

RMJ

Rural Minnesota Journal

January 2006

*Trends & Tsunamis:
Rural Higher Education*

Dr. Linda Baer

Minnesota State Colleges & Universities



CENTER for
RURAL POLICY
and DEVELOPMENT

Seeking solutions for Greater Minnesota's future

**Center for Rural Policy & Development
Board of Directors**

Dan Reardon
Board Chair
Otto Bremer Foundation

James Hoolihan
Blandin Foundation

Colleen Landkamer
Vice Chair
Blue Earth County Commissioner

Cynthia Johnson
Farmers' Union

Robert Bunger
Secretary/Treasurer
HBH Associates

Kevin Kelleher
Houston County Commissioner

Sandy Layman
Iron Range Resources

Rep. Tony Cornish
Minn. House of Representatives

John MacFarlane
Otter Tail Power Company

Richard Davenport
Minnesota State University,
Mankato

Lois Mack
Waterville, Minn.

Garfield Eckberg
Farm Bureau

Allen Olson
Eden Prairie, Minn.

Neil Eckles
Blue Earth Valley Communications

Sherry Ristau
Southwest Minnesota Foundation

Louis Hohlfeld
McKnight Foundation

Sen. LeRoy Stumpf
Minn. State Senate

© 2006 Center for Rural Policy and Development

The Center for Rural Policy and Development, based in St. Peter, Minn., is a private, not-for-profit policy research organization dedicated to benefiting Minnesota by providing its policy makers with an unbiased evaluation of issues from a rural perspective.

Center for Rural Policy and Development
600 S. Fifth Street, Suite 211 • Saint Peter, Minnesota 56082
(507) 934-7700 • (877) RURALMN

RMJ can be found on the web at:
www.ruralmn.org

Trends and Tsunamis: Rural Higher Education

Linda Baer

Introduction

The trends and tsunamis of public higher education are clearly evident in rural higher education. This article provides a very brief overview of the history of higher education in rural areas, the linkages with rural and regional communities and some future opportunities within the ever changing environment in rural communities.

“Higher education stands as one of the true success stories in our nations’ history. It is a story of transformation — for students, main streets, communities, and states — from the Industrial Age to the Space Age and now to the Information Age. For nearly a century and a half, the American people have looked to state colleges and universities — their colleges and universities — with hope and expectation.”¹

These institutions have a foundational base that is essentially a social contract. It is a contract derived from the fundamental belief that public education benefits individuals and society, and therefore individuals and the public should support it. This foundational base has survived over many decades of change and transformation. Yet the waves of change on the horizon are shaking this social contract. Education beyond high school is becoming a universal expectation. The United States is slipping in its global leadership role in percentage of young adults receiving a post-secondary education. The economic structure is shifting from production to services and information. States are finding imbalances within the taxing and spending systems. College affordability is being challenged.²

In this context of transformational change, we find that it is a demanding, exciting and risky time for colleges and universities. Part of the change flows from the demands of political, business and industry leaders who are concerned about the ability to be

competitive in this new economy. Others are concerned about a growing trend of under-prepared young people who are not ready to attend post secondary institutions, nor are they ready to take the roles of workers and citizens. In addition, many are concerned about the impact of globalization on local, regional and state economies.³

Higher education in rural America is transforming within this context of changing structures, demands and expectations. In the early 1990s, nearly 100 one-room schoolhouses existed in the state of Montana. "Many look the same as they did at the turn of the century, but inside are computers, professional teachers, and a broad array of modern instructional resources. Some of their original buildings still stand, but regional colleges and research universities are a far cry from their beginnings as to their mission and priorities." However, Newman points out that in the urbanization process, the higher education community has lost a focus on the distinctive needs of rural learners and their communities.⁴

Land Grant Universities

The role of higher education has been integrally connected with the viability and success of rural communities. Land Grant institutions created in the mid-nineteenth century served the communities with current agricultural and mechanical arts, two prominent economic development issues of the day. In 1890, the U.S. Congress created a number of Historically Black Land-Grant Colleges in many of the southern states. This was a systemic response to educational needs of Black students. The Land Grant institutions contributed to the transformation of agriculture and the Industrial Revolution.⁵

The Industrial Age brought a dramatic change to the rural areas. Farm operations were mechanized, agriculture was "industrialized" and communities were transformed to include manufacturing and processing operations. Education again served the needs of the communities with advanced agricultural techniques, training and education for the more industrialized needs. Today the Land Grant mission includes some of the finest research in the world, meeting the needs of the Information Age.

