Reskilling Urban Manufacturing: Workforce Solutions from the Inside Out

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In the United States, a four-year college education has gradually come to be assumed as a prerequisite for entry into the middle class. This is troubling, as more than half the country's working-age population lacks this credential. Rather than being driven exclusively by a "college for all" mentality, argues Nichola Lowe, policymakers should strive for an economy in which social-mobility strategies are also embedded in the workplace, activating internal structures within firms that support and reward work-based learning. Led by nonprofit organizations and community colleges with collaboration from employers and employer associations, workforce intermediation strategies are an important enhancement to conventional urban and regional economic development practice.

Each semester, in my course "Planning for Jobs", I introduce students to a young South Carolinian named Maddie. Her story is documented in a thought-provoking essay by Adam Davidson,[1] co-host of NPR's *Planet Money*. Maddie's story, portraying a 22-year-old single mother with only a high-school diploma living in Greenville, sheds light on the "job crisis" facing many low-income Americans who are trapped in dead-end, low-wage, mundane employment situations. For Maddie, who works in an auto-parts factory manufacturing specialized fuel injectors, work involves routine tasks that in the near future will likely be completed by a robot replacement. According to Davidson, Maddie's fate (and that of her low-income compatriots) is sealed by a lack of a four-year college degree. By implication, more than half of America's working-age population has failed to secure a golden ticket into the middle class.

As an assignment, I then ask my students to imagine a different future for Maddie—but with the important caveat that they cannot propose she leave her job to pursue a traditional residential college degree. They must propose an alternative pathway into the middle class that is embedded in her daily work experience and where improvements must stem from changes to the job itself: how it is organized, how it is managed and how it gets valued.

Like Maddie, my students are sharp, scrappy and creative. Their proposals often share similar elements: mentoring opportunities that bring Maddie into closer contact with engineers and product designers; dedicated time for problem-solving with co-workers who recognize the machine Maddie is assigned to sometimes generates sub-standard parts, thus creating an opening for guided discussion and worker input; and finally, employer-sponsored training—formal on-the-job structures, for sure, but also coursework supported through a tuition reimbursement scheme or flexible work schedule that augments her existing strengths in high-school math and science. And they often propose Maddie earn more as she learns, moving up the organizational and occupational ladder.

Yet in light of his conviction that Maddie and others like her should leave dead-end jobs to pursue a college degree, Davidson considers none of these possibilities. Are my students naïve? Is Davidson describing a labor market inevitability—a world in which work is less critical and

[1] See: www.theatlantic.com/magazine/archive/2012/01/making-it-in-america/308844.

education crucial for social mobility? Or, rather, should we interpret his essay as a cautionary tale that we might be overselling the "college-for-all" assumption in ways that exacerbate our national job crisis?

Beyond "College for All"

Expanding educational opportunity is laudable and must remain a national priority. Still, as currently framed—with college education presumed a prerequisite for a quality job[2]—we as a society risk undervaluing alternative pathways through which employers support work-based learning and with it standards of "decent work".[3] We also encourage US employers to relinquish even more of their internal training responsibilities and, in the process, disrupt an essential channel through which firms learn to value and commit themselves to their existing workforces (Doeringer and Piore 1971; Osterman 2000; Appelbaum and Batt 1994).

In advocating that skill development be reconnected to work and recognized by employers as a shared responsibility, my goal is not to suggest that we swing the pendulum back to an older era in which companies were expected to "grow their own" talent. Doing so ignores the tremendous barriers that many small and medium-sized firms face in building and sustaining robust yet adaptive internal structures for training.[4] (Osterman and Weaver 2014). A louder call for employer participation in workforce development is not enough (Cappelli 2012). Instead, we need a policy commitment to build different kinds of skill-development support systems that activate external institutions to help achieve goals in the workplace.

A promising approach is offered by *workforce intermediaries*, nonprofit organizations that mediate the relationship between employers and employees with the primary goal of improving wages and career advancement opportunities for less-educated and low-income individuals. Early leaders in workforce intermediation include San Antonio's Project Quest, New York City's Garment Industry Development Corporation, Detroit's HOPE and Milwaukee's Wisconsin Regional Training Partnership. Today, workforce intermediaries are estimated to number around 1,000, with large numbers specializing in manufacturing. Many intermediaries support skill development by helping jobseekers and incumbent workers gain access to external educational and training programs, including those offered at community colleges. But on the employer side, they also intervene to help firms formalize internal structures for supporting and rewarding work-based learning—structures that help employers recognize a wide array of skills and expertise within their existing labor pool that can also be a resource for worker training (Lowe 2015; Conway and Giloth 2014). The goal is an integrated approach that intentionally combines training opportunities both internal and external to the firm, ultimately making skill a shared responsibility of employers as well as educational institutions and individual workers.

