Economic Development in Challenging Times: The Penn State Outreach Response

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THE FUTURE: UP CLOSE AND PERSONAL

"In addition to teaching, research, and service, today's land-grant institution has a fourth mission—economic development." Elson Floyd, President, University of Missouri System

rom its inception, Penn State has played a role in Pennsylvania's economy. As the commonwealth's land-grant university, it has functioned as a change agent, transferring research and knowledge to increase farm yields, encouraging business and "the mechanic arts," and transmitting technology to the general population.

While the university still does those things and much more, the key driver in today's global economy is innovation, and the university's role has expanded beyond transmission of knowledge. Penn State is evolving into a catalyst for the economic transformation of the economy and is offering support as the Commonwealth moves toward global competitiveness.

OLD AND NEW ECONOMIES

The innovation economy is different in many respects from the old economy, the one from which we are evolving. An innovation economy

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rests on translating new knowledge and insight into high-value products and services. The university's response to regional economic and workforce issues must address and advance the realities of the new economy; however, the attitudes of community or industry representatives, as well as of university faculty and staff, were formed during the old economy. There is much comfort and attachment to traditions, legacy cultures, and the known—all embedded in the past. After all, who would want to trade a stable, job-specific, secure position for one that operates in a dynamic, broad and changing, risky arena? (Table 1)

Table 1: Old and New Economies

ISSUE	OLD	NEW
MARKETS	STABLE	DYNAMIC
Scope of competition	National	Global
Organizational form	Hierarchical	Networked
Production system	Mass production	Flexible production
Key factor of production	Capital/labor	Innovation/ideas
Key technology driver	Mechanization	Digitization
Competitive advantage	Economies of scale	Innovation/quality
Relations between firms	Go it alone	Collaborative
Skills	Job-specific	Broad and changing
Workforce	Organization Man	Entrepreneur
Nature of employment	Secure	Risky

In Pennsylvania, the innovation economy has run headlong into the expectations that the successful manufacturing economy engendered over many decades, and to some extent, the kind of engagement done by educational institutions has fostered some of the attitudes in population groups. For example, workers at a closing assembly facility expect to find similar jobs, despite recognizing an overall decline in manufacturing in their region. Historically, higher education has frequently provided the retraining to move to a new—though same-sector—position. While many dislocated workers anticipate some retraining, most do not expect a total shift in what they must do to earn a living.

"In today's New Economy, knowledge-based jobs are driving prosperity. These jobs tend to be managerial, professional and technical positions held by individuals with at least two years of college" (New Economy Index, 2007).

The jobs in the new economy are different in many ways from those of our old manufacturing, production-oriented economy. The key is that some higher education is essential for these new kinds of jobs: "Most of the people who will be in our workforce are already in it, and if they cannot master the new literacy at high levels, it will not matter what we do in the schools" (Tough Choices or Tough Times, 2007).

Besides the nature of the jobs, however, we also must face another sobering fact: with our changing demographics, most of our workforce is already in place for the foreseeable future. In other words, we have what we have. We cannot just look to youth as a way out. A lot of adults are going to have to adjust to the new economy—people who lack the knowledge and skills they need.

The New Commission on the Skills of the American Workforce concluded: "We have done a very poor job of making it possible for adults who have full-time jobs and family responsibilities to get the continuing education and training they need to survive in the world that is coming" (Tough Choices or Tough Times, 2007). While some colleges and universities are doing an outstanding job of responding to the needs of adults, by and large we have a higher education system that is not geared to serving adult learners well.

Robert Atkinson and Daniel Correa agree:

Notwithstanding the widely held view that American higher education is the best in the world, there is evidence that the performance of colleges and universities in educating students has not kept up with the demand of the global economy. Strikingly, among recent graduates of four year colleges, just 34, 38, and 40 percent were proficient in prose, document, and quantitative literacy (New Economy Index, 2007).

Higher education in America is not doing a very good job even of educating traditional students; less than 40 percent of college graduates are proficient in key skills needed for the new economy.

