

Build Upon the Strength's of America's Community Colleges

By James Jacobs¹

In February 2009, Macomb Community College held an unusual student “graduation” in a suburban office building. There were 25 “graduates”—all males, many of whom had 10 to 15 years of experience as auto body designers working for original equipment manufacturers (OEM's) and their suppliers in the Detroit metropolitan area. They were all former graduates of the college's Auto Body Design program. They were also unemployed, because their skills were no longer needed, a result of the downsizing of the domestic auto industry. However, with support from the local workforce board, these individuals had just completed a college course to transition their auto design talents into designing nuclear power plants, petroleum refineries, and new subways being built overseas. They were mastering the lexicon and techniques of design due to collaboration with Macomb College and a local employment service firm, Talascend, which was going to market them to companies in the Southwest with a need for design talent. The end goal, however, was not for these individuals to leave the Detroit area. Rather, the strategy was to seek design work that could be brought back into their community, creating new markets and new opportunities for designers.

This project is one small example of how community colleges are working to create new jobs and economic opportunities in auto-impacted and other older industrial metros throughout the Great Lakes region, and around the nation.² In fact, there is a community or technical college within 30 minutes of every major center of auto production in the United States. These institutions, which were created by state and often local policies, have the potential to serve as a vital part of a federal response to the needs of these communities as they struggle to regain their economic footing. This paper examines that potential. It will outline the challenges that community colleges face under current federal policy, as well as suggestions for specific reforms that would significantly strengthen their capacity to provide the specialized training and education workers and businesses in the Great Lakes region need to compete in the next economy.

America's Challenge

While there is no single “technical solution” to the issues faced by auto-impacted and other older industrial communities in the Great Lakes region, there are a set of common challenges these areas face that community colleges can help to resolve:

Many dislocated auto workers lack in-demand skills. Traditionally, the auto industry did not emphasize formal education and featured strong unionization of the domestic manufacturing plants, providing little incentive for auto workers to maintain formal skills to hold relatively high-paying jobs. Despite 30 years of downturn in the industry, these individuals chose to remain on auto companies' payrolls in large part because of the

relatively good wages and benefits.³ Dislocated auto workers are very vulnerable in today's economy. Unless jobs are available in other local unionized manufacturing establishments, they are unlikely to find work at any where near their former wages. They often lack technical skills applicable to other industry sectors, and, most importantly, lack the foundational knowledge on which technical skill development is often based. Local workforce providers, including Workforce Investment Boards (WIBS), can have extreme difficulty in placing these workers in technical programs requiring some post-secondary education—let alone in fields in which access to higher-paying careers may be possible. Unfortunately, many workforce boards ignore this issue and offer whatever job training will result in immediate employment opportunities, regardless of their long-term sustainability.

Not every autoworker is immediately interested in retraining or is prepared to attend a community college. Indeed, experience indicates that many workers—especially those over 40 years of age—are often unable or unwilling to engage in long-term training that would position them for other work. Currently few institutions within auto communities—other than community colleges—have the breath to offer vocational counseling to these workers and match them with jobs they can easily transition into. By contrast, many younger dislocated autoworkers—especially those with some college—are very good candidates for retraining in sectors with opportunity for local employment growth. However, some of these workers may also be faced with significant basic skills deficiencies, which is a barrier to successful performance of college-level work. For them, integration of basic foundational skills within technical training would be an important learning strategy, but most traditional job training programs provide for technical training sequentially *after* foundational skills learning.⁴

There are some auto communities with substantial numbers of dislocated technical workers who have both college credits and years of experience, and who, with appropriate career counseling, could apply their skills in other sectors. Community colleges could be utilized to help individuals complete their four-year degree process as quickly as possible, and help them obtain jobs in industries that share technology they have already mastered. For example, Macomb Community College, with its local workforce development board and industry partners, initiated a program in which automobile technicians can be retrained for position in the growing defense industries in the Detroit area. Other community colleges have developed similar transition programs, such as retraining electrical engineers into designers of industrial equipment. Launching a program that pairs realignment of skills with entrepreneurial training would not only help individuals enter new fields, but provide them with the skills to create new businesses that will bring work back into the community.

