

RACHEL DRETZIN: These kids are among the smartest, most wired people on the planet right now. They may hardly remember a time when they weren't able to be on line anywhere they went.

STUDENT: I have three tests this week.

RACHEL DRETZIN: Everywhere you go on this campus, kids are looking at screens, sometimes multiple screens.

STUDENT: Do you want an email back?

STUDENT: I was productive on Saturday.

RACHEL DRETZIN: Take Eliza. She's 20, a mechanical engineering major, and completely wired all the time.

ELIZA: Is it going to stay in beta for as long as Gmail stayed in beta? Like, a decade?

STUDENT: Probably.

ELIZA: I have a few friends who, if they hear the word BlackBerry, they think of me. Like, I am never off of it. It is glued to me. When it's more than arm's-length from me, I start to get panicky. It's very disconcerting.

I'm, like, I'll pull it up and show you, and I don't even send it to you! Are we G-chat buddies? Can I just-

I'm always IMing, I'm texting, or things like that, always checking my phone, taking care of other things while I'm doing something else.

KAMO: You are talking to your friend at the same time you're talking to your other friend, same time you're emailing another friend about what you're going to do tomorrow night.

The classes here are fun, man.

We kind of understand that, too, between each other. We're all so busy that it's OK if I'm talking to Murph right now and his BlackBerry goes off and he has to start going on it. I'm, like, Well, that's OK because I'm going to do that to him anyways, so- you just- it's a mutual understanding.

School, I think, is just kind of the same. Like, you're paying attention in class to your professor, you're emailing another professor and you're looking up something else.

Prof. SHERRY TURKLE, MIT Initiative on Technology and Self: Nobody who's been teaching for 25 years would say that our students aren't different now than they were then. I mean, they need- they need to be stimulated in ways that they didn't need to be stimulated before.

RACHEL DRETZIN: Sherry Turkle has been teaching at MIT for more than 30 years.

Prof. SHERRY TURKLE: Every professor who looks out onto a sea of students these days knows there's email, FaceBook, Googling me, Googling them, Googling their next-door neighbor, that's happening in the classroom.

RACHEL DRETZIN: Like most universities, MIT allows laptops in its classes at the professor's discretion.

Prof. SHERRY TURKLE: I mean, it even changes how teachers teach because now the- the pressure is on teaching kind of scintillating PowerPoint things that will distract them from the Web.

DAVID JONES, Associate Professor, MIT: There are two sorts of things you can test students about. You can test how well they're paying attention in lecture and you can test how well they're absorbing information from readings that you assign. And I don't think they're doing either of those things well.

I just gave my class a midterm, and I was really asking obvious questions that, had they been attending carefully in lecture and had they been doing the readings carefully, everyone should have gotten 100 percent on this exam. And the mean score was probably about a 75 percent. It's not that the students are dumb, it's not that they're not trying, I think they're trying in a way that's not as effective as it could be because they're distracted by everything else.

Prof. SHERRY TURKLE: I teach at MIT. I teach the most brilliant students in the world. But they have done themselves a disservice by drinking the Kool-Aid and believing that a multitasking learning environment will serve their best purposes. There really are important things you cannot think about unless it's still and you're only thinking about one thing at a time. There are just some things that are not amenable to being thought about in conjunction with 15 other things.

LAUREN: I feel like the professors here do have to accept that we can multitask very well and that we do at all times. And so if they try, and you know, restrict us from doing it, it's almost unfair because we are completely capable, moving in between lecture and other things and just keeping track of the many things that are going on in our lives.

RACHEL DRETZIN: No one's actually measured whether these kids are as successful at multitasking as they claim to be. But out in California, a respected research lab is studying their counterparts on the Stanford campus in Palo Alto.

Prof. CLIFFORD NASS, Stanford University: They understand the research. They're smart kids. But they seem utterly convinced it doesn't apply to them.

We want to study what's really going on in the brain. But when it comes to what parts of the brain [unintelligible] we know nothing. These are really the first studies of brain imaging of multitaskers versus non-multitaskers. So anything we discover here is new because we know zero. Now in this lab here, we're researching speaking on the cell phone while driving.

ASSISTANT: Tell me about a time when you had to deal with a difficult person-

Prof. CLIFFORD NASS: You walk around the world and you see people multitasking. They're playing games and they're reading email and they're on FaceBook, et cetera. Yet classic psychology says that's impossible, no one can do that. In general, our brains can't do two things at once. And we want to ask the question, "How do they do it?" Do they have some secret ingredient, some special ability that psychologists had no idea about, or what's going on?

You guys were chosen because you're very high chronic multitaskers, and what that means-

RACHEL DRETZIN: Nass allowed us to film one of his studies, conducted on a group of carefully chosen students.

Prof. CLIFFORD NASS: On a college campus, most kids are doing two things at once, maybe three things at once. These are kids who are doing five, six or more things at once all the time.

RACHEL DRETZIN: The experiment looks simple: identify numbers as odd or even, letters as vowels or consonants. But it's rife with traps in the form of distractions. Nass is testing how quickly these kids can switch between tasks without losing their focus.

BRIAN: I'm pretty much constantly texting. And whenever I study I have my laptop out and-

RACHEL DRETZIN: Brian is a junior.

BRIAN: -I'm watching a YouTube video, I'm checking my email, non-stop refreshing the page, you know, on FaceBook, FaceBook chat-

RACHEL DRETZIN: He's pretty confident that his multitasking is successful.

BRIAN: -so that I can always stay connected.

RACHEL DRETZIN: [on camera] So you think you're effective?

BRIAN: I think so.

RACHEL DRETZIN: [voice-over] But his results, like others Nass has tested, suggested otherwise.

RESEARCHER: And what we found was you're actually significantly slower when you're switching than when you're doing kind of the same task consistently.

Prof. CLIFFORD NASS: Virtually all multitaskers think they are brilliant at multitasking. And one of the big discoveries is, You know what? You're really lousy at it! It turns out multitaskers are terrible at every aspect of multitasking. They get distracted constantly. Their memory is very disorganized. Recent work we've done suggests they're worse at analytic reasoning. We worry that it may be creating people who are unable to think well and clearly.

RACHEL DRETZIN: When i got back to new York, I noticed how much I, too, fell prey to distractions. I kept catching myself in the act, checking my email when I should have been writing a

script, Googling something to satisfy a random curiosity. This is affecting all of us.

Read more: <http://www.pbs.org/wgbh/pages/frontline/digitalnation/etc/script.html#ixzzImxeoNtok>