



COURTESY OF STEVEN KING

# A Hierarchy of Needs

**In a frenzied spring of teaching off the script, some faculty struggled to match the vitality of the live classroom. Others made valuable discoveries about pedagogy and people.**

*by Barry Yeoman*

When the COVID-19 pandemic shut down Carolina's campus in March, Steven King considered moving his "Emerging Technologies" class onto the videoconference platform Zoom. He could have flipped on his webcam and lectured to a screen, where his students would have appeared in a grid reminiscent of the 1970s TV show *The Brady Bunch*.

King is an associate professor in the Hussman School of Journalism and Media and the Kenan-Flagler Business School. He thinks a lot about how to use cutting-edge technology to innovate higher education. He considered Zoom an adequate, if conventional, backup plan. But it would hardly have captured the spirit of the class, which explored virtual and augmented reality, artificial intelligence and robots.

King wondered what it would be like, instead, to teach in a three-dimensional virtual classroom with sofas, whiteboards and potted plants. "I should jump all in," he remembers thinking.

So he secured permission from his deans and checked with students to make sure they didn't have any disabilities that limited their access to the technology. Then, over spring break, he shipped out 28 virtual reality headsets and controllers.

Across the University, educators were reckoning with the most sudden upheaval in their lifetimes. The entire campus went online at once — with no preparation, no training, no unified set of standards. Faculty had to rely on unfamiliar technologies. They had to teach to students scattered across the world, many of whom had left their textbooks behind in Chapel Hill.

Many teachers and students struggled. Some still were in that mode at semester's end.

Fundamental questions abounded: How do you reach students who might lack privacy, internet access or emotional bandwidth? How do you facilitate rich discussions with those *Brady Bunch* boxes? How do you teach hands-on skills like laboratory science and ensemble music? Should you incorporate the pandemic into your lesson plans?

And, in King's case: How do you push the boundaries of online learning so that students feel like they're still on campus?



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With the stay-home spring looming, Steven King — above and on previous pages — wondered what Zoom teaching would be like. Then he shipped virtual reality headsets to his 28 students.

Some, like King's class, found things that worked.

When classes resumed, King's students created cartoon images of themselves called avatars. Then they used their virtual reality hardware to teleport those avatars into the classroom. It was a spacious, if imaginary, room with skylights and picture windows overlooking a city skyline.

Over the next five Mondays, King lectured and students gave presentations. They broke into small groups to collaborate on projects. The professor walked from one cluster to the next, supervising.

The virtual space eventually came to

feel like home and not so contrived. Students could whisper to each other. They could hear the quiet murmurs of their classmates talking across the room. At the end of class, they lined up to talk to their professor, as they did in person before spring break.

"I actually felt like I was there," said Alex Baumeier '20, who came to recognize her friends by their avatars. "I remember my friend Raquel was dressed as a robot. And I remember looking for her robot like it was a normal person."

One afternoon, a student showed up distraught that COVID-19 had preempted her internship. King noticed her huddled



**VijiSathy** @vijisathy  
• March 23 • “And the #OnlineTeaching #onlinelearning commences today. We didn’t sign up for this, and neither did they, but there’s something so hopeful about continuing to teach and learn when everything else feels like it’s coming to a screeching halt. #COVID19 #highered #playroomdecor”



COURTESY OF VIJI SATHY '96

in a corner with a friend. “This was a kind of semiprivate conversation that you would have in a real classroom,” he said. “It doesn’t happen on Zoom.”

On the last day, King polled his students about how the semester went. One offered unexpected advice: “Even if the school goes back to in-person classes, you should definitely include this experience,” said junior Evan Castillo. King took the suggestion to heart: Moving forward, he plans to teach a segment of the class in virtual reality. Sometimes a crisis can shake up old patterns and offer insights about how to become a better teacher.

### Honoring students’ concerns

The coronavirus forced students to absorb a series of unexpected shocks. They were dodging a deadly virus. They were far from their campus friendships. Some were back in living arrangements they had earlier fled.