Comprehensive Universities and Colleges

Thomas Jefferson believed that education should be practical as well as liberal and should serve the public good as well as individual needs. Regional universities were established in the latter half of the 19th century and have become the regional public baccalaureate-and-beyond universities. Many of these universities began as teachers'

colleges and grew to comprehensive institutions serving the region with graduates in careers and professions that meet the growing focus on the needs of the communities, including nursing, business, engineering, and liberal arts.

Campuses in the rural areas continue to be the access point for many individuals, drawing large numbers of first-generation college attendees. They provide access for non-traditional students in more familiar and comfortable surroundings. In addition, there has been rapid increase in the non-credit side of the curriculum targeted at the incumbent workforce of many businesses and industries in rural areas. Proximity of the campuses often aids in the transition to work for first-time employees or reentering workers.⁶

Junior colleges and vocational institutes established by many communities in the first half of the 20th century have evolved, merged, and expanded to today's comprehensive community colleges. Joliet Junior College, the first two-year public institution, was created in Illinois, in part, to prepare rural high school graduates for admission to the university.

The development of community colleges was an important transformation of higher education because this institutional type provided a major access point for educational opportunities to local communities with innovative strategies for learning. The community colleges mission includes open access and equity, comprehensive services, meeting community needs and commitment to teaching and lifelong learning.

Local community colleges and technical training facilities expanded the reach of higher education to rural areas. The colleges and technical institutes focused on occupations and specific training in the trades and industry. Education in these areas contributed to the professions and trades required to meet the service, business and industry and leadership needs of growing communities.

Tribal colleges were founded to explore traditional tribal cultures as well as to address Western learning models. They are an innovative model of education sponsored by tribes across the United States and are specifically aligned with the needs of Native American communities.⁷ Tribal colleges support the dual mission of perpetuating traditional Native American cultures and providing a general post-secondary education for reservation residents. While some tribal colleges offer selected four-year degrees, they primarily offer the associate level as the highest degree. Both the Historically Black Colleges and the Tribal Colleges often record improved retention, transfer and graduation rates.⁸

Current Trends

Today the Land Grant institutions, regional universities and community and technical colleges play a vital role in rural communities as society has moved into the Information Age. The Land Grant colleges and universities have resulted in education that is far more engaged in the process of community development and support than had been the case prior to their establishment. A report by the National Association of State Universities and Land Grant Colleges (NASULGC) concludes that these universities have had a profound effect on the transformation of communities. This includes major impact on American agriculture, economic development, homeland security, biotechnology and information technology. About two-thirds of the land grant universities have a business park and some form of incubator to help start or support new business development.⁹

Currently, the United States has more than 3,000 colleges and universities, and about one out of three are located outside of metropolitan areas.¹⁰ These comprehensive universities have developed a wide range of majors, professional degrees, social and cultural enrichment and research which is often tied to the regional community needs. Today, Black, Hispanic and other minority students make up 30 percent of community college enrollments nationally.¹¹

Overall, the public colleges serve about 10 million students per year nationally — 5 million in credit courses and another 5 million in non-credit courses, activities, and programs. This represents a rapid increase in the non-credit side of the curriculum targeted at the incumbent workforce, businesses and industries in rural areas.

Rural colleges are facing what may be their biggest challenges. The new landscape includes:

- Increasing reliance on global connections, even in isolated environments
- Rising credential and skill needs of employers and academic aspirations of students
- Low skill and literacy levels among applicants
- Increasing diversity in terms of race, ethnicity, and academic achievement
- Job hopping and multitasking
- Declining recruitment success in rural areas
- A proliferation of missions that threatens to fragment colleges' [and universities'] resources
- New competition from corporate for-profit and web-based

- programs and The Internet and growing demands for information technology skills and certification.¹²

Linkages to the Community

Rural community college involvement in economic development expanded during the 1980s as the demands of business and industry changed. Small and mid-sized enterprises required new technical and organizational skills associated with growing technologies. Colleges began to develop strong alliances with industries. An example of this is the Consortium for Manufacturing Competitiveness in the rural South.¹³

Rural communities have been well served by rural colleges and universities, particularly where there has been a major emphasis on industry niche or cluster development. Many institutions are assisting communities in identifying workforce gaps in the regional economy and helping citizens obtain advanced skills and training. As the information-based economy continued to grow, community colleges again transitioned in the 1990s. The computer and Internet brought dramatic changes to teaching and learning. Business and industry began to move from traditional credit-based training and education and to certifications. Non-credit and customized training opportunities increased, developing under less restrictive conditions than the credit driven policies, which allow more responsiveness to community training needs.