Testing the model

A few examples from US metro areas are especially noteworthy.[5] The Jane Addams Resource Corporation in Chicago has been able to draw on 30 years of experience as a nonprofit training provider to help small and medium-sized manufacturers create in-house apprenticeships. They launched their apprenticeship development program in 2012, initially supporting a small manufacturer of machined bearings. That firm, Trelleborg Sealing Solutions, had struggled to

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2 See, for example: www.huffingtonpost.com/2015/01/09/obama-community-college_n_6445578.html.

3 See: www.ilo.org/employment/about/executive-director-office/statements-speeches-old/WCMS_180801/lang--en/index.htm.

4 See, for instance: http://bostonreview.net/forum/suzanne-berger-how-finance-gutted-manufacturing.

5 These examples draw from an essay by the author published in *Pacific Standard Magazine*'s "Future of Work" series. See: www.psmag.com/business-economics/the-future-of-work-encouraging-employers-to-train-workers.

recruit enough skilled machinists to run new, computer-controlled equipment. Jane Addams helped this firm—and eventually six other Chicago-area manufacturers—realize the benefits to supporting internal training through apprenticeship and create opportunities for incumbent workers to advance through the development of new skills and responsibilities. The nonprofit customizes each apprenticeship program to reflect firm-specific technology needs, but always with an eye towards worker advancement. Jane Addams places its own trainers at the work site. They make use of company time and equipment and they also prepare more experienced workers at these firms to mentor others on the job. In this regard, they help to instill a "culture of learning" across the entire organization, such that workers seek out additional education and training opportunities, which supervisors equally encourage and support.

Jane Addams has even convinced two manufacturers to certify their apprentices through the National Institute for Metalworking Skills (NIMS)—a nationally and industry-recognized credential. While some companies might fear a portable credential like NIMS would encourage workers to leave, in this case it is presented as an employee benefit. As such, it is seen as further proof these companies value their workforce and helps increase employee loyalty to the firm.

A second example from North Carolina's Charlotte metro area is a new initiative by the Central Piedmont Community College (CPCC) that is modeled after Apprenticeship 2000—a 20-year training consortium that was started by two foreign-owned manufacturers based on training systems common to Europe. Apprenticeship 2000 maintains its small size, with just seven core manufacturing partners. CPCC is expanding that model to reach other firms through its new program, Apprenticeship Charlotte. In particular, they are targeting American-owned manufacturers by drawing attention to performance and innovation gains for participating firms in Apprenticeship 2000.

CPCC helps these apprenticeship newcomers recruit from a wide applicant pool, including military veterans and current college and high-school students. The college also has a team of apprenticeship coordinators and counselors who do much of the heavy lifting when it comes to class scheduling—ensuring apprentices use their time efficiently at the college so they can spend the largest portion of their workweek at a company, earning wages as they learn on the job. This coordination helps the apprentice be successful both academically and professionally. It also sets them up for earning an associate degree, but with little to no college debt. Some employers offer scholarships for additional undergraduate and graduate education upon completion of the apprenticeship, making these jobs especially appealing to parents of the millennial generation, who are looking for less-expensive alternatives to the standard four-year residential college experience for their children.

Admittedly, not all workforce intermediaries are in a position to play this influential role, often because they lack sufficient financial resources to dedicate considerable staff time to employer engagement. A crucial next step is increasing the visibility of these strategies and showcasing their relevance to national urban and metropolitan policy. An opening exists, thanks to a new federal mandate to use sector-based workforce intermediation to deliver state and federal workforce-development funding. Also crucial is growing policy interest in urban manufacturing; here, intermediaries could target services at small and medium-sized manufacturers in cities and help them extend employment opportunities to underserved populations, including unemployed youth.

Workforce intermediation as urban economic development

Conventional place-based economic development policies, in emphasizing job creation and revenue generation at all costs, often pay too little attention to job quality and other complex issues surrounding the future of work. With their focus on innovation, upskilling and opportunity for people historically on the margins of the primary labor market, workforce intermediation strategies are an important enhancement to "business as usual" in urban and regional economic development

practice. A robust institutional infrastructure designed to increase employer commitment to skill development can help give people like Maddie alternatives to the "college for all" route into the American middle class. And it can support the innovation systems needed to make US metropolitan areas competitive locations for advanced manufacturing production.

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