“They might be distracted or stressed or worried for their personal safety, about being honest or truthful about who they are with their families,” said Viji Sathy ’96 (’01 MA, ’03 PhD), a teaching professor in the department of psychology and neuroscience.

For students from lower-income families, being home erased the equalizing effect of living on campus. It might have meant worrying about the next meal. Or sharing a spotty wireless signal in a crowded apartment. Or living without Wi-Fi at all.

If attending a university means nurturing the top of what psychologist Abraham Maslow called the hierarchy of needs — creativity, problem-solving, self-confidence, achievement — the pandemic refocused students’ attention on the bottom. Survival and safety became paramount.

Professors had to adapt. They still had to deliver quality education, albeit online. But they also needed to honor students’ immediate concerns.

“I needed a moment to gather myself and reassure myself that, even though this was a new situation to me, teaching was not new to me,” Sathy said. When the University extended spring break, she took the extra week

to rethink her large introductory statistics classes and her first-year seminar, “Talking About Numbers.”

Sathy had had a head start. She’d been advocating for “inclusive teaching”: the

**“I think this put a reset on some things. ... ‘What is this whole educational enterprise about? Who is it for? And are we really doing the best we can for all of the students?’ So I’m grateful that this shook things up, because we’re all asking very good questions now. Just because of the way it was done, that doesn’t mean that’s the way we move forward.”**

**— Viji Sathy ’96  
(’01 MA, ’03 PhD)**

idea that diversity is an asset that professors can foster by getting to know students individually and by building in more structure and more flexibility. COVID-19 would stress-test that approach.

At the outset, Sathy wanted to reassure her students. So she used mail-merge software to send them messages with personalized salutations. “My priority now is you and your well-being,” she wrote. “In times of uncertainty, I know things can feel particularly stressful. Please know I am here to support you.”

Sathy wanted to see her students’ faces and to continue their real-time conversations in Zoom. “But I did not want people who could not meet at that time — because they’re in a different time zone or they’re sick or a family member is sick — to feel excluded,” she said. So she posted video recordings of the Zoom sessions, along with the questions she had asked in class. Students could watch the videos, pausing to answer the questions on an online worksheet or polling platform.

Aware of the digital divide, Sathy accommodated students with internet problems. If someone couldn’t upload an assignment, she’d ask, “Can you snap a picture of it and text it to me?” She eliminated timed multiple-choice exams, which penalize students without stable connections or quiet surroundings. She developed alternative ways to measure students’ mastery of the material.

To maintain what she calls the “class-



COURTESY OF VIJI SATHY '96

From Viji Sathy's Zoom tips for students: **"Q: How should I dress? A: Join in whatever you feel like wearing. It's a pandemic. I don't care what you wear; I'm just grateful you're alive and want to keep learning."** One day, Sathy hosted a bring-your-pet-themed class session.

room community," Sathy gave themes to some of her online meetings: "Bring Your Pet" or "Zoom Outdoors." She created an opt-in system for students who wanted more personal daily messages from her — a photo of the tulips in bloom at the Old Well or of the turtle that visited her backyard.

That personal touch initially felt "weird," Sathy said: "Not that I'm a deeply private person, but it feels like there are boundaries on what you can share as an instructor." But she noticed how much she appreciated when students responded. "It really allowed us to connect," she said.

That's a connection that won't disappear, she believes, regardless of how the fall semester unfolds. Everything she did differently, from how she communicated to how she wrote exams, will inform Sathy's future instruction.

"We tend to think of teaching as transactional," she said. "There's even sometimes animosity between students and teachers, or distrust. I think this put a reset on some things. It said, 'Hold on a second. What is this whole educational enterprise about? Who is it for? And are we

really doing the best we can for all of the students?' So I'm grateful that this shook things up, because we're all asking very good questions now. Just because of the way it was done, that doesn't mean that's the way we move forward."

### The delicate line

The coronavirus offered professors the chance to bring real-time relevance to their academic subject matter. But seizing the headlines also ran the risk of piling onto students' stress. Faculty had to walk a delicate line.

