



NCHEMS *News*

National Center for Higher Education Management Systems

From the President

Conversations in the states where we've been working, and at the national and regional meetings I've attended in recent months, seem to indicate an emerging consensus that:

- The U.S. (and most of the states) needs a citizenry with higher levels of educational attainment if economic competitiveness is to be achieved and effective participation in a democratic society made possible.
- Getting more students through the education pipeline is a necessary, but insufficient, condition for success. Graduates must acquire higher levels of learning, not just a degree.
- Current resources will not be adequate to achieve these goals unless our institutions and agencies of postsecondary education change the way they do business.

One could argue that I hear these topics because of the choices I make about which projects to undertake and which meetings to attend. Nevertheless, I believe these issues are real and that attention to them is imperative. I am pleased to say that NCHEMS is playing an important role with institutional, state, and national policymakers as they try to find appropriate responses to each of these challenges.

One dimension to this matter is increasingly being recognized by policymakers and educators, though it is seldom discussed thoughtfully. That is the role of colleges and universities in creating the jobs to be filled by the knowledgeable graduates whom they have prepared for employment. In many of the states



in which NCHEMS staff have worked in recent years, the states' colleges and universities are preparing more graduates than their economies can absorb. *Workplace*, rather than *workforce*, development then becomes the priority.

Unfortunately, there are not many tools that have proven to be effective at this task. The knee-jerk reaction is to "build more research capacity and hope for technology transfer." While this may be an important part of the answer, it can't become the only one. These problems are too varied and complicated to lend themselves to a single solution. I applaud Arizona Governor Napolitano's initiative which she led as chair of the National Governors Association's *Innovation America*. It's a start, but more voices need to be heard. My initial attempt to enter the dialogue is offered in the main article for this newsletter. It represents nothing more than an effort to identify the different ways in which institutions might contribute to workplace development. I welcome your suggestions for changes to this list of what needs to be done. Even more, I'd like to collect examples of where strategies like these have been successfully employed.

On a different note, I want to use this forum to publicly congratulate Marianne Boeke for finishing her dissertation and being awarded the Doctor of Philosophy degree from the University of Denver. Finishing a degree while being a full-time wife and mother of two energetic boys and a staff member at NCHEMS is a real accomplishment. Well done, Dr. Boeke!

The Under-Understood Nexus: Higher Education and Economic Development

Higher education is widely touted as an engine of economic development. In a world in which economic success is increasingly driven by innovation in knowledge-based industries, there is little wonder that civic and political leaders expect colleges and universities—the social institutions that specialize in the discovery and application of knowledge—to lend a hand in expanding and diversifying their lagging economies. University officials are more than willing to play to this audience, seeking new financial investments on the basis of economic return.

Unfortunately, the mere presence of a university, even a well-regarded research university, does not automatically translate into the kind of Silicon Valley success story that sponsors envision when such investments are made. The fact is, there are relatively few blockbuster success stories of this kind; and in most of them, the role of universities is seldom as directly causal as typically assumed and portrayed. The stereotypical construction of this phenomenon involves university-based research generating commercially-applicable ideas that are spun off into private sector enterprises, which in turn generate jobs and wealth in the community. While this scenario does occur, the relationship between higher education and economic development is more multi-faceted than this prevailing view suggests. If public policy is to promote a more active and intentional role for colleges and universities in economic development, a more realistic and nuanced understanding of the relationships between the two is a necessary starting point. This brief essay represents an initial attempt to foster such basic understanding.

In assessing the appropriate relationships between higher education and regional economies, it is useful to start by recognizing that basic economic needs can be placed in one of two basic categories:

those requiring *workforce* development and those requiring *workplace* development. In some areas, good jobs are available but are going begging. In such environments, the critical need is to train workers with the necessary skills. This task is one that colleges and universities usually know how to do. They may not be enthusiastic about responding to these needs because they sometimes do it badly and they would rather pursue advanced research and engage in more academic instruction. But at most institutions, this function gets adequately performed.

