Book Reviews

You Have to Be Somebody Before You Can Share Yourself: Applying *You Are Not a Gadget to Education: A Manifesto* by Jaron Lanier. New York: Alfred Knopf, 2010. 224 pp., ISBN 0307269647. (Reviewed by Julie Rust and Beth Buchholz.)

> *"We are going to try something new today," I (Julie) said with great optimism to my class of 32 future English teachers that unseasonably warm February afternoon. "Inspired by the way that academics use Twitter to tweet comments related to sessions and speakers at conferences, I've decided we will use an online polling platform to interact with an article I read aloud in class. As you listen, text some comments or questions about the arguments raised and they will show up on our projector. Your contributions will be anonymous, so don't worry if you think your question might appear obvious to someone else." Before I even had the words out of my mouth, three clever twenty-year-olds had already sent sarcastic texts to the front of the room, much to everyone's delight.*
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> *The tone of the responses changed little once I started reading. Although a few kind, mature souls tried to keep their text messages related to the article, the majority of the messages foregrounded off-color humor rather than scholarly engagement. I, one who generally anticipates the problems with my novel pedagogical moves, was completely blindsided. Was the article I chose not intellectually stimulating enough? Does the cell phone, as a medium, promote social, silly interaction? Did this "open culture" and participatory structure invite students' individual voices to be heard, or did the structure support mob-like behavior that in essence diminished the diversity of responses?*

Coincidentally, this incident actually took place while the authors of this review were beginning to envision how Jaron Lanier's (2010) book *You Are Not a Gadget: A Manifesto* might be relevant for teachers, teacher researchers, and the field of teacher education. Schools have historically been slow to introduce new technology into the classrooms, and although the book is now two years old, nearly ancient in the fast-paced world of the digital, many schools are just now beginning to address the changing landscape. (For instance, our local school corporation recently invested two million dollars in the purchase of iPads for all students and teachers.) While not speaking directly to educators, Lanier's critical perspective on the current digital landscape—including the often praised open culture of the web—serves as an important voice in ongoing conversations about the role of technology in schools, and ultimately the role of technology in our students' lives and our own lives. Rather than frame the subversive texts in the previous vignette as an issue confined to the classroom, Lanier takes a wider view of these kinds of anonymous, participatory practices, situating the subversive texts within a larger milieu of digital culture. In this essay we aim to concretize his ideas about the current state of web design and

online participation by transporting them to our most familiar spaces as educators, teacher educators, and education researchers.

As a computer scientist and pioneer in the field of virtual reality, Lanier assures readers throughout the book that he actually does "love the internet," but his concern stems from the fact that the freedoms associated with open culture have been "more for machines than people" (p. 3). Lanier's manifesto comes, ironically, at a time when teachers and educational researchers are looking, more than ever, to integrate teaching pedagogies that reflect young people's "technology funds of knowledge" acquired at home and outside of school (Labbo & Place, 2010, p. 12) through promising Web 2.0 platforms such as Facebook, wikis, YouTube, Twitter, blogs, chats, and forums (Jenkins, 2006; 2008; Greenhow, Robelia, & Hughes, 2009; Young, 2010). Because of the contrasting conclusions being drawn at these intersections between Web 2.0 technologies and learning, we will explore Lanier's argument through an educational lens in the following three areas: 1) learner identity, 2) consumption and production practices, and 3) testing/assessment. Each section begins with a short vignette gleaned either from Beth's research experience in elementary school or Julie's teaching experience in a high school classroom, in order to show the relevance of these themes to educators at all levels.

Learner Identity & Group Practices

> *The classroom teachers and I (Beth) stared at the computer screen, dumbfounded. Just four hours earlier, we were gloating over how democratically and respectfully elementary-aged students had engaged in their weekly face-to-face community discussion. This week's topic, collectively creating rules for a recess tag game one student (Alex) had initiated, had elicited serious ideas for rule revisions and resulted in Alex extending the conversation by creating a website for his peers to anonymously contribute additional comments online. But instead of seeing more evidence of thoughtful deliberation later that day, we were struck by the change of tone in the most anonymous comments glaring off the screen: "Well this rulebook is really boring," "This is an annoying website!" "This game is not sacred," and "These rules are stupid." We couldn't help but wonder: What changed between the collective face-to-face classroom discussion and the open invitation to anonymously comment online? How does anonymity affect self-expression? Are the practices and attitudes we value in our classroom carrying over to online spaces?*

Student-centered learning has long been the mantra of the education community, and it is often professed that the best teachers must really take the time to "know" their students. Issues of "who our students are" in a digital culture must take into account both physical and virtual self-representations, so Lanier's pessimistic estimate of how current digital platforms limit self-expression seems relevant. He writes that Web 2.0 designs "actively demand that people define themselves downward" (p. 19), resulting in reduced versions of self and relationships, so this

may prove directly relevant to how we as teachers, researchers, and teacher-educators perceive our students, ourselves, and our classrooms.