In these efforts, community colleges can become extensions of the economic development interests of the community, using their education and training resources to grow and attract new industries. This may require collaborations with local business incubators to help determine the skills and education necessary for these employers to expand.

Incumbent workers often lack the skills needed to increase their productivity.

Workers remaining in the auto industry must continually upgrade their skill sets and adapt to a smaller, leaner auto industry. Despite significant downsizing, there are still large automobile plants whose overall workforce requires continual education and cross-training to sustain productivity gains. Moreover, as the auto market recovers, there will be hiring of new workers. For hourly workers, the emphasis should be on cross-training of mechanical and electrical skills to maintain, diagnose, and troubleshoot new computer-based in-plant machinery. This often requires skills in both mathematics and information technology (or “mechatronics,” as it’s dubbed by the Germans) that haven’t been incorporated into existing trades and maintenance programs. Within the industry, the current consensus is that an associate degree should be the entry level credential for hourly auto workers.

The demand for labor in Great Lakes metros is lagging. Focusing solely on the auto industry will not be sufficient for the economic development of the Great Lakes region. Community colleges need to enter the uncharted waters of stimulating demand for new industries and job creation efforts. This could be in industries that share many auto industry skills, such as defense manufacturing (particularly exporting parts for older equipment), new green construction products (solar panels, wind turbine parts), and industries based on new consumer trends (local food production centers, new entertainment or products). Efforts could also focus on vocational pursuits related to the unique characteristics of the community (power boating engine repair, hunting and fishing product developments), or developing sustainable service industries on a new, more uniform scale (computer networking operations).⁵ Sometimes it means new combinations of firms that develop new markets for their skills. For example, the diversification seminar and follow-up technical assistance developed by Lorain Community College, working with the Ohio Manufacturing Extensions Partnership MEP program (MAGNET) in Youngstown, Ohio, encourages networks of firms to cooperate in the development of products utilizing advanced material composites.⁶ Finally, it could mean stimulating entrepreneurial developments within communities to encourage new business formation. In southeast Michigan, automotive engineers are relearning machining skills to initiate new business start-ups, focusing on securing work in the growing defense manufacturing sector in the area. This requires an approach that combines knowledge of defense logistical and supply procedures, as well as planning and economic development skills.⁷

Limitations of Existing Federal Policy

Community colleges maintain a unique and formidable mixture of technical and academic faculty who can address the diverse needs of auto and other manufacturing industry workers.⁸ Many of these colleges maintain “advanced technology centers” that can provide adults with hands-on training for advanced manufacturing positions, for example. And many are stepping up their efforts to connect technical training with occupations that require four-year degrees—a break from the traditional practice of focusing technical training efforts solely on entry level jobs. Most community colleges have partnered with senior institutions to offer a range of options for pursuing four-year programs right on their campuses or in close proximity.⁹ In short, the modern

comprehensive community college has evolved into an organization that can not only provide effective short-term training for skills acquisition in non-credit programs, but also extend a bridge through its credit programs to four-year degree programs.

The federal government could build upon these strengths. Unfortunately, existing federal policies affecting community colleges do not harness this potential. Despite articulating an ambitious national goal of doubling the number of adults with post-secondary degrees, most programs focus on the distribution of funds—not on a strategic leveraging of resources to support education, job creation, and long-term economic development:

The federal government provides limited financial support for community colleges. Direct federal support for community colleges is less than one-third of federal funding provided to their four-year counterparts, despite the fact the majority of post-secondary students start at a community college. In fact, annual community college enrollment is increasing at more than twice the rate of that at four-year colleges, growing by 2.3 million students in the first half of this decade alone.¹⁰ The American Graduation Initiative would have been a start at rectifying that imbalance, but it was dropped by the administration in the final stages of the health care debate.

