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# Discovering a New Indiana Economy: The Role of Higher Education—Discussion

*Moderator: Gary Gorshing*

**Gary Gorshing:** Are there questions for Mr. Jischke?

**Holly Woelber,** *New Mexico Rural Development Response Council:* Mr. Jischke, you spoke of having incubators in your Discovery Park. We have found companies that incubate in an urban type of environment don't want to move out to rural areas. What have you done to provide incentives or encourage these companies to move away from the incubation center and into the rural communities?

**Martin Jischke:** We are doing a couple of things that speak directly to that question. First, we have begun a process of business competitions that come typically from our students but not exclusively. Our idea is to take those business plans for new enterprises and annually hold a conference. Economic development people from around the state would be invited to come in and literally bid or compete for these new businesses. We are trying to evolve a model by which students as part of their education and research, including at the graduate level, are not only interested in developing their research capacities and publishable materials but thinking about the commercialization potential of all this.

I have a wonderful example. Two years ago, some Ph.D. students in analytical chemistry defended their theses in May, came to commencement two weeks later and received their Ph.D.s, and then went to the research park to start a company. That company today is alive and well. The company has gone through two rounds of funding. It is developing a miniaturized mass spectrometer. We want to pro-

vide the opportunity for communities all across the state to compete for the locations of those businesses.

The second thing we are doing is trying to take the model of an incubator at the university. We have a little more than 100 companies and about 2,500 employees at the incubator in West Lafayette, and we are involved in a number of places that are developing incubators away from the university. With federal help, we are developing one in northwest Indiana in the town of Maryville. It is under construction as we speak. The big challenge, dilemma, or test is whether we can find entrepreneurs in that part of the state who would be advantaged or helped through such an incubation process and then would stay in that location.

We are working with communities all across the state to help them develop that kind of incubation capacity. Shelbyville, Indiana, has developed an interesting niche for which it is building an incubation capacity—medical records and, in particular, backup for disaster recovery. Where does the hospital or the insurance company store its records so they are safe from various natural disasters, but with the infrastructure in terms of information technology capacity, safety, and so on is well-developed? We provided expertise from our faculty in designing a wide network. It is through that kind of support.

Anderson, Indiana, is trying to build on the history in the electric power area for automobiles and other kinds of transportation. It is starting an incubator. We serve on its board of directors.

We are trying to find out if we can help export some of the developments in West Lafayette and, second, help other communities develop their own incubation capacity. My bias is that kind of deliberate effort at strategic economic development that goes on beyond the spec building and the industrial development model of 20 years ago is exactly what companies have to do. It is hard for us, from a distance, to drive the economic development of a community. We can help. We can support it, and we must. But the local leadership is really the key. One of the ideas we have is that these incubators around the state must be locally led, and they must involve a local institution of higher education. We will do everything we can in terms of our expertise and experience to help them grow. But there must be local ownership.

**David Sears, U.S. Department of Agriculture:** This was a real interesting presentation today. I would assume that you have probably made a similar presentation to your colleagues—other land-grant institution presidents. To what extent have you been able to energize them and get them moving in the same direction that Purdue is moving?

**Mr. Jischke:** I would guess you could get every university president in the country to give a speech about economic development. We have sort of all gotten it. The reasons are fundamental. Some of them are fundamental in the sense there is a widespread view that the future of our economy is driven by knowledge. Universities are repositories of people with knowledge, people gaining knowledge, and places that can develop new ideas and new knowledge. There is something absolutely fundamental at work in terms of what drives the economy.

Second, many of us are doing this for very pragmatic reasons. Our states are struggling for finances. We, like a lot of other public enterprises, are being asked to justify our existence in terms of today's and tomorrow's needs in our states. It is quite clear, as I travel around Indiana, that the people in that state want us to do this. It is reflected in our ability to

sustain our funding for the university. I happen to believe beyond that it is great training and education for our students. These great public universities exist at their core for public purposes. The extent to which we can demonstrate it to our students, as well as ourselves, through this kind of engagement, we become more vital institutions and then we fulfill Justin Morrell's promise.

As far as how other institutions are doing—you have heard an example from Texas, where the University of Texas is absolutely central to the strategy of Austin. You have heard an example in northeast Minnesota, where the community college is playing the leadership role in convening all of this. That is happening more and more around the country. The people who don't get it are the exception. The dilemmas are some of the fundamental challenges that have been talked about here.

Resources are a major issue. Where do you get the initial investment to kick this off? In Austin, it is my understanding that it was a group of private businesspeople, who literally put some money on the table. One of the reasons our institutions often have the opportunity to provide leadership is we—particularly the largest of us—command significant resources. We can make some investments. We put some of our own risk capital at work.

That research park I described to you is probably today a \$20 to \$25 million investment, and there is not a nickel of state money in it. It was all funded by the Purdue Research Foundation, which is private and is affiliated with the university. We have been able to bring resources, both human and financial, and that gives us an opportunity.