In *Capitalizing on the Potential of Minnesota's Rural Campuses*, Manning, Campbell and Triplett developed a matrix that describes the range of college community connections. In the first pattern, campuses are at the basic level of being responsive to communities. The campus acts in a more independent manner, responding to community questions. Boundaries of the college are maintained as clearly separate from the community. The second pattern is the engaged community, where the college is more involved in the ongoing activities of the community. Here there is a bridging between the boundaries of the campus and community. The third pattern is the most connected level of campus-community linkages, where the campus is fully integrated into the community. In this case, the community and campus work in a coordinated fashion where boundaries are actually blurred.

Table 1: Range of college–community connections¹⁴

Responsive to Community	Engaged with Community	Integrated into Community
College as responder to community requests	College as ongoing participant in economic development organizations	Community system automatically draws on college resources
College as independent actor/cooperator	College as partner	College as collaborator – working for mutual benefit
College asks community leaders how it can be of help	Community leaders rely on services college makes regularly available (e.g. two-way interpreter role)	Community projects integrate resources from college and other community resources
College boundaries are maintained; exceptions are made to support partnership	College develops ongoing venues to bridge boundaries and to partner with community	College and community boundaries are blurred so two systems act as one
Community brings ideas to campus	Community economic development activities begin with college leaders participating	College assumes new roles to address unmet community economic needs (loan funds, temp services agency, retail)

This fully integrated model is characterized by collaboration that maximizes the synergy between higher education and communities. “Success cannot be achieved without both institutions moving toward the same goals.” The principles presented in this matrix assume that the campus will take the initial implementation steps in this new collaborative model. There are seven action-oriented steps to becoming a more engaged campus/community collaboration. The college takes the initiative as:

1. Convener for economic visioning.
2. Leader of a coordinated learning and career partnership
3. Provider and translator of data
4. Integrator of core strengths/industry cluster model
5. Host for business location
6. Leader in research/technology commercialization
7. Campus and individual as entrepreneur¹⁵

The report concludes that colleges should be expected to play a more forceful role in the economic development of the regions they serve and be rewarded for doing so. Collaboration is critical to the future of rural areas in order to meet statewide and regional workforce needs, business and community development and expanded trade opportunities.¹⁶

Rural Community College Initiative

The Rural Community College Initiative, RCCI, was established by the Ford Foundation in 1994 to explore how community colleges can be catalysts for change in economically distressed regions. Many RCCI regions have lost their historic job base of mining, farming, timber or manufacturing, while others may not have had a viable economic base. These college communities share certain characteristics including low educational levels, one-industry economies, and/or high dependence on government programs. Many communities were divided by conflicts among races, economic groups, and natives and newcomers.¹⁷

The Rural Community College Initiative established an important model that connects rural colleges with communities for the benefit of economic and community development. Rural campuses identify economic development roles in their communities including the following:

- Mobilizing regional leadership for economic development.
- Being the center of a regional workforce development system attuned to employers' changing needs.
- Promoting technology transfer and competitiveness
- Promoting entrepreneurship and small business development.
- Developing programs that target poor people while creating jobs.
- Encouraging a strong education ethic.¹⁸

"RCCI provides a process designed to build broad-based collaboration between college and community and bring about long-term change. To RCCI, economic development means creating jobs, raising incomes, generating wealth, and reinvesting that wealth in the region's businesses, institutions, and people."¹⁹

In summary, the two approaches found in the Rural Community College Initiative and the Manning study challenge rural campuses to become more engaged in the future of the communities. The campuses hold many resources, including leadership, facilities for business incubators, resources, access to training for incumbent

workers, provider and translator of data, integrator of industry niche development capacities, and provider of entrepreneurial opportunities. The fully integrated campus/ community model can maximize the future potential for rural communities.