There is no common federal approach on how to make use of community colleges' capacities to aid with important national issues. While there are numerous “offices of community colleges” within a variety of federal cabinet agencies, these efforts are diffuse and uncoordinated. The lack of coordination intensifies three major federal deficiencies:

- **A failure to align adult education with preparedness for work and post-secondary education.** Federal policy is strangely bifurcated, whereby adult education is considered separate and distinct from either career or technical education/training. The legislation that established the Workforce Investment Act (WIA), for example, maintains distinct sections, along with different measurements of success. The Department of Education’s Office of Vocational and Adult Education, moreover, does not measure career preparation as a major element of its programs.¹¹ Indeed, in many states, adult education is only delivered through K-12 districts and has no direct ties to adult job preparation.¹²
- **A failure to adequately align workforce and economic development strategies.** The federal workforce system is designed to function as a short-run approach to help workers find an immediate replacement job and, if necessary, enroll in short-term training to prepare for another job in the community. While this may work in healthy labor markets, it is disconnected from the reality of communities suffering severe economic decline. In these communities, short-term training may be an important start, but it needs to link to a longer-term strategy that develops careers within a sector. In auto communities, short-term training, at best, can help the unemployed transition to lower-paying work, but it does not provide the educational

capacity to upgrade skills necessary for comparable employment in different industries.

This emphasis on short-term training can actually disadvantage community colleges, which tend to focus on medium- and longer-term interventions tied to entry into viable fields with enduring or growing prospects. Yet the distinctions between these approaches are rarely made. In fact, many local workforce boards maintain a “client-driven” system, falsely assuming that unemployed workers can effectively distinguish between training providers and “select” the training that best fits their needs. This remarkable surrendering of policy expertise and fiscal responsibility allows for beauty schools and bartender training academies to compete with community colleges program for students. So, despite significant public investment that typically makes community colleges much less expensive than local private providers—not to mention the long-term value of holding credentials from these recognized, degree-granting institutions—the local workforce development board treats the community college as just another “vendor.”¹³

- **A de-emphasis on manufacturing training and education programs.** In the absence of any sustained federal effort to promote manufacturing, let alone the auto industry, many community colleges have de-emphasized manufacturing programs in their regular credit offerings. The programs of choice for students, especially in manufacturing communities, have been in areas like health care and information technology—despite the fact that most economic development strategies in these communities, even those related to “green jobs,” require the development of manufacturing skills.

A New Federal Approach

The federal government can take several steps to better exploit the multiple strengths of community colleges, and enhance their role in regional job creation and economic development efforts.

(1) Federally supported dislocated worker training should be better aligned with long-term economic development strategies. Federal funding should be used to help support community colleges to assist dislocated and incumbent workers who want to enroll in degree programs that can help move them into—as well as help grow—new industries and careers. The State of Michigan, for example, has used federal funds to establish a program that guarantees two years of education to dislocated workers who were willing to enroll in a post-secondary “critical occupation” program—with promising results.¹⁴ Emphasis should be placed on ensuring that workers are able to build upon previous college credit and work experience to accelerate their advance toward a bachelor’s degree or other post-secondary credentials. The strong relationships between community college and four-year degree programs can promote these efforts.

(2) Federal adult education policies should be better integrated with post-secondary education, skills training, and employment opportunities.¹⁵ The federal government needs to refocus its adult education efforts such that the goal is not a GED,

but preparation for college. Given the significant numbers of adults lacking even eighth-grade reading, writing, and numerical skills, such a reorientation would better align with the realities and needs of many auto impacted and other older industrial communities.¹⁶

Integrating foundational skills with technical training is a strength of most community college programs. In automotive service or machining programs, for example, complex mathematics can be taught to adults through hands-on applications. This not only advances their knowledge in the specific technical area, but provides the basis for performing “college-level” work if they choose to enroll in a degree-granting program. By targeting federal adult education funds to community college workforce programs, community colleges would have additional resources to support education and training for under-prepared adults—a major part of the dislocated and current auto workforce. It would strengthen the ability of these institutions to retrain workers through its non-credit programming and to encourage them to pursue post-secondary credentials through credit-granting courses.

