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Our Lives with Technology

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April was an extraordinary month for me due to two significant events, both fueled by technology. In one instance, available technology was great and made a big difference in many lives; in the other, technology played a horrible role, and its misuse was unfortunate to a young person very close to me.

I was very proud of the role that technology played in the identification of the suspected Boston Marathon bombers. This was an event that was high profile and highly regarded by most Americans, encompassing the spirit that we all admire. Instead, it was turned into a tragedy by terrorism that killed three people and wounded many more. There are many survivors whose lives will never be the same.

Technology played a huge and positive role in two ways. I am proud to say the first way was related to imaging (which I am parochial about): digital security and observer cameras obtained images of the suspects and the associated bomb backpacks that they carried. Digital imaging is cheap, hightech, and can ensure that an area is monitored in a costeffective way. Without these images, there is no way that the suspects could have been identified. The second significant technology was cell-phone-tracking technology, which is sometimes termed signal intelligence. This technology not only corroborated the suspects' identification, but also allowed law enforcement to track and locate the suspects. These two technologies were effective in identifying and locating the suspects and probably saved many more lives.

In the second event, the misuse of technology severely hurt a teenage girl who is very close to me. Most of the teenagers I know are on Facebook and/or Instagram, and they use these programs for both good and bad. They use these programs to reveal how they live their lives, divulge their insecurities, post various pictures, say both good and bad things about people, and in many situations, they seek the approvals of others. Young people break up by texting, and parents admonish their children over digital media. A friend of mine sent me a blog post this week about how "Likes" on Facebook or number of followers on Instagram and Twitter are now actual quantitative measurements of a teen's appearance or popularity. Something similar happened to this person I care about, and it resulted in her hurting herself severely. It is a high-pressure, high-stakes game that has been enabled by technology. Social media has made our lives more enjoyable in many ways, but, in some circumstances, has made our children's school years more difficult and stressful (as if it were not difficult to begin with!). I hope that this editorial will, at least, provide a wake-up call to parents to closely monitor your kids' activities on social media for their own protection and welfare.

So what do I think about technology now? While our law enforcement and military personnel are truly heroes, they need our help with the latest technologies to be more successful in fighting terror and crime. Technology can also be used for both good and evil, as has been demonstrated since humans have existed. I think that technology, through social media, has impacted our school-age kids more significantly in the last five years than at any other time in history. This technology is powerful, and we—parents, scientists, and engineers—need to ensure its influence on our children remains positive.

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