Name	Development of the Adolescent Brain – English 7		
Date	Growing Up Digital Article		



"Growing Up Digital"

By Matt Richtel

- (1) The day before the start of Vishal Singh's senior year in high school, he faces a stark choice on his bedroom desk: book or computer?
- (2) Vishal, a bright 17-year-old Californian who spends most of his time on Facebook, YouTube, and making digital videos, has read just 43 pages of his summer reading assignment, Kurt Vonnegut's *Cat's Cradle*. Instead of picking up the book, he clicks to YouTube.
- (3) On YouTube, "you can get a whole story in six minutes," he explains. "A book takes so long. I prefer the immediate gratification."
- (4) Students have always faced distractions. But computers and cellphones, and the constant stream of stimuli they offer, are a new challenge to focusing and learning.
- (5) Researchers say the lure of these technologies is particularly powerful for young people. But because developing brains can get used to constantly switching tasks a lot more easily than adult brains, the risk is that today's teenagers will be less able to stay focused on anything, not just schoolwork.
- (6) "Their brains are rewarded not for staying on task but for jumping to the next thing," says Michael Rich, a professor at Harvard Medical School and head of the Center on Media and Child Health in Boston. "The worry is we're raising a generation of kids in front of screens whose brains are going to be wired differently."
- (7) But even as some educators express unease about students' digital diets, they are increasingly using technology in the classroom, seeing it as a way to connect with students and give them the skills they need. Across the country, schools are equipping themselves with computers, Internet, and mobile devices.
- (8) It is a tension on vivid display at Vishal's school, Woodside High School in Redwood City, California. Here, as elsewhere, it's not uncommon for students to send hundreds of text messages a day or spend hours playing video games, and virtually everyone is on Facebook.

27,000 Texts a Month

- (9) Allison Miller, 14, sends and receives 27,000 texts a month. She texts between classes, the moment soccer practice ends, while being driven to and from school, and often while studying. But it comes at a cost: She blames multitasking for the three B's on her recent progress report.
- (10) "I'll be reading a book for homework and I'll get a text message and pause my reading and put down the book, pick up the phone to reply to the text message, and then 20 minutes later realize, 'Oh, I forgot to do my homework."
- (11) Some shyer students do not socialize through technology—they recede into it. Ramon Ochoa-Lopez, 14, plays six hours of video games on weekdays and more on weekends, leaving homework to be done in the bathroom before school.
- (12) Students say that their parents, worried about the distractions, try to police their computer time. But it's trickier with cellphones, since a lot of parents want to be able to call their children at any time, so simply taking the phone away isn't an option.
- (13) Sam Crocker, Vishal's closest friend, who has straight A's but lower SAT scores than he would like, blames the Internet's distractions for his inability to finish either of his two summer-reading books.
- (14) "Facebook is amazing because it feels like you're doing something and you're not doing anything," Sam says. "It's the absence of doing something, but you feel gratified anyway."
- (15) He concludes: "My attention span is getting worse."

No Downtime

- (16) That's what has doctors worried. "Downtime is to the brain what sleep is to the body," says Dr. Rich of Harvard Medical School. "But kids are in a constant mode of stimulation."
- (17) Rich isn't suggesting young people toss out their phones and computers, but that they take a more balanced approach to what he says are powerful tools necessary to compete and succeed in modern life.
- (18) Vishal has mixed feelings about technology. "If it weren't for the Internet, I'd focus more on school and be doing better academically," he says. But thanks to the Internet, he says, he's discovered and pursued his passion: filmmaking.
- (19) Vishal often spends hours working on music videos or film projects with sophisticated film editing software that he taught himself how to use—and then he's focused in a way he rarely is when doing homework. He hopes colleges will be so impressed by his portfolio that they'll overlook his school performance.

- (20) Some teachers are alarmed by what they see. Marcia Blondel, a veteran English teacher, has resorted to having students read aloud in class because many lack the attention span to read assignments on their own.
- (21) "You can't become a good writer by watching YouTube, texting, and e-mailing a bunch of abbreviations," says Blondel.
- (22) By late October, Vishal's grades began to slip. Vishal says he's investing himself more in his filmmaking. But he is also using Facebook late at night and surfing for videos on YouTube. Evidence of the shift comes in a string of Facebook updates.
- (23) Saturday, 11:55 p.m.: Editing, editing, editing.
- (24) Sunday, 3:55 p.m.: 8+ hours of shooting, 8+ hours of editing. All for just a three-minute scene. Mind = Dead.
- (25) Sunday, 11:00 p.m.: Fun day, finally got to spend a day relaxing ... now about that homework ...

stark: strong

gratification: pleasure, especially the satisfaction of a desire

stimuli: something (as an environmental change) that acts to partly change bodily activity (as by exciting a sensory organ); heat, light, and sound are common physical *stimuli*

tension: when something is stretched, stressed, "tense"

Name			
Data			

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Questions	Write the answer to each question below.
1. After Paragraph 4: How does the story of Vishal help us visualize and understand the main idea in Paragraph 4?	
2. After Paragraph 8: Why would the use of technology in school be described as a "tension"?	
3. After Paragraph 16: Why would the author choose to use quotations from doctors and researchers in this article?	
4. After Paragraph 19: What is the point of describing the benefits of technology, such as Vishal's filmmaking, in an article about the dangers of technology?	
5. In this article, how does technology affect Vishal? How do you think it might affect his brain? What do you know about the adolescent brain that makes you think this?	