Much community college activity related to auto communities is taking place on the non-credit side of these institutions, which has traditionally functioned as customized training for employers or contract work with incumbent workers—and is often the main “bridge” by which under-prepared adults can return to school for marketable skills. The market knowledge accumulated by these non-credit training divisions has not always been shared with the colleges’ credit programs, however, missing an enormous opportunity to connect these industry-driven manufacturing programs with traditional faculty-organized credit programs.¹⁷ This is beginning to change: There is an increased interest by the business community in “non-credit” education, and more colleges are merging both areas under a single administrative structure.¹⁸ It would be a major step forward for federal policy makers to recognize the importance of these efforts within a fresh interpretation of adult education.

(3) Federal innovation policies should better link to human resource needs. The federal government’s substantial efforts to promote the development of new products and technologies—through, for example, the National Institute for Science and Technology in the Department of Commerce and DARPA within the Department of Defense—needs to be enhanced with a complementary effort to define the “emerging” educational and skills such innovation requires. This would help community colleges more deliberately prepare both younger students and those already in the workforce for jobs in emerging fields. The development of electric automobiles, for example, not only calls for new skills in the engineering technology, but also in the future design of automobiles and their repair. Green construction programs, meanwhile, require not only skills in handling the new materials, but new techniques for estimating the capacity of structures for heat loss, the toxicity of specific materials, and other issues directly related to their use.

Federal information and guidelines would help community colleges and workforce boards develop effective and appropriate training that meets the demands of new and growing sectors; they would also help employers establish hiring guidelines that can be

adopted regionally by companies.¹⁹ The Department of Labor would be best positioned to lead such efforts, with a unit capable of interacting with major product and process innovation areas to collect key data and provide it to the workforce system.

Conclusion

The recent adoption of the Community College and Career Training Grant Program, which allocates \$500 million for four years to community colleges to provide retraining for workers who qualify for benefits under the Trade Adjustment Act (TAA), provides an important tactical opportunity to implement some of these reforms. While it's unclear how much the \$2 billion will be directed exclusively toward community colleges, as opposed to private training providers, the program could be utilized to promote some new approaches to workforce training and education.

The main conditions for a successful implementation are present. There is a network of community colleges located in auto communities who are beginning to work together to implement many of the suggestions contained in this paper.²⁰ And inside the Department of Labor, the leadership of the Employment and Training unit is interested in promoting them at the federal level. The only missing ingredient is political will.

¹ James Jacobs is the president of Macomb Community College.

² For a general discussion of Macomb's efforts see Karen Fischer, "As An Auto Industry Shrinks, A Community College Retools," *Chronicle of Higher Education*, May 8, 2009, available at <http://chronicle.com/article/As-the-Auto-Industry-Shrinks/44281>

³ For a discussion of the workforce education requirements in automobile industry see Center for Automotive Research, *Beyond the Big Leave*, 2007, available at http://pale.cargroup.org/download/Apale_book8a_001.pdf

⁴ For a discussion of this issue see the National Council for Workforce Education and Jobs for the Future, "Breaking Through" (2004).

⁵ Many of these projects remain small and still in the initial stage of development. They are emerging from some of the work done by community colleges in the WIRED grants and other activities. Some of them are summarized in Kristin Dziczek, "The Greening of the Auto Industry" presented to Auto Communities and Community College Meeting, January 27, 2010, available at www.macomb.edu/nonCMS/Auto-Communities-Meeting/presentations.htm

⁶ Judith Crocker, "Connection Supply and Demand Side of Workforce Equation: A Regional Perspective," presented to Auto Communities and Community College Meeting, January 27, 2010.