Future Challenges and Opportunities

Out-Migration: Overall, rural areas are characterized today as diversifying, less agriculturally oriented, diminishing in population, aging, less educated, less technology-oriented, and less well off economically than their metro-based counterpart sector. An ongoing challenge in rural America is the out-migration of the population. Massive numbers of people continue to move from rural areas to larger cities and metropolitan areas. Since 1985, over one-half million people per year have left rural America to move to the cities. This continues a pattern of over 100 years of out-migration. Young people make up the majority of those leaving rural areas. Those “left behind” are aging as a population.²⁰

Rural areas must continue to deal with creating vision and opportunities for young people so they find reasons to stay. Communities must integrate the very best educational opportunities between the school districts and the colleges and universities so people are educated to the highest standards. Higher education’s alignment with regional business and industry development is a key to the future of rural areas. Sustaining existing enterprises is crucial for future regional economic vitality.

Unstable Funding: In April 2002, the National Conference of State Legislatures reported that forty-three states had a deficit. By 2003, it was forty-four, and the deficits have only grown since. As the push for new revenue streams developed over the last decade, it became increasingly clear that there was going to be less state revenue. The American Association of State Colleges and Universities made the argument that “the total funding ‘pie’ for states and for institutions has gotten bigger, but higher education’s piece of the state funding pie has not concomitantly grown, nor has the state’s share of the higher education funding pie. With the state appropriation representing a smaller share of the total budget, colleges and universities have been aggressively expanding other sources of revenue, including tuition, fund-raising, sponsored research and corporate contracting.”²¹

A report by the State Higher Education Executive Officers, focused on the relationship between states and their colleges, found

that state funding for higher education is at its lowest levels in 25 years. According to the report, state funding per student in 2004 was \$5,721. In constant dollars, that represents a decline from \$6,094 in 1981. The result has been that in just the last four years, college tuition has risen at triple the rate of general consumer spending. In 1991, tuition made up 26 percent of state educational revenues. It now makes up 36 percent, according to the State Higher Education Executive Officers.²²

This budget instability particularly affects the rural areas, which serve smaller populations. States continue to deal with the commitment to access to more remote areas while balancing the growing metropolitan areas. Campuses will need to plan for less reliance on funding from state tax dollars; seeking funds from private sources and federal dollars. Of strong concern is the increasing reliance on increased tuition costs from students. More creative partnerships between K-12, business, industry, and community development may provide enhanced resources through the development of shared operations.

A New Covenant

As the world approached the millennium, organizations took the opportunity to review and assess where higher education should be going in the next century. In 2000, a Kellogg Commission report proposed a Higher Education Millennial Partnership Act to renew the “covenant” between land grant universities and the public. The focus was to be on equal access “without regard to race, ethnicity, age, occupation, or economic background,” enhanced civic engagement by “preparing students to lead and participate in a democratic society,” and “conscious efforts to bring the resources and expertise at our institutions to bear on community, state, national, and international problems in a coherent way.”²³ This is, in essence, a call for a more engaged relationship between the universities and the communities.

The American Association of State Colleges and Universities commissioned a study of the core commitments of the public universities and how they might be renewed to meet current and future challenges. In *Renewing the Promise*, the commission determined some key recommendations that are important for the renewal of colleges and universities within the communities. These included:

- States and their universities must develop and sustain a long-term vision for higher education.

- Campuses and systems must work collaboratively to renew and update basic commitments of access in order to reach those most at risk of being left behind.
- Campuses and systems must work collaboratively to renew and update public partnerships in support of communities, regions, and states that require encouragement by institutional, system and state policy.
- Campuses and systems must be guided by a vision and policy environment that emphasizes flexibility, adaptability, and accountability.
- Campuses and systems must forge a new relationship with government, one that promotes public entrepreneurship and accountability for outcomes.²⁴

The W.K. Kellogg Foundation studied the role of community colleges and reported the findings in *New Expectations: Charting the Second Century of Community Colleges*. The report concludes that: "Community colleges are well positioned to educate much of the nation's workforce. As the nation's economy demands more highly skilled workers in order to compete in world markets, community colleges must continue to excel in workforce development." In fact, "the community college, with its emphasis on serving all segments of society, puts higher education within reach of virtually all who seek it. In the 21st century, the community colleges success will continue to depend on its ability to respond to a changing environment."²⁵

As the three major associations reviewed the major future needs and expectations of higher education, they each concluded that it was time for a call for a new covenant or social contract between higher education and the major constituents of these institutions. This renewed covenant is essential for the future of the citizens and the nation.

New Ways of Engaging

New approaches to the future of education can make a significant difference in the long-range development and sustainability of communities. The following model compares the past approaches of higher education engagement with the future approaches given the new economic realities in rural America.