In other parts of the country, well-paying jobs that require workers with high skill levels are not available in sufficient numbers to yield economic returns for either individuals or the community. Here there are frequently high expectations for higher education institutions to help out with job creation. Although colleges and universities almost always actively seek a role in such endeavors, the nature of their engagement is often more reflective of what they want to accomplish for themselves than a response that is carefully aligned with community needs. This is not the fault of the institutions. Information about the best way to help communities with very different local circumstances successfully create new jobs is not commonplace. As is often the case when a problem has no obvious answer, there is an urge to borrow solutions from seemingly successful practices elsewhere. More often than not, however, such strategies are doomed to fail because they are not aligned with local realities.

Too often the array of possibilities in this arena is not critically examined, or even known. This array includes the following elements:

I. Research as Economic Development

In some states or regions, there are universities with underdeveloped research capacity—typically states in

the Department of Energy's Experimental Program to Stimulate Competitive Research (EPSCoR). Under these circumstances, it may be reasonable to invest in targeted research capacity, if only to create a way to attract additional funds from sources external to the state. Such investments are not always illogical. If they work, they generate new funds that can be used to expand rosters of faculty and support personnel, thus expanding the number of well-paying jobs in the region. This strategy is easy to manage. Positive results are readily detected and the investment can be discontinued quickly if the expected returns are not realized.

2. Research that Spins Off New Companies and Jobs

This is the classic version of the connection between higher education and economic development most often advanced by educational leaders and policymakers. But success using this strategy depends on numerous conditions that are not always present, among them:

- *An entrepreneurial faculty.* Appropriate faculty must not only be researchers capable of garnering research funding but must also have the skills needed to turn ideas into products or services that can gain traction in the regional market place. This may be asking a lot of individuals who may well have deliberately entered academe as an alternative to employment in the private sector.
- *State and institutional policies that support entrepreneurship.* Policies in place must create an environment that encourages faculty members to leverage their research, and their access to research assistants and equipment, to help create private-sector, start-up organizations. Actions that are applauded in some states may bring faculty members in other states face to face with accusations of ethics violations.
- *Incubator space.* Facilities and a variety of technical and other support services geared

to the needs of start-up organizations must be in place or created.

- *Business planning and support services.* Faculty who are good at research and creating derivative products from research results are seldom equally good at creating and running a business. They need a range of support services, from assistance in the development of business plans to advice about compliance with government regulation and marketing. Expecting the "idea person" to successfully take the idea all the way to market is asking a lot.
- *Venture capital.* The need for money is always present in new companies. Without access to the necessary working capital, good ideas will not move past the idea stage.

This complete panoply of necessary conditions for success is hard to establish and sustain for a period long enough to yield results. Of all the alternative strategies, this classic vision of "research to riches" may well be the one with the highest risks.

3. Tracking Entrepreneurship

It is increasingly becoming a tenet of regional economic development that the key to success lies in supporting individuals who have ideas, entrepreneurial skills, and a capacity to learn from mistakes. In many parts of the country, growing the needed talent is a surer bet than trying to attract it from elsewhere. With this in mind, colleges and universities can train students in basic entrepreneurial skills, expose them to successful local entrepreneurs through internships and similar strategies, and create an environment in which interested students have access to the necessary support systems. Perhaps most important of all is creating an institution that is *itself* entrepreneurial and administrators and faculty alike are given rein—indeed, are *expected*—to try new ideas and seek out-of-the-box ways to further the institution's mission.

4. Investing in the Scholarship of Application Rather than the Scholarship of Discovery

Most institutions and their faculties are particularly attached to the kind of research resulting in discoveries that extend the frontiers of a discipline. Economies, however, are changed through *use* of these ideas, new or old, in ways that yield improved, marketable responses to a concrete need or desire. Finding innovative solutions to problems based on existing research takes a different set of knowledge and skills than those associated with the discovery of new knowledge. Creating a unit comprised of a small number of dynamic problem-solvers may yield larger contributions to regional economic development than a similar investment in attracting basic researchers.

