...are working to ensure that any movement aiming to retrieve the "civic" from the margins must include the nation's community colleges and our students.

NOTES

1. The mission of the Foothill-De Anza Foundation is to change student lives by raising and investing funds to support the educational excellence of Foothill and De Anza Colleges. See http://www.foundation.fhda.edu. 350.org was founded in 2008 as a global climate movement to link climate-focused campaigns, projects, and actions by people from 188 countries who lead from the bottom up. See http://www.350.org.
2. The DREAM Act is a piece of bipartisan legislation designed to provide qualified undocumented immigrant youth eligibility for a six year long conditional path to citizenship. At the time of this publication, the DREAM Act legislation has not been passed into law. See http://www.dreamact.info.
3. For further details about the California Community College System, see http://www.cccco.edu.
4. For further details about LEAD, see http://www.deanze.edu/lead.
5. For further details about IMPACT AAPI, see http://www.deanza.edu/impact-aapi.

Making Civic Engagement Matter to More Students: Expanding Our Reach and Improving Our Practice

Paul LeBlanc

MANY PEOPLE FEAR that online education makes it harder to support civic education and engagement, worrying about isolated and alienated students (the antithesis of civic engagement, really) sitting behind computer screens at home and alone. It need not be so. In fact, a new generation of degree programs—online and competency based—can actually empower previously marginalized adult learners from around the globe with new knowledge and powerful tools to shape their worlds, while dramatically improving and expanding civic education and engagement. Because these programs largely serve adult learners—the majority of college students today—they also expand civic engagement's generally narrow focus on traditional-age students in residential "coming of age" settings. While these next-generation competency-based approaches are still new, they have remarkable potential to make civic education both better and more broadly available.

First, some background. Southern New Hampshire University made history in April 2013, when its College for America (CfA) degree program became the first competency-based program to be approved by the US Department of Education. While competency-based programs have been around for a long time, CfA is the first approved program fully to untether from the three-credit-hour construct, or Carnegie Unit. Working online and at their own pace, CfA students must demonstrate mastery of 120 competencies—there are no courses or classes—and they can go as fast or as slow as they like. The first CfA graduate went from zero credits to completing an associate's degree in only three months, because in CfA learning is fixed and time is variable. The key breakthrough with CfA is a fundamental reversing of the Carnegie Unit, which makes it very easy to report how long students have sat in classrooms, but not to measure what they actually learned while there.

Competency-based education, by its very nature, is very clear about the claims it makes for student learning, and it is complemented (or should be) by well-designed assessments that force students to demonstrate mastery. In contrast, traditional higher education tends to be much less precise about what graduates *actually know*, with the exception of fields where there is rigorous third-party certification (think nursing boards for nursing or the CPA exam for accountants). Indeed, much of traditional higher education actively resists such accountability.

Commensurately, at most institutions, civic engagement often feels squishy—ill-defined, poorly assessed, and touching only a percentage of the graduates. In a program like CfA, there is no room for the ambiguous or ephemeral. There are well-defined competencies related to civic learning, engagement, and responsibility, and students complete projects that concretely demonstrate their mastery against rubrics that reviewers use to assess the work.

IMPROVING OUR PRACTICE BY CLARIFYING OUR CLAIMS

CfA includes competencies necessary to participate fully as citizens in the broader society (e.g., critical thinking, communication skills, media literacy) and pays special attention to ethics and social responsibility in various key societal contexts (science/technology, media, business). More importantly, competency-based education does not have to be vocational or merely utilitarian, as some traditionalists fear; the work can require higher-level thinking and critical analysis, and it is well-suited for the kinds of learning widely associated with civic education. Moreover, by resting on a strong foundation of clear competencies and well-defined rubrics required for demonstration of mastery, competency-based education offers greater clarity about learning than do many traditional programs.

In an exploration of torture, for example, the competencies include the ability to describe major traditions in moral philosophy, to identify key figures in the field of moral philosophy and explain their views, and to identify and evaluate ethical arguments. Other competencies include the ability to research, write, and edit one's own work. Every student has to complete these competencies; there is no sliding by with a B or C (one has either "mastered" or "not yet"), and they are not "add-ons" to the educational experience. These competencies are built in and expected of everyone with the CfA associate's degree. In terms of rigor, accountability, and quality, competency-based education is transparent and coherent in ways that the mere "weaving in" of civic learning is not. Built into the program as it is with CfA, no students are left out.