Interestingly, he sees current participatory web designs as encouraging an absence of authentic identity through the veil of anonymity, which creates conditions ripe for "troll-like behavior," fostering a "brittle" communication landscape where "insincerity is rewarded while sincerity creates a lifelong taint" (p. 71). Lanier's biggest problem with the open culture fostered by Web 2.0, however, has little to do with anonymity. It has to do with the raging battle between collective and individual meaning making. Sociocultural theory (Vygotsky, 1934) is a popular theoretical framework undergirding educational scholarship, emphasizing the role of the collective in shaping identity and thus enhancing learning. Perhaps due to this, educators have embraced Web 2.0 platforms because they seem to embody constructionist (Papert & Harell, 1991) learning principles. Classrooms are, after all, composed of groups of people with the assumption that we learn best by constructing meaning together. Rather than using the term "collective or participatory meaning making," however, Lanier has much more menacing terms for the type of group dynamics he sees emerging in today's online culture, such as "pack mentality" and "the hive mind." He goes so far as to describe the current state of the Internet as "slum-like," due to collective authorship.

Here Lanier waxes sentimental about the disappearing "phenomenon of individual intelligence" (p. 5):

> The central mistake of recent digital culture is to chop up a network of individuals so finely that you end up with a mush. You then start to care about the abstraction of the network more than the real people who are networked, even though the network by itself is meaningless. Only the people were ever meaningful. (p. 17)

While it can be difficult to trace individual contributions on sites like Wikipedia, and comments on platforms such as YouTube or Amazon are often anonymous, Lanier doesn't fairly address the wealth of platforms that often result in wide identity sharing, such as Facebook, many blogs, and many Twitter accounts. Rather than looking at the ways that people creatively use these platforms, he simply dismisses them as reductionist by design. In addition, classroom Web 2.0 applications almost always feature a teacher's ability to trace student participation in order to assess their work, and this inability to escape accountability through anonymity may directly counter many of Lanier's fears. While we think Lanier overstates the potential of "the adventurous individual imagination distinct from the crowd"(p. 50) and understates the power of collaboration (there are two of us, after all, writing this single article!), educators can appreciate Lanier's warning against the complete erasure of boundaries between authors, since, as he writes: "Any singular, exclusive book, even the collective one accumulating in the cloud, will become a cruel book if it is the only one available" (p. 47).

Although Lanier abstains from providing pedagogical implications, his words on authorship remind us, as educators and researchers, of the importance of

merging digital literacy practices with critical literacy practices. Discussing the complex sources of the media to which we collectively contribute, as well as those we consume as "truth," should arguably be high priorities for educators today. In addition, his insistence on paying attention to the ways that Web 2.0 shapes users' identities urges us to increasingly recognize the different ways that the digital media consumed by many young people are impacting how they perceive and represent themselves, in both in-school and out-of-school environments. A final implication we draw from Lanier's fears regarding "collective production" includes those educators that are using Web 2.0 platforms for classroom purposes; they might consider the tensions that emerge between individual and collective meaning making, as they find ways to maximize the affordances and decrease the limitations.

Production & Consumption

> *Fifth graders Eli and Peter huddle around a classroom computer. Eli controls the mouse and moves with ease between the video editing software and various Google image searches. The boys have spent the previous few days highly engaged in creating a digital "book trailer" (i.e., updated version of the book report) based on the book* Fablehaven *by Brandon Mull. "Look! It's just like the cover of the book," argues Peter as he points excitedly at the screen. Eli agrees, "That's perfect!" and right-clicks the image to save it, uploads the image to the editing software, and drags it to the right place in the timeline. The final "book trailer" they proudly share with the class consists of 10 images collected from the web that are woven together with transitions, text, music, and voiceovers. There's little question that the boys demonstrated a growing set of digital production skills during the production process, but larger questions remain about incorporating projects like this into classrooms. Is remixing digital images a creative process that schools should encourage? Can Google and YouTube searches limit students' opportunities to visualize books for themselves? Are there dangers to this "remixing" culture? Does "remixing" belong in schools?*