PENNSYLVANIA'S CHALLENGES

As a country, we have some very serious challenges, and those challenges are magnified in Pennsylvania by some major demographic changes.

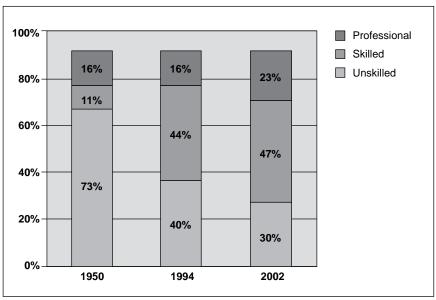
Table 2:

CHALLENGE	DEMOGRAPHIC INDICATORS
Age of population	Second oldest in the nation
Rural residents	Third largest in the nation
Population growth (2005-2020)	3 percent vs. 14 percent nationwide
Loss of young people (brain drain)	First in the nation

Pennsylvania has the second oldest population in the country behind Florida. We have a large rural population that lags in income compared with urban populations. According to a 2003 report by the Brookings Institution, Pennsylvania ranked first in the United States for absolute loss of young workers from 1990 to 2000. And while the nation will grow 14 percent by 2020, Pennsylvania will grow only 3 percent.

Pennsylvania's economy has been changing, beginning with the decline of the steel industry in the 1970s. Unskilled jobs are disappearing and demand for higher skills is rising (Chart A). When we look at jobs available for Pennsylvania's workforce over the past 50 years, the drop in unskilled jobs from 73 percent to 30 percent is staggering. And the need for skilled workers and professionals is up from 27 percent to 70 percent.

Chart A: Skill Distribution of the Pennsylvania Workforce



US Bureau of Census and PA Department of Labor and Industry (Center for Workforce Information and Analysis. 2005)

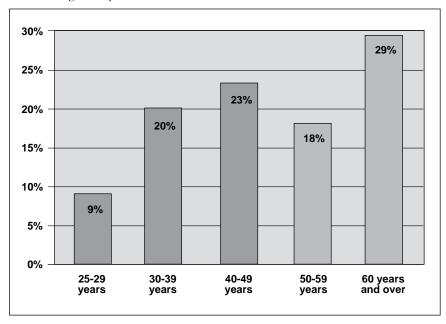


Chart B: Age Comparison

Our aging workforce means that new workers must replace skilled retirees. While the demand is for skilled and professional workers, Pennsylvania ranks twenty-eighth in the nation for college graduates; only 23 percent of its citizens hold bachelor's degrees (US Census Statistical Abstract—2004). Unfortunately, due to many factors, including lack of financial aid to study part-time, only 3.1 percent of Pennsylvania's adults enroll part time. That puts us in fortieth place nationally (Measuring Up 2006). Nor do we do well at keeping young people in the system. Out of 100 ninth graders, 75 will graduate from high school; 46 will enroll in college, though only 36 will return for their second year; and 27 will graduate (Quiet Crisis, 2004). While this represents a tremendous loss of talent from our schools and colleges, it also represents an opportunity to bring people back into the educational system.

Pennsylvania is actually one of the better states in terms of keeping people in the system (Measuring Up 2006). However, we are challenged in the education of our rural population (Chart C).

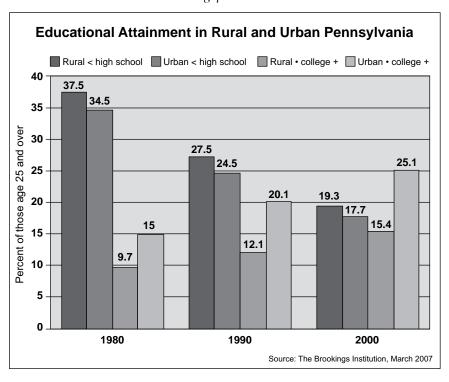


Chart C: The rural-urban education gap

Not all the news is bad for Pennsylvania. Over the past decade, it has improved its position in the New Economy Index Ratings, based on the degree to which an economy is knowledge-driven, globalized, entrepreneurial, IT-driven, and innovation-based. The Commonwealth was thirtieth and is now twenty-first. Our biggest challenges remain the education of our workforce, where we rank thirty-second, and our entrepreneurial activity, which ranks an abysmal forty-eighth (New Economy Index, 2007).