Table 2 *Access to education: Approaches for the future*
*New economic realities in rural America demand an expanded definition of access*²⁶

Typical past and current approaches	Approaches for the future
“Open door” admission	Aggressive outreach to groups that need education, including young high school dropouts, working and unemployed adults.
Primary goal is enrollment	Multiple institutional goals emphasize positive outcomes for students, including retention, graduation, and placement in further education and jobs. College helps each student achieve his or her individual goals.
Emphasis on credentials—awarding of degrees and certificates	Emphasis on competencies — learning what one needs now, while keeping the door open for future learning, as well as graduation and certification.
Emphasis on teaching	Emphasis on learning — student-centered individualized approach
College relationship with students begins at age 18	College works with middle and high schools to prepare more students for post-secondary education and to raise the college-going rate in the region
Enroll those who can travel to campus	Extend classes to people in remote areas and at work sites
College operates in isolation from other educational institutions	Strong links with secondary schools and four-year colleges/ universities

Source: MDC, *Expanding Economic and Educational Opportunity in Distressed Rural Areas: A Conceptual Framework for the RCCI*, Chapel Hill, NC. May 1998.

This model changes the context of how campuses and communities have operated. It calls for far more engagement between communities and institutions, more alignment with K-12 institutions and better collaboration with business, industry and community development.

Catalyst for Change

Rural community colleges and universities can be effective catalysts for change in distressed rural areas. However, serving as a catalyst will continue to be a challenge given the need to balance the access mission, the comprehensive offerings of core programs and degrees and the commitment to economic and community development. Many rural colleges and universities have provided a foundation for improved prosperity in the region. It will take strong leadership for rural colleges and universities to be responsive to the economy's needs without losing their commitment to independent learning and inquiry, to integrate credit with increased non-credit programs and academic and vocational courses, and to select goals they can meet most effectively and relinquish those that can better be met by others.²⁷

This approach will require clear commitment supported by policies in higher education that focus on results, quality processes, and on lifelong learning. The future focus should encourage a culture of innovation, improvement, and quality assurance for colleges and universities that enable all students regardless of age, ethnic background, or environment to succeed.²⁸ It will require policies that support collaboration and innovation with communities in more seamless approaches to learning and training. This focus will be the promise for rural communities.

The public higher education institutions face a future filled with promises and challenges. Action becomes a question of will — the will to question conventional wisdom, the will to take risks and the will to renew. “Continued success will depend on the willingness of leaders on and off the campus to think and act boldly, combining the best of what has been with the promise of what can be.”²⁹ Peter Smith adds: “As we look ahead to the year 2020, those of us in higher education must get over the conceit that traditional institutions, organizational structures, and services will continue to control the future development of higher education. The synergy generated by the emerging forces is not controlled by institutions — it is embedded in the surrounding communities, outside the institutional walls.”³⁰

Conclusion

Higher education is facing tsunami-like changes. Whether the factors of change are demographic, global, economic, technological, or financial, all are coming together in what some have called the perfect storm. Higher education in general and rural education in

particular must heed the call of John F. Kennedy to “hold fast to the best of the past and move fast to the best of the future.”³¹

This will require exploring new directions, new pathways and new ways of doing business. The next generation organization of higher education must be more like a catamaran than the large ship of state. It will need to be far more adaptive, flexible and responsive to the changing environment. A key to the future will be leaders with competencies and skills who share leadership with community leaders. It will include the leadership ability to seek and sustain partnerships.³²

And what will the next ten years be like in higher education?

“America is on a learning curve to its future, propelled not by design but by swirling forces unleashed by our knowledge and our growth, by our successes as a beacon of freedom, and also by our shortcomings. If we are to lead the world into a ‘Knowledge Century,’ we must commit to giving all qualified Americans the opportunity to succeed through education, including higher education that gives them the ticket to opportunity. This will require a revolution in our thinking. Higher education will no longer be the province of a few; it must become the common territory for nearly all of us.”³³

Learners will move between institutions in a seamless manner. Students will have a “mobile transcript” which will serve as a learning passport that travels with the student and reflects the learning accomplished through outcome measures. Services and programs will be customized to individual learning needs. Hybrid courses, those that are on site as well as online, will maximize the enhancement of learning by strategically using technology-enhanced curriculum. Work and learning will be fused where ongoing, “just-in-time” learning will be readily available. Campuses and communities will commit to a higher level of integration, blurring the boundaries, and become learning centers that energize individuals and main streets in the knowledge age.