5. Creating a Welcoming Environment for the “Creative Class”

In his book *The Rise of the Creative Class*, Richard Florida notes that vibrant economies are found in places where creative people want to live, and where these people have plenty of opportunities to meet each other, strike innovative sparks and forge new alliances. Universities can further this dynamic by helping create an environment where the “creative class” wants to congregate. This means welcoming a very diverse set of faculty and students and creating a culture of acceptance and free expression. It also means developing venues where these individuals can come together in informal settings that allow relationships to develop and, eventually, deals to be made.

6. Workforce Development

While much of the emphasis of workplace development involves steps that lead to the creation of new jobs in a community, it would be wrong to underplay the importance of providing postsecondary training to potential employees of companies that indicate an interest in setting up shop in the community. While making such contri-

butions lies within the set of core competencies of most institutions, the need is seldom met through “business as usual” instruction. Instead, these needs are best met by identifying the specific skills to be taught, determined in consultation with employers, then delivered in a “rapid response” mode. While basic disciplinary subject matter may not be foreign to the institution, the delivery requirements may be well outside their normal ways of doing business. If this type of contribution is to be maximally effective, it may require the institution to “broker in” instructional delivery from another institution that already has programmatic competencies more in line with the specific training needs identified.

In summary, this brief recounting of the ways colleges and universities can contribute to regional economic development suggests that:

- Contributions can take many forms.
- They can be made by all types of institutions and are not just within the purview of major research universities.
- Policymakers need to be more discriminating about the tools they utilize to accomplish these goals. Not every institution has to become a full-fledged research institution to serve the intended purpose. The most important point is that all institutions can contribute *within the scope of their missions*, if public policy is flexible enough to allow it.

Introducing Our Newest Staff Members

Stacey Zis, Research Associate, is currently a doctoral candidate in Educational Leadership and Policy Studies at Virginia Tech.

Erica Torres Haltom, Data Analyst, is a graduate of Metropolitan State College of Denver with a Bachelor’s in Computer Information Systems.

Cindy Babiak, Executive Assistant/Travel Planner, formerly studied at the University of Kansas with an emphasis on journalism.

A New Look for Our Websites

www.nchems.org

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The National Center for Higher Education Management Systems

The National Center for Higher Education Management Systems (NCHEMS) is a private nonprofit (501)(c)(3) organization whose mission is to improve strategic decision making in higher education for states and institutions in the United States and abroad.

The NCHEMS Information Center for State Higher Education Policymaking and Analysis (The Information Center) provides state policymakers and analysts timely and accurate data and information that are useful in making sound higher education policy decisions. The Information Center is a comprehensive "one-stop-shop" for state-level higher education data and information, and a leader in coordinating the collection of missing data and information that are crucial for higher education policy analysis.

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Turning DATA into INFORMATION

Welcome to the NCHEMS Information Center

Thanks to the Ford Foundation and the National Postsecondary Education Cooperative for supporting the development of this website. This website is our ongoing effort to provide higher education policymakers and analysts with the data and information needed to make sound policy decisions. By navigating the links on the left, you'll find comparative data for states and counties, and useful contextual information. Also, click above on "Policy Questions" to find answers to specific questions regarding your state's system of higher education.

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Who is Eligible for NCHEMS Membership Program and How It Works

All institutions, state agencies of higher education, and systems offices are eligible for NCHEMS membership. Each campus in a system must join in order to realize the membership benefits.

The key to the NCHEMS network is your own liaison officer. Each member organization appoints an individual who coordinates communication with NCHEMS. This individual can also serve as the hub of your own internal network of department chairs, deans, administrators, and executives.

Because the NCHEMS Membership Program provides benefits not just for one individual but for your entire organization, your liaison officer can ensure that full use is made of discounts on NCHEMS publications, products, and services. The liaison officer is also a vital link in communicating your institution's needs and interests to NCHEMS.

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