The challenge for a lot of institutions is this question of initial resources. There are some tough strategic issues about what you choose to focus on. You cannot be all things to all people. How do you show early success, so that you begin to create the momentum and excitement behind this so that

others will get on board? Clearly, some of us are either lucky, clever, or some combination of the two. Some are not so clever and not so lucky, and you can make bad bets initially.

It is important that these are thought of as sustained initiatives. Building it into the fundamental mission of the institution is gaining the support of the governing board. At Purdue, I can speak directly to this. Those were the terms under which I was brought to Purdue, not just to take the university up a notch in academic terms but to do so in a way that it had a direct impact on the future of Indiana. That was consciously part of our plan.

What most people are perhaps a little surprised at, reassured, or pleased is the response within the university has been enormously positive. Our faculty and staff want to do this. They see it not as an assignment from the president's office that they would just as soon not do, but I think they want to do it. Making it relatively easy and fluid, and making it a positive sum game is part of the challenge of leadership.

**Thomas Steen, *Cybus Capital Markets*:** What are the roles of corporate partnering and the identification of successful business management teams to go along with incubated companies in regards to sustainability of separate businesses?

**Mr. Jischke:** The private sector plays many roles. One of them is giving legitimacy to all of this, not just the incubated companies. There needs to be a view that this role for the university is an important one and deserving of support. If the only people talking about it are those of us in the higher education community, there is a certain self-serving nature to it or it can appear to be self-serving. The extent to which you can gain allies, who don't have narrow self interests or are motivated by larger community concerns and statewide interests, is absolutely essential to creating a sense of legitimacy.

More specifically, with regard to the incubated companies, we by and large do not do much equity investing in any of these companies, so they have to compete for private sector capital. One of the things we are working on is trying to bring in some private sector expertise in a way that is appropriate and would stand scrutiny on the evaluation of the intellectual property of the university and what the smartest business strategies would be for its development. We are reasonably well-organized internally for finding out where the intellectual property is. The faculty is cooperative. We know what things are potentially patentable, and we know how to do that process, both in terms of gathering it and pursuing the patents.

The harder questions for us are business plan strategies. The question of whether you actually pursue a patent depends in part on whether there is a reasonable business plan out there. How we gain access to expertise to help us make those judgments without losing competitive advantage or compromising the proprietary nature of some of this is a tricky issue. One possibility is to develop the expertise in-house. That would be rather expensive, and it is not clear we can do it across the full range of technologies that we are interested in. We are looking to see if there are people in the private sector, typically alums of the university, who would be willing to join with us and sign confidentiality agreements. They could review the intellectual property for the purpose of helping us make sure the policies under which we develop and pursue commercialization are wise, informed and for specific technologies where they have real expertise. This would help us understand what the business options are as we pursue them.

**John Leatherman, *Kansas State University*:** In your presentation, you talked a little bit about the need to revitalize the Extension program in your state and bring it on board with the community economic development programming. Could you elaborate on that a little bit more? I would imagine that is a lot easier said than done. What do you envision your

Extension program being? How are your local partners going along with your ideas? How is the institution itself responding to these ideas?

**Mr. Jischke:** You start with asking the most fundamental question. What does the state of Indiana, in my case, need from Purdue and specifically what do rural communities need from Purdue? Historically, if you go back 100 years, agriculture, home economics, and veterinary medicine were almost synonymous with rural communities. Now you look at rural communities today and—while many involve agriculture, 4-H, and such programs—the needs of those communities go beyond that. My view is that we need to, on the one hand, preserve the support and connection we have to those traditional areas, help them compete, and find value-added opportunities like Morales in Jasonville, Indiana. But we have to do more.

We have done a couple of things at the university that speak to this. One is we are talking about economic development more broadly, and I would use the term for extension of community development. While the economy is a major driver in all of this, there are other issues as well.

Second, we have tried to organize our outreach efforts at Purdue under an office of engagement. We tried to make the case that everybody at Purdue has a responsibility for, in an appropriate way, engaging all of Indiana. We have also done some new things experimentally. I mentioned the commercialization center.

A second thing we did was to begin developing in rural communities that do not have a higher education establishment. Indiana has 92 counties. Almost exactly half of them do not have a university, a community college, or a vocational technical institution. They have no higher education institution in that county. They are almost all rural and very low population densities. We started through Extension learning centers. We have seven or eight of them now. They are partnerships with counties, and

they are built around giving these counties access to educational resources.

The first one started in Clinton County, headquartered in Frankfort. The community tried to start a learning center on its own. It failed after a year because it didn't have the organizational capacity. At that point, Frankfort asked Extension to help it. What Extension brought was more organizational capacity, rather than specialized expertise. Today, Clinton County has a learning center. It uses Extension facilities. It has enrollments that approach 1,000 a year.