To illustrate, one area of study for the associate's in general studies degree requires that students examine ethical perspectives. In this area, students explore a variety of essential ethical questions—whether torture is ever justified, for example, or whether people should be able to sell their own organs. In another area of study, students consider the environment by examining the environmental impacts of common products—like bottled drinking water—and show whether they can both calculate the specific carbon footprint of the industry and generate solutions to mitigate it. Students must show that they can identify and analyze ethical issues raised by scientific and technologic developments by analyzing the infamous Johns Hopkins Lead Paint Study (in which researchers put children in potentially dangerous living situations) and determining whether or not it violated ethical principles of science.[1] They engage in questions about globalization and the meaning of "corporate responsibility." They look at advertisements and examine the ethical issues involved—for example, in marketing to children. They also read important thinkers on the questions under consideration. For example, in the torture example, students read Michael Sandel's *Justice: What's the Right Thing to Do?* and Sam Harris's "In Defense of Torture,"[2]

and they study Mill on utilitarianism and Kant on duty-based ethics. Their work is assessed against a well-defined rubric that asks them to spot issues, apply relevant philosophies, provide evidence for their analysis, and identify ethical flaws in the argument. In these examples, students engage very explicitly with the kinds of thinking, analysis, and application of ethics that support civic learning. In CfA, there is greater clarity of claims about and confidence in the actual learning (and the ability to demonstrate both) than most institutions possess. And because these elements of civic learning are explicitly built into the curriculum, they become crucial to it. Students cannot graduate without completing these competencies, and they are not the tangential add-ons one sees in many institutional efforts.

Not only can competency-based education offer a way to strengthen what counts as civic learning but, by leveraging its lack of geographic boundaries, it can also broaden definitions of community in ways that more traditional campus-based efforts tend not to do. As Dan Butin noted, the great majority of faculty members think about civic engagement in terms of local community.[3] But CfA's online programs collapse traditional assumptions about what community means. For CfA students, enrolling through their employer and interacting with colleagues in multiple sites, the "company" can become the community. By enlisting employer engagement in ways that colleges usually do not, CfA is altering the way students "live" within that community of work: they now forge relationships with fellow employees across the company (and its multiple sites), are newly empowered within the workplace, and have a higher level of recognition and, thus, responsibility with their employer.

CfA can push the boundaries of community much further in online programming. In a discussion of environmental issues, online students can be part of a global community addressing a global issue. In this case, civic learning becomes less a case of the privileged "helping the needy"—as so often is the case in service-learning programs, for example—and more a case of genuine engagement with "others" whose claim to a stance on the environment is no less privileged than that of students in the United States. Or in another example, stereotypical and clumsy claims about the veil in Islam might have a very different hearing when students in the class are logging in from Saudi Arabia and Qatar and Paris. The problems that need to be solved today—whether related to climate change, economic inequity, fundamentalism, or corporate irresponsibility—extend well beyond the more localized sense of community that most faculty members favor. In a globally connected world where coal burning in China affects air quality and asthma rates in Chino, California, and where a Koran burning in Florida results in rioting and deaths in Pakistan and Afghanistan, online platforms and tools allow for the global definition of community and, thus, civic engagement in ways that traditional classrooms can't touch.

SERVING MORE STUDENTS AND EXPANDING OUR IMPACT

However, the starting point with CfA students is often not that of getting them to think beyond their local communities; it is, rather, to start with a recognition that they are part of a community *of any kind.* Discussions of civic engagement

and learning almost always assume that students are eighteen-year-olds in traditional coming-of-age residential four-year colleges. But according to the National Center for Education Statistics, that student profile is a distinct minority today.[4] Online programs mostly serve older adults for whom education gets squeezed between the demands of family and work. For CfA students, the world has often found ways to exclude them from community through conditions of poverty, dysfunctional neighborhoods, alienated and disrespected labor, and more. Yet these students deserve and need the benefits of civic learning and engagement no less (perhaps much more) than their traditional-age peers.