"I actually polled the students when we got back online and asked them, 'How much do you want to talk about COVID-19?'" said Karin B. Yeatts '97 (PhD), an associate professor of epidemiology in the Gillings School of Global Public Health. Most of them were eager to discuss the outbreak. "But there were a few students that were overwhelmed and didn't want a lot on it. So I tried to navigate that as well."

The science around the virus was changing daily. Yeatts' "Principles of Epi-

demology" class critiqued the research as it came out, applying principles they had learned in class. They dissected, for example, the design of a French clinical trial that concluded that the anti-malaria drug hydroxychloroquine reduced viral loads. The study had commanded headlines: President Donald Trump tweeted about it, and the U.S. Food and Drug Administration released the drug from its national stockpile. Scientists since have called the study flawed and hydroxychloroquine ineffective against COVID-19.

The teachable moments crossed department lines. Caela O'Connell '14 (PhD), an assistant professor of anthropology who also teaches in the environment, ecology and energy program, realized that her introductory students no longer could safely observe public exhibits and performances, and the audiences attending them, as part of their fieldwork. But they could still conduct interviews at home. O'Connell learned that Foxfire, an organization that preserves Southern Appalachian culture, had launched a COVID-19 oral history project. So she

gave her students the option of interviewing relatives and housemates for the Foxfire collection.

"It would let them know that their experience, and their families' experience, during this pandemic are meaningful in a time when everyone is feeling very much invisible," O'Connell said. Students who didn't want to confront the virus were given an alternative assignment.

For Valerie K. Fields '94, a teaching professor in the Hussman School, leaning into the news felt essential. Fields teaches a public relations course called "Crisis Communication." The arrival of COVID-19 was the very type of scenario for which she had been training her 12 students.

#### **PR crises made real**

"All right. It's 10 a.m., so we will get started," Fields announced one April morning to the students and professors who had dialed into Zoom for her class's end-of-semester press conference. "I must say that, if ever there has been a semester that has been representative of what crisis looks like, this is it."

Fields had been teaching the students how PR professionals respond when a client's reputation is on the line. They had divided into four teams representing Facebook, the British monarchy, Janssen Pharmaceuticals, and the U.S. Centers for Disease Control and Prevention. Each team was preparing for what was supposed to be an in-person event, with faculty standing in as reporters.

When campus closed, Fields' students asked whether the press conference would proceed. "There was never a question for me," she said. "The nature of crisis is that it's often inconvenient. However, the value of getting information to people quickly is immeasurable."

As they prepared, the students could observe how politicians and public health officials were talking about the virus, often with conflicting messages that sowed confusion and fear. That helped guide their

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own preparation.

At the Zoom event, the trio that represented the British royals got off pretty softly. But then the Centers for Disease Control team took over, and the tough questions flew.

"What exactly did the CDC know about this new strain of the coronavirus?" asked Stephanie Mahin '17 (PhD), a clinical assistant professor in the Kenan-Flagler Business School. "There's some talk that it was known the same time South Korea knew, and had we done something a little bit more proactively, we may not be where we are today."

"There's a lot of confusion regarding this issue, and we do apologize," responded junior Megan Dennehy. "It appears that there was a lot of internal communication going on mid-January about employing more people to get things going regarding data and research."

"We do want to acknowledge some of the missteps at the beginning," added Lena Johnson '20. "But we want to quickly adjust and do the best that we can now and address how we're working diligently now to protect the American public."

Mahin pushed back. "Missteps in communication. Internal conversations going on. How do you reconcile that with lives that have been lost?" she asked. "When you say, 'I'm sorry, we had some misstep in communication,' people are dead now."

The team fielded questions about masks and medications and about government officials who refused to social distance. Afterward, the faculty offered feedback. "Your composure was good because we were kind of pissy," said Lois Boynton '97 (MA, '01 PhD), an associate professor in the Hussman School. But perhaps, she suggested, students radiated too much composure: "When I asked about numbers, I didn't get the empathy piece with it."

Ironically, COVID-19 was not on the team's radar when they signed up to represent the CDC. They were initially preparing to talk about vaping regulations and seasonal flu. "In the blink of an eye, it became the crisis nightmare," Fields said at the end of the presentation.

