The "Educative Potential" of 21st Century Technologies

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I am honored to have the opportunity to respond to Ana Martínez-Alemán's article. It is meticulously crafted, well-referenced, and subtly argued. I find little to disagree or even to quibble with. Therefore, my comments are intended to highlight the article's richness, suggest a broader generalization of its thesis, and explore some possible extensions of its work.

Ana's primary concern is with the effect that contemporary digital technologies can have on the formation of democratic communities across difference on college campuses. Using John Dewey's theory of communication's role in democracy, she shows that any technology that affects communication potentially has an effect on the democratic quality of those communications, and of any communities utilizing the technologies.

Ana shows that Dewey was nostalgic for the face-to-face, proximal, un-mediated communication of pre-industrial societies, and was skeptical whether the use of the relatively modern electronic technologies of the late 19th and early 20th century would enhance or diminish the depth, range, and shared meaning of communications, and thus affect democracy in positive or negative ways. Of particular concern to Dewey was the possible depersonalization, decontextualization, and de-reciprocalization of communications that might result from having communications take place across broad distances or in a one-to-very-many mode (such as with radio or motion pictures). Dewey simply didn't know what the long-term effects might be (and, of course, neither did anyone else!). At least in this

respect, Dewey cannot be accused of blind scientism or technophilia. Rather, like a good inquirer, he was withholding judgment prior to seeing the data. We, of course, should do the same thing.

But, you may argue, we've had 65 years since Dewey's death to watch the effects of the telegraph, telephone, radio, motion pictures, and even TV on democracy, not only in the United States, but around the world. We should be able to form a fact-based consensus on whether new technologies such as these enhance or diminish democracy. Shouldn't we?

Of course, in addition to those relatively modern technologies that Dewey was dealing with in the early 20th century, we now have considerably more tools to consider. Television has metastasized from three or four networks and a few major local stations to hundreds of cable channels and even to streaming upon demand, allowing for individualized content chosen on a momentary whim (or, perhaps, in the frenzy of binge watching). Radio, especially if we include Internet radio, has similarly exploded. And that doesn't even begin to encompass the myriad and multimedial communications available through the Internet, World Wide Web (1.0, 2.0, 3.0, etc.), apps, cell phones, video conferencing, virtual reality, augmented reality, and on and on.

(I just would like to pause here, for just one second, and explicitly acknowledge that it's no wonder we are overwhelmed with technological change and can be excused for not really knowing how these many tools actually affect communities in general or even our own communities. Change is accelerating, and we simply aren't prepared for it.)

I don't think we actually *have* a fact-based consensus on the effects of even *19th century communications technologies* on the democratic quality of communities, local and distant, let alone 20th century or 21st century technologies. This lack of consensus has several likely causes, not least of which is a lack of agreement about what democracy is, or

how to operationalize it. Surely we can agree that democracy (in its most general meaning) has increased globally during the last 200 years, despite a few significant bumps along the road. But has this been a result of the spread of new communications technologies, or other profound changes such as industrialization, urbanization, massive increases in literacy, or globalization? And can we even separate out the technological aspects of these enormous changes?

The import of all of this is that I don't think we actually *can* answer the question of whether a given communication technology enhances or diminishes democracy, because the answer is, "it depends." None of these technologies are introduced one-by-one into carefully controlled laboratory conditions, and as soon as you try to examine effects under real-world conditions, confounding variables, ever-changing situations, and the ongoing evolution of culture inhibit clear conclusions. I suggest that we can even argue ontologically or metaphysically that a given technology is *never* isolable from the context in which it is utilized.

Thus it is with the relatively new social media technologies such as those that Ana focuses on in her article. What are the effects of social media on the democratic quality of communications on college campuses, particularly with regard to communications across difference, involving especially students of color and first-generation college students?

I believe Ana has dealt with this question in the final section of her article. The answer: It depends.

I'd now like to introduce a visual prop to help me make my next point. Imagine me as Jack Zuckermusk, or some-such tech wizard …

[Picks up bag, "drum roll, please" … pulls out Agora 2.0.}

Ta-da! May I present to you … my newest invention

... Agora 2.0.

Agora 2.0 is designed to facilitate conversations across distance, involving as few as two and as many as … ten participants. The communication stations, or nodes, are differentiated in color and size and shape to facilitate diverse users, with the designed-in goal of increasing the number, quality, and depth of democratic communications across difference. All that is necessary ("wink wink") is to introduce this device into the shared spaces of any college campus (the student union, the quad, the rec room, the dining hall) and Voila! New, richer, multi-dimensional democratic communication!

Look, it'll even work here in this room!

[pause]

Well, come on, have new democratic communications across difference! Do it!

[pause]

What's the matter with y'all? Don't you know how to use the device? Here, let me teach you!

[pause]

Hmmmm … You don't seem to be utilizing the democratic potential of this new tool.

Can I ask, why not?

Clearly, this little demonstration was contrived and somewhat ridiculous. But I think you see my point. No communications tool is, all by itself

and without external "guidance," going to push communication in the direction of "democratic." Even something like Twitter, which has proven to have democratic potential in certain situations such as the Arab Spring, isn't *inherently* or *intrinsically* democratic.

Like any other tool, the *effect* of the *use* depends. On the context. On the intentions of the users. On the *un*-intended consequences of the use. On what kinds of scaffolds or supports the users have access to.

Even though the Indian villagers in Sugata Mitra's experiments with the *Hole in the Wall* showed that the villagers utilized modern technology without any external training whatever, it's not clear that such use was democratic in effect(Jagodzinski, 2017).[1]

Democracy, I want to argue, isn't an unintended consequence of the use of a communication technology. It doesn't just "happen." It requires intentionality on *someone's* part - hopefully, on the part of the users. This intentionality might arise "organically" or out of the inherent conditions of the use or, more likely, it will come from someone, perhaps a college administrator, or faculty member, or community organizer, or protest leader, interjecting something into the situation. Perhaps a "nudge."

The conclusion to Ana's article is both unsurprising (if you've thought about the effects of communication technologies in any of the ways I've suggested here) and hugely significant. Yes, first-generation college students and students of color need "nudging" to use new communication tools in ways that increase the democratic quality of their interactions with others on campus. This "nudging" can be undertaken by campus administrators as part of campus-wide social initiatives, or by college faculty members, as part of course requirements. (I am especially interested in the latter, because all-too-often, those administratively-initiated activities are divorced from academic or even educative ends.)

This is unsurprising, because we've known for some time that the development of strong democratic community in, for example, online courses requires specific and strategic instructional interventions. People don't just pick up a new tool and automatically start being more democratic.

This is hugely significant, because it acknowledges and explicates the universal truth that new technologies don't change *anything* in a particular direction. *Intentionality* and *dissemination of intentions through scaffolds and supports* are required. This realization has gradually dawned on pre-K-12 educators, and now must be embraced by those involved in higher education.

By the way, Ana knows considerably more about this than she lets on in this article. Earlier this year, she and her colleagues released a book on the subject, *Technology and Engagement: Making Technology Work for First Generation College Students*, which offers many specific strategies.[2] I highly recommend it.

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1 jan jagodzinski, The Precarious Future of Education: Risk and Uncertainty in Ecology, Curriculum, Learning, and Technology (New York: Palgrave, 2017).
2 Heather T. Rowan-Kenyon, Ana M. Martínez-Alemán & Mandy Savitz-Romer, *Technology and engagement: Making technology work for first-generation college students* (New Brunswick, NJ: Rutgers University Press, 2018).