As educators look for ways to adapt their curricula to reflect current students' ever-changing relationships with new technologies outside of schools, Lanier offers some very specific warnings and suggestions in regard to online consumption and production. As mere users of the Internet, Lanier suggests that individuals are being used by "lords of the clouds" (i.e., Facebook, Twitter, Google) to increase already incredible profit margins (p. 200). He uses Facebook as an example throughout the book to show how social media companies' futures rely on packaging massive amounts of information that users voluntarily provide as "bait" to lure future advertisers (p. 54). As technology becomes an increasingly integral part of daily life, Lanier invites readers to interrogate software designs (e.g., anonymous comments, limited nature of categories on Facebook, defaults on a Word document) before they become fully "locked in" to our digital tools. Lanier's critique of consumption asks users to read the Internet with sociological imagination (Mills, 1959; Shannon, 2011)—not merely in terms of content, which is where most curricular efforts are currently focused in schools, but also on the software, tools, and design of the

Internet more broadly. In terms of what this means for schools, it suggests that teachers must find ways to build students' awareness of the ways that digital media shape who they are as humans. What's at stake are the very "tools we use to understand one another and the world" and the kind of future that is made possible with those tools (p. 14).

Beyond fragmented, exploitative consumption, Lanier suggests that a deeper issue with the current internet culture is a lack of quality production by individuals—referring at one point to the internet as an "online slum"—as speed is emphasized over accuracy and thoughtfulness. To combat this, Lanier offers some of his most concrete ideas in the book that also link directly to Web 2.0 classroom practices: post a video that took "one hundred times more time to create than it takes to view"; create a website that "won't fit into the template available on a social networking site"; write a blog post that "took weeks of reflection before you heard the inner voice that needed to come out"; and innovate on Twitter "in order to find a way to describe your internal state instead of trivial external events" (p. 21). As an experienced software designer, his overarching message is that Internet users must struggle against the "easy grooves" that technology offers, and that ultimately entrap "all of us in someone else's ... careless thoughts" (p. 22). Lanier's book does not suggest that teachers and students must all become software designers to create change in the culture of the Internet; instead, he asks each user to interrogate online tools and to produce content in ways that preserve what it means to be human. As educators, integrating this kind of critical talk around production and consumption within classrooms would help us allow students to make more informed choices in their online lives—moving them from being used to being users.

Lanier's call for quality, creative online production is contrasted with digital mash-ups/remixes, which he cites as signs that "pop culture has entered into a nostalgic malaise ... a culture of reaction without action" (p. 20). He regards remixes as "schlock" where users steal content (e.g, music, text, video) and mash it together, giving very little credit to the original sources. Remixes can be found all over the Internet and are made possible by its "open culture" design that allows users to borrow/steal (depending on who you ask) creative content that can be put together in "new" ways using digital editing tools. As a practicing musician, Lanier critiques remixes on behalf of the creative, lone, middle-class artist, who is now the loser in an online world where all creative content is "free" (read "worthless"). His proposed vision is a world where creators—not remixers—get paid for their cultural expressions. Lanier's disregard for remix culture is reminiscent of Dyson's (1997, 2003) work looking at young writers, where the romantic image of the lone, creative, original author is contrasted with authorship as a process of appropriation and recontextualization of children's textual resources (e.g., superheroes, movie characters, rap music, cartoons). Whereas Dyson sees the positive learning potential in the practices of remixing cultural resources, Lanier comes across as a bit of an elitist, as he sees remixing as a form of content theft that is ruining Internet culture.

We believe that schools must begin to consider digital remixes as a legitimate genre of writing that offers students new ways to communicate with audiences, as

well as addressing this idea of "quality" digital production with students. Certainly there are remixes on the Internet that may be considered "schlock," but there are also deeply moving, funny, inspiring, and engaging remixes that convey new messages beyond the disparate collected bits of content. Perhaps the real danger is not remixes themselves, but the speed at which everything in the digital world can be produced. Lanier contrasts this with the academy:

> Academic efforts are usually well encapsulated, for instance. Scientists don't publish until they are ready, but publish they must. So science as it is already practiced is open, but in a punctuated, not continuous, way. The interval of nonopenness—the time before publication—functions like the walls of a cell. It allows a complicated stream of elements to be defined well enough to be explored, tested, and improved. (141)

This insight into the importance of slowing down the process and building in an interval of "nonopenness" before publication are directly applicable to the ways production (i.e., writing) might be conceptualized in classrooms. Teachers must work with students to identify production possibilities that necessitate the immediacy offered by the Internet (e.g., writing a blog post about a timely event in the community) and production possibilities that invite a "cell wall" to be constructed as peer review informs a lengthy, student-driven revision process.