"What a great way to learn," Mahin replied.

Observing her students' willingness to adapt, Fields learned, too.

"My takeaway is how effective it is when you are flexible and open to new solutions," she said. "That's important as an instructor: to be mindful of, OK, the old way can't work under the current circumstances. And so we need to change

***"My takeaway is how effective it is when you are flexible and open to new solutions. That's important as an instructor: to be mindful of, OK, the old way can't work under the current circumstances. And so we need to change what our expectations are of what normal means."***

**— Valerie K. Fields '94**



HUSSMAN SCHOOL OF JOURNALISM AND MEDIA



The pandemic nixed the high-profile gigs that students in David Garcia's Cuban-inspired ensemble group Charanga Carolina had lined up. He floated to his students the idea of a remote recording project — ensemble music with individual parts recorded separately, then stitched together by an editor. They performed *Indestructible*, percussionist Ray Barretto's 1970s-era ode to perseverance.

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### Indestructible

Some activities can't be done remotely. Sathy's first-year seminar originally

required students to work together at a campus makerspace. With tools like laser cutters, they were supposed to create physical objects that illustrated the beauty and complexity of mathematical concepts.

Moving online, “I had to ask myself:

What is the point of this course?” she said. “And how do I distill it so that we still accomplish the point?” Sathy had wanted students to use collaboration and problem-solving skills. They could do that without a makerspace. Some engineered the files that a laser cutter could use to create their objects. Others produced videos to demonstrate the concepts.

Still, physicality matters. In performing arts classes, for example, students rehearse together and present in public. That threw a particular challenge to David F. Garcia, professor and chair of the music department.

Garcia directs Charanga Carolina, an ensemble specializing in Cuban and Cuban-inspired dance tunes. Last semester, they had gigs lined up on the rooftop of the Durham Hotel and at Sharp 9 Gallery, a Durham jazz club. The 24 student musicians were excited. These were high-profile venues.

When UNC suspended in-person learning, “we all started mildly panicking,” Garcia said. He had never taught online before. And he would have to cancel the live shows that were Charanga's raison d'être.

But, like Sathy, Garcia came to separate the details (live rehearsals, a hotel rooftop) from the larger goals (collaboration, performance). As the whole world sheltered in place, social media filled with videos of ensemble music, each part recorded separately and then stitched together by an editor.

“Well, I've never used any video soft-

## 'I Watched This Lecture With My Grandfather'

Matthew Andrews taught two lecture classes last semester: “Baseball and American History,” and “The Olympic Games: A Global History.” When COVID-19 shut down campus, he decided not to hold real-time classes, with up to 250 students logging in simultaneously. Instead, he would record his lectures so that students could watch on their own schedules.

It was a pragmatic compromise, and demoralizing at first. Andrews '08 (PhD), a teaching associate professor in the history department, missed the students' laughter at his jokes. He missed the reverential silence when he described the slaughter of 11 Israeli athletes during the 1972 Olympics in Munich.

What he didn't expect were the messages that rolled in. “I mean, a lot of emails,” he said.

Students recounted watching his lectures with their families. Afterward, they sat together in the living room or on the front porch and talked about their parents' sports memories. “And not just parents,” he said. “Grandparents. Elderly grandparents. I do a lecture on Mickey Mantle and nostalgia in the United States in the 1950s. And I received three emails from students who said, ‘I watched this lecture with my grandfather and [we've] never had a better conversation.’”

One student explained that her grandfather has Alzheimer's disease and was re-creating into his own thoughts. “This lecture sparked remembrances, and he started talking more than he has in the last few months,” Andrews said. “And she wanted to thank me for that lecture because of [how] it allowed her to connect with her grandfather in a way that had seemed physically impossible.”

— Barry Yeoman



Matthew Andrews '08 (PhD)

ware,” Garcia remembers thinking. “But maybe we could do a remote recording project.” He floated the idea to his students, adding that participation was voluntary and would not affect their grades. He sent them his cell number in case they wanted to talk. “We’ll get through this together,” he wrote.