I would go a step further. The need to *re-engage* civically might be even greater for the student most marginalized by traditional education and often by society at large, for one who has never felt a sense of "mattering," as Brown Sociologist Greg Elliott and his colleagues use the term: "A relatively new concept, 'mattering' is the belief persons make a difference in the world around them. Mattering is composed of three facets—awareness, importance, and reliance. Do others know you exist? Do they invest time and resources in you? Do they look to you as a resource? Elliott asserts that mattering is the fundamental motivation in human beings. 'Above all else, there's a need to matter,' he says."[5]

CfA students are often hourly workers in food processing plants, convenience stores, and manufacturing plants, and most are long removed from education at any level. Statistically, they are much less likely to be civically engaged than their college-educated peers (in our increasingly socioeconomically divided society, they probably don't have many college-educated *neighbors*), and they come to CfA with little perceived social capital and few tools to leverage it. So, to the extent that it addresses those needs, the *delivery* of the CfA program is proving almost as powerful as the competencies and topics included in the CfA degree.

CfA students engage with the CfA community, both online and in person, in a variety of ways in order to build their own learning and, eventually, professional networks. Students become members of a learning community while completing their competencies through peer interactions—asking and answering questions, providing feedback, sharing resources, and celebrating successes. However, in the CfA model, students are also asked to think about and leverage other resources in their lives. They are asked to name an "accountability partner," someone whom they can trust to keep them on pace and on task (the way a "gym buddy" increases the likelihood that one will get out of bed and to the gym to work out). They are asked to think about workplace mentors upon whom they can call for help. Some activities require students to work in teams, and all students get a Southern New Hampshire University coach who supports them throughout their degree program. Maybe the most powerful motivator is the way employers let CfA students know it matters to them that they are enrolled. While most employers simply sign off on tuition reimbursement, CfA employer partners are encouraged to let their employees know they care and are invested in their success.

The first step in becoming engaged in the community—in any community—is to think of oneself as first belonging and then as empowered—a sense that grows with CfA students, who form workplace "meet ups" on their own and find ways to support each other. CfA then builds on that sense of community with requirements

that they start engaging in professional networks such as LinkedIn as part of a competency called "establishing a professional presence." In fact, social capital theory and social media tools are a critical part of CfA's design. The CfA portal allows students to see who else in their company is enrolled (in design studies, students identified this as very important to them), who else is working on the same competencies, and who else has successfully completed which competencies (since they might then become a peer-to-peer learning resource). CfA has no instructional faculty, so this peer-to-peer engagement serves learning needs while also building a sense of community. It does so not only from a sense of belonging and shared experience, but also through the empowering confidence that comes from helping peers.

As important as the interactions between students are the specific tools that enable them. For example, all CfA students are asked to join a Google Plus Community—a social networking site that allows students to connect with each other and other mentors in CfA. Using that powerful platform, students can do the kind of interactions described previously: ask questions about the projects they are working on, about technical issues, or about the program more generally. Information technology and academic experts monitor the community to answer questions, but more often than not, other students will respond before those experts get a chance. All the coaches are also active in the community, posting resources on success strategies and tools for completing academic work. The Google Plus community also allows students to connect with each other privately in order to collaborate on team projects or to discuss other issues that might be important to them. CfA employs a range of other Google tools to support academic work and community building as well. Students check in with their coaches, complete team projects, and submit presentations over Google Hangouts—a free video-conferencing service. They use Google Docs to critique each other's writing.

The first step in becoming engaged in any community is to think of oneself as belonging and then empowered

To some extent, it is taken for granted that traditional-aged students have some facility with such tools. But for the adult students CfA serves, these are tremendously empowering tools to master. Social media tools are now critical components of any community interaction at any level, from organizing fundraising walks to political campaigns to rebellions in the Arab World. Not to possess mastery of these tools is to be marginalized and often left out; digital literacy is becoming as important as reading and writing. CfA provides practice in the use of these tools, models their application, and demonstrates their power. The extent to which students answer questions before the staff do, or organize meet-ups offline, or go out to access resources and people outside of the CfA program and community provides assurance that they are being equipped with some elements of the essential toolkit of modern civic engagement in a society of technology haves and have-nots.

There is a core assumption in all that has been thus far outlined: that CfA graduates will take all they have learned, the tools they have mastered, that sense that they matter, and actually become more civically engaged after they graduate.

