."

In the summer of 2004, while still living in Boston, Khan learned that his seventh-grader cousin, Nadia, in New Orleans was having trouble in math class converting kilograms. He agreed to remotely tutor her. Using Yahoo Doodle software as a shared notepad, as well as a telephone, Nadia thrived -- so much so that Khan started working with her brothers, Ali and Arman. Word spread to other relatives and friends. Khan wrote JavaScript problem generators to keep up a supply of practice exercises. But between their soccer practices, his job, and multiple time zones, scheduling became impossible. "I started to record videos on YouTube for them to watch at their own pace," Khan recalls. Other users tuned in, and the blueprint for Khan Academy was created.

Khan continued to work for the small hedge fund he had joined after Harvard, Wohl Capital Management. He said he took away "under $1 million" before the Silicon Valley-based hedge fund wound down, and briefly started his own fund in mid-2008, which didn't really get off the ground because of the financial crisis. ("I called it Khan Capital," he says, "but it never got much beyond 'Khan's Capital.'") He used his nest egg to buy a house with his wife, Umamia, a rheumatology fellow at Stanford Medical School, and as a reserve when he gave up his investment career. On a typical day he tapes a few tutorials, answers posts from students, calls experts when he's stuck on how best to explicate a concept, and fields queries from curious potential backers.

He maintains he has no interest in monetizing the operation by charging subscriptions or selling ads. "I already have a beautiful wife, a hilarious son, two Hondas, and a decent house," he declares on his website. But that hasn't stopped the inquiries, the most notable from John Doerr, the Silicon Valley venture capitalist, and his wife, Ann. Not long ago a PayPal donation on Khan's site came in for $10,000 (a typical gift is $100). Khan e-mailed the donor. Her name was Ann Doerr. He knew of a John Doerr but just assumed the name was more popular than he realized. He e-mailed her to say thanks. She suggested lunch.

When they met, Ann Doerr told him she couldn't believe hers was the largest donation. "This is, like, criminal," she said. "I love what you're doing." When he got home, he found a message from her: "There's $100,000 in the mail."
Khan is using that money to pay himself a salary. Later, he met John Doerr and has since relied on both Doerr's for entrée to others in the philanthropic establishment. After Gates mentioned Khan in Aspen, John tweeted it to his Silicon Valley legions. In July the academy received another $100,000 -- from John McCall MacBain, a Canadian entrepreneur who made a fortune in publishing. "If I had a million dollars," Khan says, he'd fund software development of more automated problem sets and extensive translations of his videos. Gates, whose foundation spends $700 million a year on U.S. education, plans to talk to Khan soon as well.

**An academy or a library?**

Khan has his skeptics in the education business. They don't doubt he means well and is helping students, but they question the broad impact of any tutorial that doesn't test performance or allow student-teacher discussion. "It's a solid supplemental resource, particularly for motivated students," says Jeffrey Leeds, president of Leeds Equity Partners, the largest U.S. private equity firm specializing in for-profit education. "But it's not an academy -- it's more of a library."

But Khan intends nothing less than "tens of thousands" of tutorials offering the "first free, world-class virtual school where anyone can learn anything." The advances envisioned by Leeds and others wouldn't hurt either. The education industry can use all the innovation it can find.