PENN STATE OUTREACH'S RESPONSE

Penn State Outreach is constructing a multi-faceted response to the challenges of the new economy. Higher education must respond in an innovation fashion to address the rapid changes and uncharted territory of the new global economy because old solutions do not work. We must work on multiple fronts and engage our entire organization and key elements of the rest of the university to facilitate transformation in the commonwealth. Penn State Outreach includes Continuing and Distance Education, Cooperative Extension, Penn State Public Broadcasting, and the Office of Economic and Workforce Development. As part of Penn State, which is

a single multi-campus university rather than a system or confederacy of linked colleges and universities, Outreach has a unified presence across 24 campus locations. Combined with its Cooperative Extension presence in all 67 counties, Penn State Outreach is uniquely positioned to bring change to Pennsylvania.

With this foundation, we are undertaking major initiatives that focus on the adult learner, regional economic development, and engagement with communities and businesses. At the same time, exercising new university leadership and helping to reposition Penn State institutionally with state government are important aspects of our response.

ADULT LEARNER FOCUS

Adult learners are a key to success for Pennsylvania's new economy. With a large and expanding older population and declining numbers of young people, the commonwealth must raise the educational level of the existing workforce to stay competitive.

Despite success in recruiting traditional-age students, Penn State has not always done an exemplary job of recruiting and educating our adult population. Penn State receives more than 100,000 applications for admissions each year—the most in the country. While more than 10,000 can be defined as adult learners, we could do better. To that end, we have recently moved on several fronts to become more adult-friendly. With multiple campuses in Pennsylvania and our online World Campus, we provide flexible programming and ease of access. We call this concept ONE Penn State, allowing the adult learner to move seamlessly from campus to an online environment and to blended/hybrid environments. This flexibility is essential to retaining adult learners throughout the degree process. We are also taking steps to develop a ONE Penn State approach to enrollment and student services in order to create a common adult-learner experience, regardless of how that learner accesses Penn State continuing and distance education programs. In addition, each campus has developed a One-Stop service center to support the diverse needs of our adult learners.

We are undertaking an initiative that includes developing programs at campus locations and on the World Campus to help adult learners improve basic skills prior to enrolling. For some, algebra and essay writing are decades in the past, so refresher courses can help bridge the study-gap. Another program involves mobilizing retirees through the Osher Lifelong Learning Institute to mentor and/or tutor adult learners. In 2007, we

launched a career development effort that involved hiring two specialists to build linkages with our business communities. This has already resulted in a regional job fair that has given our adult learner graduates more opportunities of finding employment in the local economy. For most location-bound adult learners, a career-development connection in the local economy is essential.

In addition, Penn State is engaged in helping adults expedite their coursework and degree attainment through degree-completion and immersion programs, and we are placing more emphasis on credit for experience and prior-learning opportunities.

One critical roadblock for adults is the cost involved in higher education—tuition, fees, books, and living expenses. Penn State is pursuing many avenues, both at the state level and locally. The university is active in supporting a number of unique statewide financial aid programs and policies to provide critical support for adult students, especially those attending part-time. In addition, Penn State is successfully advancing major fundraising initiatives targeted to funding scholarships for part-time adult students.

REGIONAL ECONOMIC DEVELOPMENT

The second area Penn State Outreach of focus is regional economic development. Over the past five to ten years, it has become apparent that regions drive the economy. Pennsylvania has 26 Keystone Innovation Zones that represent Gov. Edward G. Rendell's initiative to build partnerships between Pennsylvania's colleges and universities, communities, and companies to fuel economic development. Inherent in this strategy is the recognition that there is no single solution to building regional economies. Rather, any strategy requires the coordinated participation of the private sector, government, and higher education working together on a holistic plan encompassing economic, community, and work force development.