This is something that will be assessed and tracked over time, as the first CfA graduates have been—and as should also be done for the civic engagement programs in more traditional settings. In the meantime, if one were designing a new program for civic engagement at one's institution, the following would be a pretty good checklist of priorities:

- Be very clear about how civic engagement is defined, measured, and built into the curriculum.
- Include ethics education across fields and areas that shape community and civic life (such as media, corporate responsibility, the environment, and more).
- Expand the definition of community and make sure students engage with others who are quite different from themselves on some sort of equal footing.
- Give students the technological tools to engage in this way.
- Provide students with a sense that they matter and that they have social capital, and provide them with the ability to be agents of improvements in their own lives and in the lives of others.

College for America does all of this, and it does not look at all like traditional higher education. In fact, in this new phase in higher education—disaggregated, online, focused on outputs and not inputs—we can rethink not only degree programs, but important learning in areas like civic engagement. In the world of competency-based education, if you say civic learning matters, then the test of that conviction is transparent, straightforward, and rigorous. More importantly, CfA is reaching out to people traditionally excluded from higher education and civic education, and empowering them to have better work, to be full and better citizens, and to have the knowledge and tools to improve their communities.

NOTES

1. For background on this study, see Tamar Lewin, "U.S. Investigating Johns Hopkins Study of Lead Paint Hazard," *New York Times*, August 24, 2001, http://www.nytimes.com/2001/08/24/us/us-investigating-johns-hopkins-study-of-lead-paint-hazard.html.
2. Michael Sandel, *Justice: What's the Right Thing to Do?* (New York: Farrar, Straus, and Giroux, 2009); Sam Harris, "In Defense of Torture," *Huffington Post*, October 17, 2005, http://www.huffingtonpost.com/sam-harris/in-defense-of-torture_b_8993.html.
3. See Dan W. Butin, *Service Learning in Theory and Practice: The Future of Community Engagement in Higher Education* (New York: Palgrave Macmillan, 2010).
4. See Frederick Hess, "Old School: College's Most Important Trend is the Rise of the Adult Student," *The Atlantic*, September 28, 2011, http://www.theatlantic.com/business/archive/2011/09/old-school-colleges-most-important-trend-is-the-rise-of-the-adult-student/245823.
5. Brown University, "For family violence among adolescents, mattering matters," news release, April 18, 2011, https://news.brown.edu/pressreleases/2011/04/mattering; see also Gregory C. Elliott, Susan M. Cunningham, Melissa Colangelo, and Richard J. Gelles, "Perceived Mattering to the Family and Physical Violence within the Family by Adolescents," *Journal of Family Issues* 32, no. 8 (2011): 1007–29.

5 | Rethinking Higher Education: Olin College of Engineering

Richard K. Miller

WHY START OVER?

Established in 1938, the F. W. Olin Foundation developed a wonderful legacy in higher education over more than fifty years. The foundation provided the funding for seventy-eight buildings on fifty-eight university campuses, including many well-known universities like Cornell, Johns Hopkins, the University of Southern California, and Vanderbilt, as well many smaller colleges such as Bates, Macalester, Kenyon, Babson, Harvey Mudd, and the Rose-Hulman Institute. However, the foundation decided in 1997 to suspend their building grants program and consider instead establishing an entirely new institution from the ground up. The members of the foundation were concerned about making a positive difference and had noticed that there was a great deal of unhappiness about the way engineering was taught at the time. After consulting with officials at the National Science Foundation and the Accreditation Board for Engineering and Technology, they concluded that what was needed was not simply a new course or degree program here and there, but a whole new mindset. Therefore, nothing short of establishing an entirely new institution would provide the necessary opportunity.

Before reaching this radical conclusion, the members of the foundation first considered the alternative of giving the money to an existing technical university that was already doing things quite well. In addition, they also considered establishing a new college of engineering within an existing university that did not yet have an engineering program. However, they had concluded that the dominant culture in higher education was the primary factor responsible for resistance to the changes that were needed. So, unless a change in culture could be established, the improvements that were sought were unlikely to be sustained. Starting over provided the best chance of achieving the cultural change they sought.

Concern about engineering education continues to this day, and has become more widespread and better recognized. Symptoms of the underlying problems include the following: (1) less than 5 percent of the bachelor's degrees offered nationally go to students who majored in any kind of engineering; (2) about half of all entering freshmen who choose engineering as a major will not graduate in engineering; and (3) less than 20 percent of all students majoring in engineering are female. In addition, and perhaps of even more importance, the National