⁷ The State of Michigan has established Procurement and Technical Assistance Centers (PTAC) to aid firms in making the transition to be suppliers to the defense industry. Macomb College maintains the PTAC in southeast Michigan which has been responsible for over 250 firms served creating 9,000 new jobs in the community. See:

www.macomb.edu/Businesses+And+Municipalities/Workforce+And+Continuing+Education/PTAC/

⁸ This means both technical and liberal arts faculty. It is misconception of community colleges that they only hire technical faculty. A careful investigation of the staff of ten large community colleges (three of them in auto communities) conducted by the Community College Research Center indicated that these institutions maintained a ratio between liberal arts and technical faculty that was fairly consistent over a period of time. The same study found that technical instructors were often part-timers—often brought into the area because of their knowledge of the field. Vanessa Smith Morest, "Double Vision." In Thomas Bailey and Vanessa Smith Morest, eds. *Defending the Equity Agenda* (Baltimore: Johns Hopkins Press, 2006).

⁹ Debra Bragg, Barbara K. Townsend, and Collin M. Ruud, "The Adult Learner and the Applied Baccalaureate: Emerging Lessons for State and Local Implementation," *In Brief* (2009). http://www.acteonline.org/uploadedFiles/About_CTE/files/Adult%20LearnerApplied%20Bacc.pdf

¹⁰ Sara Goldrick-Rab and others, "Transforming America's Community Colleges: A Federal Policy Proposal to Expand Opportunity and Promote Economic Prosperity" (Washington: Brookings Institution, 2009).

¹¹ For a discussion of these issues see James Jacobs and Pamela Tolbert Bynum, "Shifting Gears: Community Colleges and Adult Basic Education," (2008), available at: <http://ccrc.tc.columbia.edu/Publication.asp?UID=665>.

¹² Ibid.

¹³ Several community colleges have established very useful and important relationships with their workforce boards. But these are because of the willingness of the boards and the colleges to work together to solve issues. See Stephen Long, "Dealing With Local Workforce Boards," presented to Auto Communities and Community College Meeting, January 27, 2010.

¹⁴ More than 102,000 workers have signed up for the program since its inception, demonstrating a real desire for training. An early analysis of the program found that of 62,206 participants, more than 24,699 had already found jobs related to their training. Many others were still in training and continuing their post-secondary education. See www.michigan.gov/documents/nwlb/NWLB_Outcomes_Report_2009_10_23_298741_7.pdf.

¹⁵ For an overview of the adult education system, see the website of CLASPE, an organization which has supported major changes to the workforce system to deal with the needs of underprepared workers: www.clasp.org/admin/site/publications/files/Workforce_Investment_Act_Recommendations_for_Shared_Accountability_System.pdf.

¹⁶ Ibid.

¹⁷ For a discussion of non credit workforce education see Michelle Van Noy, James Jacobs, Suzanne Korey, Thomas Bailey and Katherine Hughes, "The Landscape of Noncredit Workforce Education: State Policies and Community College Practices" (New York: Community College Research Center, Columbia University, 2008), available at <http://ccrc.tc.columbia.edu/Publication.asp?UID=572>

¹⁸ The Business Roundtable organized a group of CEOs, post-secondary educators, and policy experts into a Springboard Project. In 2009, the Project released a report calling for more emphasis on non-credit workforce education. See "Getting Ahead, Staying Ahead: Helping America's Workforce Succeed in the 21st-Century," 2009, available at www.businessroundtable.org/initiatives/education/springboard_project. The Roundtable also published a study of the significance of non-credit workforce education: "Counting the Hidden Assets: First Steps in Assessing the Impact of Community College Noncredit Education Programs on the Workforce and Local Economies," available at www.businessroundtable.org/news/counting_hidden_assets_first_steps_assessing_impact_community_college_noncredit_education_program

¹⁹ See: The Hollings Manufacturing Extension Partnership Advisory Board, "Innovation and Product Development in the 21st Century" (2010), available at www.nist.gov/mep/upload/MEP_advisory_report_4_24I.pdf.

²⁰ The community colleges auto communities network is a peer learning network is made up of over 30 colleges who are interested in working together to meet the needs of their auto communities. This network is currently being administered through Macomb Community College. For more information, contact: www.autocommunities.net.