You will never guess what the most popular first offering was—conversational Spanish. Why conversational Spanish? There is a hog processing plant near Frankfort that employs several Hispanic workers. They settled in Frankfort because a large Catholic church was the home for the first Hispanic family to settle in the area. All those who followed decided to live in Frankfort. Out of this came a Hispanic community in Frankfort. The social service providers of Frankfort wanted enough conversational Spanish, so they could clean teeth, cut hair, and fill prescriptions. The second most popular offering was introductory computing, so that grandparents could communicate with their grandkids through e-mail.

We now have six or seven of these. It is very much a partnership. The community has to put up some of the money. Extension has reallocated some of its resources. It speaks to a couple of fundamental issues, including gaining access to educational resources. More and more of these rural communities understand their ability to continue to prosper as communities requires access to education. They are not all in a position to create a whole institution. Second, it is part of the community taking charge of its future. It is part of the community organizing itself for that future, be it through learning conversational Spanish, word processing, or whatever necessary. Those are a couple of examples.

I believe it is important for Extension to evolve because the challenges I have described in these settings for rural communities have their counterpart in Extension. Extension also must evolve into this globalized, knowledge-based, and partnered society we are all a part of. We have to get beyond the old model.

**Mr. Gorshing:** I think we may have time for one more question and answer.

**Charles Fluharty, *Rural Policy Research Institute.*** In Washington State, Extension shares common positions with community colleges and development organizations in workforce programming for regions. With the transformational leadership you are providing, when we rethink formula funding for Extension, do you see a colleague community coming to a discussion about that within your presidential colleague base, given it is on everyone's table now? Do you have any hope that might become a more structural and directed discussion, given the phenomenal turf that exists in this arena?

**Mr. Jischke:** I think it will come. I will share an experience that we've had in Indiana. We have struggled like a lot of states with our state's budget. Many constituents and stakeholders were considerably at risk: higher education, K-12 education, farmers through property tax, and organized labor. You could go down the list. What was interesting about two years ago is that we came together in what we called an Alliance for Indiana's Future for two reasons.

First, we knew that if something wasn't done about the state's tax structure and the economic development posture of the state that we would all lose big time. Second, none of us had the political assets to drive the debate. We could not get it done alone. K-12 educators could not get it done alone. It had to do in part with the details of the political environment in the state, but it also was a recognition by the leaders that we had to partner in order to prosper. An amazing thing happened. We completely restructured Indiana's tax structure and essentially eliminated

inventory taxes, gross revenue tax, and increased sales tax. It was a massive restructuring.

We also changed the state's priorities for funding from an emphasis on Medicaid and corrections to an emphasis on education and economic development. One of the consequences of that is our budget at Purdue has gone up a little bit over the last two years. There aren't many public universities in the country that can say that. We learned that by working together we can get things done that are not only in our narrow interest, but move an agenda of the state. It is very clear it could not have happened in the old way.

I would tell you that I don't think higher education across the country has come to this realization yet. Going separately, we are likely to get chewed up or, at best, it will be a holding action. We don't have the political resources to gain enough votes and to create a cover for those who want to do the right thing. But I have faith that people can learn. That is why I have been in this profession for 35 years. This is my business—educating people. It will come to us. You are seeing some examples of that around the country. This kind of partnering is absolutely the key to breaking down the old political gridlocks and arrangements that are not going to allow us to move forward. I have become almost messianic about this—a zealot.

Part of what ails a lot of communities at every level—locally, regionally, and statewide—is they haven't quite gotten over forming new partnerships that are essential to solving problems. This alliance we put together included the Farm Bureau, the AFL-CIO, rural interests, urban interests, mayors, realtors, K-12, and higher education. There is an amazing coalition so broad that it transcended the normal Republican, Democratic, urban, rural, House of Representatives, and Senate politics. We got very positive things done. People will learn this lesson sooner or later. In that sense, these partnerships within higher education are going to become more and more important.

In our state, we are still struggling with these financial issues. There is a group we refer to as the Indiana Grace Commission that is looking at the question of how efficiently and effectively the state spends its money. One of the conclusions that the commission has tentatively come to is that each of the institutions within Indiana higher education is relatively well-managed and efficient. There is not a lot of money to be gained by ratcheting down the institutions. What the commission thinks it has found is a system that doesn't come together in an efficient way to meet the needs of Indiana. If that is a signal of how those outside higher education are viewing us, they are going to find a way to get us to work together. Either we will do it voluntarily, or the commission will simply reorganize the governance structure for higher education and enforce it. The commission is looking for those efficiencies because that is a prelude if we are going to get any kind of relief on the budget. We have to demonstrate that we are efficient—not only institution by institution, but as a collective group.

**Mr. Gorshing:** Thank you.