Penn State Outreach is also working with industry clusters. Pennsylvania has identified nine key industry clusters: life sciences (health care), business and financial services, education, advanced materials and diversified manufacturing, building and construction, agriculture and food production, information and communication services, logistics and transportation, and lumber, wood, and paper. These are the areas the state considers "wealth-producing industries" with the most likelihood of producing positive economic results.

Outreach is focused on these industry clusters to determine how we can best use Penn State resources to foster their continued health and growth. Some clusters are linked closely with campuses in different regions of the commonwealth. Business and finance is focused in the northeast, while food production is concentrated in the southeast. Others such as life sciences, plastics, and education have statewide relevance. Our strategy in dealing with these industry clusters is to identify educational needs that must be addressed to help enhance the workforce in each of the nine clusters, then develop or link educational programs to those needs. Recently, our Economic and Workforce Development office joined forces with the Continuing Education unit to work with the powered metals industry in north-central Pennsylvania, a part of the advanced manufacturing industry cluster. Pennsylvania's powdered metals industry is a world leader but is increasingly challenged by international competitors. By linking Penn State's top-ranked faculty in mineral sciences with the powdered metals industry, we hope to contribute to the vitality of this industry in the commonwealth.

Another example of this coordinated effort is the Pennsylvania Plastics Initiative, a project of Penn State's Erie and University Park campuses, Penn College of Technology, the Pennsylvania Workforce Investment Board, and the commonwealth's Department of Labor and Industry. To build a new generation of workers, trained to a high technical level, for the plastics industry, Penn State and its partners collaborated on a campaign that included a Web site, short video spots airing on TV and in theaters, posters, You Tube presentations, and a tool kit for school career counselors. In conjunction with internships and scholarships, the effort encouraged 15- to 17-year olds to consider careers in one of the state's largest industry sectors.

ENGAGEMENT WITH COMMUNITIES, BUSINESSES, AND CITIZENS

The third focus for Penn State Outreach is engagement with the communities and businesses in our regions. Engagement embraces reciprocity, building a two-way relationship in order to bring about significant change for both parties.

For Penn State, engagement is a way to reconnect with our land-grant mission while redefining the role of land-grant institutions in the twenty-first century. That role includes enhancing access to and participation in higher education for those who need and want postsecondary education. Engagement also means addressing the practical problems, including economic problems that Pennsylvania residents face.

In Pennsylvania, lower-than-average rates of college graduation and low levels of participation in postsecondary education by adult learners are associated with a range of economic challenges. These low levels of postsecondary outcomes and participation are surprising, especially given the large number of public and private higher education institutions in the commonwealth. Since colleges and universities are all around, why do more Pennsylvanians' not take advantage of them? No doubt there are multiple contributors to this phenomenon, but two have captured our attention as we have worked to understand the context in which we are trying to bring about change.

One key factor in Pennsylvania is a culture, especially in the rural areas that cover a sizeable portion of the state, that does not value higher education or perhaps more importantly sees it as a threat to a traditional way of life.

Another factor is that for most workers, the global forces driving change are not apparent. When plants close, employees worry about paying the mortgage, yet they look for the same kind of job they just lost, rarely considering significant, long-term retraining or other educational options. This response is based on the expectations of generations of families who worked in secure jobs fueled by the manufacturing engine. Today's workers followed their parents into the plants and mills across the commonwealth, and they want to continue that way of life despite the mounting evidence that the manufacturing engine of the past century is out of gas.

While Penn State Outreach has a strong marketing operation, we do not see our response to these entrenched attitudes as an advertising or marketing challenge. It is unlikely that such tools will bring about change in a cultural mindset in a timely manner. If Pennsylvanians do not understand the forces at work, do not intrinsically value postsecondary education, and do not understand the value of higher education to expanding their options, they will not enroll in relevant educational programs.