About half opted in. Garcia chose one song for the project: *Indestructible*, percussionist Ray Barretto’s 1970s-era ode to perseverance. He sent students a guiding track to which they could listen through headphones as they played at home. That would help synchronize the recordings.

“When he said to submit a video and an audio recording, that excited me,” said Kri

Schafer ’20, Charanga’s vocalist. “I wanted to end on a positive note, and I liked the idea of having a little artifact.”

Garcia released the video in late May. He dedicated it to Charanga’s four graduating seniors. In it, Nick Sengstaken ’20 stands under a magnolia near the North Carolina coast and leans into a baritone saxophone. Ben McEntire ’20 sits at the timbales in his Chapel Hill bedroom. Senior Bobby Frith peeks out from behind a face mask, playing electric guitar. A couple pushes away the island in their kitchen and starts dancing.

Each frame is a glimpse into self-isolation: a Beatles poster, a basketball jersey, a bicycle leaning against a door. But close your eyes, and it

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could be a hotel rooftop when the band is hot — an explosion of brass, percussion, strings and voice, with couples spinning on a warm spring night.

At its center is Schafer, the vocalist. She goes through a series of wardrobe changes, wearing a Carolina hoodie in one shot, a silky peasant blouse in the next. She struts down a suburban street, shadowboxes on a dock overlooking Lake Norman, dances before a microphone in her childhood bedroom. In one close-up, she grabs a flexed bicep and peers down at the camera. In precisely enunciated Spanish, she growls:

*I have the strength of a thousand trucks.*

*They call me the invincible.*

*Though I don’t presume to be Superman, mess with me and you will see:*

*[I am] indestructible.*

*Barry Yeoman is a freelance writer based in Durham.*

UNC SCHOOL OF LAW

## How to Lawyer Through Crisis

For students in the law school’s 10 in-house clinics, learning has immediate and serious consequences.

Students help domestic violence survivors win protective orders, help tenants stave off evictions, help refugees petition for asylum. They interview and counsel clients, file documents and attend negotiations and hearings, all under faculty supervision. Much of the clinics’ work can’t readily be done online, and yet it is still urgent.

“Just because of the virus, our clients’ problems don’t go away,” said Erika K. Wilson, associate professor of law and director of clinical programs.

COVID-19 sparked new questions. How do students communicate with low-income clients who have no internet and limited cellphone minutes? How can students file pleadings when the courthouses are mostly closed? For those emergency court functions that remain open, should students visit public buildings where they risk exposure?

Even figuring out how to receive mail from the courts proved tricky.

Wilson and her colleagues developed practical solutions, like giving prepaid

cellphones to clients. But the deeper challenges were tougher to address and are ongoing.

Because so many clients have suffered extreme hardship, students practice “trauma-informed lawyering,” which requires close and patient relationship-building. “It’s hard to do that kind of trauma-informed work when you’re not seeing someone,” said Beth S. Posner ’97 (JD), a clinical associate professor and supervisor of Carolina Law’s Domestic and Sexual Violence Clinic.

What’s more, some of Posner’s students initially were drawn to her clinic because they themselves are survivors. Now they’re dealing with their own traumatic histories and the disruption of the pandemic. Posner teaches her students to care for one another. But that can be hard when the best tool is Zoom.

“So much of being empathetic is in body language and in eye contact,” she said. “And so much of these meetings have delayed language or speaking over people. So all of the stuff that I’ve been teaching them was on full display as failing.”

Faculty are planning for an uncertain future. Posner, for example, is thinking



**Erika K. Wilson: “Just because of the virus, our clients’ problems don’t go away.”**

about how to do trauma-informed teaching online. “We are dealing with a generation of students who have been traumatized by this,” she said.

And Wilson is reckoning with how to remain sensitive to students’ individual hardships while readying them for future crises. “Part of the teachable moment here was: how do you lawyer through crisis?” she said. “Because, as a lawyer, your professional obligations don’t end even though there’s a global pandemic.”

— Barry Yeoman