Testing and Assessment

> *It was my (Julie's) fourth year of teaching, and I was so thankful to finally have a classroom set of laptops for my 9th grade English classes. There was just one small catch. The grant that had so generously provided these laptops required that we use a computer-based essay grading system as a pre- and post-assessment for students. I was told that students loved the immediate feedback the program contributed, a score on a 5-point system, on areas such as word choice, sentence fluency, and grammar. I was told that students were finally exhibiting motivation to revise and edit, quickly resubmitting essays in order to see if they had improved their score. And I was told that such a program could save me hours of grading time. These predictions proved accurate, but an entirely different host of concerns began to plague me regarding using computers for grading essays. Where is the authentic audience here? What formulaic writing styles are these essay-graders programmed to legitimize? Are students writing to make meaning or to "play the game" according to the rules they are picking up?*

Lanier doesn't directly address these computer-based essay graders, but his most explicit connection to the educational community involves his critique of the standardized test movement, in which "tests drive instruction so that a student will look good to an algorithm" (p. 32). Connecting standardized tests to Facebook, he writes: "Both degredations are based on the same philosophical mistake, which is the belief that computers can presently represent human thought or human relationships. These are things computers cannot currently do" (p. 69). It is this

"perverse faith" in technology that Lanier finds particularly revolting, and his humanistic philosophy drives him to repeatedly claim that "being a person is not a pat formula, but a quest, a mystery, a leap of faith" (p. 5).

Notably, Lanier does not address the very different purposes Facebook and standardized tests serve. While the former is an informal space for social connections, the latter is being used to legitimize the closing of schools, driving policy decisions, and limiting teacher autonomy. And while few individuals would claim that friendships and identities are entirely represented on this virtual space, administrators and policy-makers often act as though learning is captured within standardized test scores instead of recognizing the "mystery" inherent in the process of learning and representing learning.

Lanier fears that tests that involve humans facing off with computers (which happens to be the format of much digital learning software today, including essay graders) may reveal something even darker than just inaccurate portrayals of learning, since it is difficult to tell whether "a machine has gotten smarter or if you've just lowered your own standards of intelligence to a degree that the machine seems smart" (p. 32). His warning helps me make sense of my misgivings with allowing computers to score students' personal writing: such educational technology is tempting in its efficiency, but it tends to privilege an algorithm over students. Some questions, however, remain. Do we completely abandon these tools because of their flaws? Is it possible for future, more sophisticated programs to be developed that could better measure our essays and motivate improvement for the idiosyncratic ways we make meaning through words?

Final Thoughts

You Are Not a Gadget is most likely not the type of book that practicing educators will race to grab off the shelf to read after a long day with kids. Its philosophical reach and fragmented, subtitle-cluttered format (noted with irony, due to Lanier's constant critique of the "fragmented" nature of online communication) make it at times brilliantly original, and at other times, difficult to follow. Lanier's manifesto reveals a very eccentric brand of brilliance, the type you expect to emerge out of a land of virtual reality and neuroscience. Readers may very well find themselves nodding emphatically to his points one moment, and the next, unsure whether to laugh at his ridiculous logic or feel embarrassed for not following him. But these very weaknesses are also his strengths. Lanier doesn't employ accessible, well-worn metaphors or analogies. It is his fresh language and original ideas that make his manifesto well worth reading for an educator.

Lanier's book, for instance, helps reframe the college classroom incident described in the opening of this article. The failure of the pseudo-Twitter activity from the opening vignette could be linked to identity, because student contributions were anonymous and the "mob-like," juvenile behavior that ensued should have been expected. Or we could think about the unsatisfying student participation in terms of the way the design of the media promoted poor quality production: students are accustomed to using their cell phones for social purposes and the

speed with which the comments were texted to the front of the room discouraged thoughtful, careful participation. Or there were the myriad ways the choice of this platform for informal assessment of comprehension of the article was a poor choice, as it caused issues of poor design to be transformed into issues of poor pedagogy.

Of course, limitations plague every educational tool, from the traditional textbook to forum-based discussion. But the danger comes not in using imperfect tools in an imperfect system or culture, but in being unaware of the potential pitfalls of the new, the shiny, and the digital. Lanier's work is one contribution to a growing field of thoughtful critique regarding the digital landscape we find ourselves in, and if we, as the educational community, are willing to read with an open mind, his contrarian spirit may encourage us to consider more thoughtfully the paths we are on and whether we can (or should) consider different destinations.

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