So we need to meet potential learners at ground level, in their communities, by talking with religious groups, meeting at familiar social settings, presenting to the Rotary and Kiwanis, holding discussions at Chambers of Business and Industry, connecting at the places the community meets, and listening to the concerns voiced. We can see the changes occurring in the global economy. We need to become a force for building awareness about the cultural change needed. We must do that through the uncles and aunts, parents, neighbors, community leaders, and more who can influence the

thinking of adults who need to enroll in postsecondary education. From our perspective, engagement is one tool that we can use to accomplish this.

Two engagement projects are underway. The first, funded by the W. K. Kellogg Foundation, is called FOCUS, a plan to mobilize the resources of Penn State Outreach to target a Central Pennsylvania community in dire economic straits. We have started to explore a multifaceted approach that will engage the community with Penn State faculty and staff to articulate and prioritize issues that need to be addressed. The second project is tied to the Osher Lifelong Learning Institute. Many universities have these institutes to foster intellectual engagement and learning among the post-55 population; however, we believe our approach is innovative. We want to launch lifelong learning institutes throughout Penn State's multiple campuses. Then we want to turn the Osher mature adults into an "army of the educated." These older adults, many of whom have deep roots in their communities, can advocate for education and can help foster cultural change that is so necessary for the renewal of our citizenry and our economy.

INSTITUTIONAL LEADERSHIP

In order to move our engagement initiatives forward, we need to build on a solid foundation of institutional leadership and support. Outreach has a multitude of efforts to turn the attention of the entire university to the range of issues surrounding economic development.

Of primary importance is the decision to make advocacy for adult learners the purview of the vice president for outreach. That leadership role allows concentration of services, elimination of institutional red tape, and coordination of adult learner services across the entire multi-campus university.

Additionally, outreach efforts in economic and workforce development have been aggregated under a new leader. Winner of the Outreach Scholarship W. K. Kellogg Foundation Engagement Award and the C. Peter Magrath University / Community Engagement Award, Tim Franklin has energized our response, bringing a regional focus to our efforts.

Outreach has committed nearly a million dollars over the next three years to fund thematic initiatives focusing on issues in energy and the environment, health, K-12, and economic and workforce development. All of these initiatives will allow Penn State faculty to advance projects that will promote regional economic development and engagement. In addition, the Penn State Faculty Senate has passed an engagement platform that will

encourage faculty to increase engagement work significantly. The platform includes a new University Center for Engagement based in Outreach, resources to assist faculty working on engagement projects, and more.

Finally, we are aware that universities often operate in isolated units, so we are pushing ourselves and the university toward the ideal of ONE Penn State. We are organizing and coordinating our resources to focus on common economic development objectives thereby hoping to concentrate our impact for the public good.

INSTITUTIONAL POSITIONING

The second foundational element for our work in economic development is institutional positioning within the commonwealth. Over the past twenty years, Penn State has worked to become a top international research institution. We have looked beyond Pennsylvania and have become a global university that reaches students in six continents through our online World Campus. In the process, we have neglected some internal Pennsylvania relationships, and we are making every effort to reconnect.

The vice president for outreach is on the Pennsylvania Workforce Investment Board (WIB). Outreach is also represented on Council on Competitiveness committees and major industry sector WIBs, and we work with state agencies in economic development, labor and industry, education, and healthcare on a regular basis. We are pushing all our outreach staff at all Penn State campuses and throughout the extension system to become more embedded in their communities Thus, at the state, regional, and local levels, we are positioning Penn State to be both a force for education and a resource for Pennsylvania economic development.

ISSUES AND OUTCOMES

We have set a course for Penn State Outreach to address Pennsylvania's economic development challenge—a course that melds our advocacy for the adult learner, our interest in regional economies, and our commitment to engagement. Of course, "developing a vibrant new economy is not an end itself; it is the means to advance larger, progressive goals: higher incomes, new economic opportunities, more individual choice and freedom, a greater dignity and autonomy to working Americans, and stronger communities" (The 2007 New Economy Index). Neither is playing a key role in Pennsylvania's economic development an end in itself. Rather, it is one way for Penn State Outreach to transform the lives of Pennsylvania's citizens and

communities, become a force for public good, and re-invigorate the landgrant university concept for the twenty-first century.

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