Expanded engagement and partnerships between colleges/ universities and the communities can serve as leverage against some of the unpredictability in this sea of change. “The public’s institutions of higher education have been beacons of hope, offering the promise of opportunity, knowledge and a better life for generations. As a new generation approaches these institutions, the work of renewal will be one of this generation’s most difficult tasks and one of its greatest rewards.”³⁴

References

Baer, Linda. Ann Hill Duin, and Donald Norris. 2005. The Next Generation Organization: Strategic Planning and Smart Change. WCET Annual Meeting, San Francisco, CA. November, 4, 2005. https://conference.wcet.info/2005/presentations/Baer_Linda.swf

Jackson, Derrick Z. "The Squeeze on College Funding." The Boston Globe. October 18, 2005. http://www.boston.com/news/globe/editorial_opinion/oped/articles/2005/10/18/the_squeeze_on_college_funding/ Retrieved December 1, 2005.

The Land Grant System of Education in the United States. 2005. <http://ohioline.osu.edu/lines/lgrant.html>, retrieved October 28, 2005.

Manning, Monica, Candace Campbell, and Thomas J. Triplett. 2004. Capitalizing on the Potential of Minnesota's Rural Campuses. Center for Rural Policy Development. St. Peter, Minnesota. <http://www.mnsu.edu/ruralmn/pages/Publications/reports/manning.pdf>

MDC, Expanding Economic and Educational Opportunity in Distressed Rural Areas: A Conceptual Framework for the RCCI, Chapel Hill, NC. May 1998.

¹Newman, Frank. Lara Couturier, Jamie Scurry. 2004. The Future of Higher Education. John Wiley & Sons, Inc. San Francisco.

Phillippe, Kent A., and Madeline Patton. 2000. National Profile of Community Colleges: Trends & Statistics 3d edition. Washington D.C.: Community College Press, American Association of Community Colleges.

Renewing the Promise. 2005. American Association of State Colleges and Universities, Washington DC. www.aascu.org

Renewing the Promise. Executive Summary. 2005. American Association of State Colleges and Universities. Washington DC.

Rosenfeld, Stuart. 2001. Rural Community Colleges: Creating Institutional Hybrids for the New Economy. Rural American Volume 16, Issue 2/Summer.

Rubin, Sarah. 2001. Rural Colleges as Catalysts for Community Change The RCCI Experience. Rural America Volume 16, Issue 2/Summer.

Smith, Peter. 2004. Of Icebergs, Ships, and Arrogant Captains. EDUCAUSE REVIEW, May/June 2004, volume 39, number 3.

Smith, Peter. 2004. The Quiet Crisis: How Higher Education is Failing America. Anker Publishing Company, Inc. Bolton, MA.

Treadway, Douglas. 1992. "Higher Education" in *Education in Rural American Community*. Edited by Michael Galbraith, Krieger Publishing Company, Malabar, Florida.

Tribal College Journal of American Indian Higher Education. <http://tribalcollegejournal.org/about/history.html> Retrieved October 5, 2005.

Vaughan, George. 2000. *The Community College Story*. Second Edition. Community College Press. Washington D.C.

Endnotes

¹ *Renewing the Promise*. 2005. American Association of State Colleges and Universities, Washington DC. 1. www.aascu.org

² Ibid.

³ Newman, Frank. Lara Couturier, Jamie Scurry. *The Future of Higher Education*. John Wiley & Sons, Inc. San Francisco, 2004, 1.

⁴ Treadway, Douglas. 1992. "Higher Education" in *Education in Rural American Community*. Edited by Michael Galbraith, Krieger Publishing Company, Malabar, Florida. P.149-150.

⁵ The Land Grant System of Education in the United States. 2005 <http://ohioline.osu.edu/lines/lgrant.html> Retrieved October 28, 2005.

⁶ National Profile of Community Colleges: Trends & Statistics p.23

⁷ <http://www.aihec.org/>

⁸ Phillippe, Kent A., and Madeline Patton. 2000. *National Profile of Community Colleges: Trends & Statistics 3d edition*. Washington D.C.: Community College Press, American Association of Community Colleges. p.7

⁹ Newman, Frank. Lara Couturier, Jamie Scurry. 2004. *The Future of Higher Education*. John Wiley & Sons, Inc. San Francisco, 187.

¹⁰ Treadway, Douglas. 1992. "Higher Education" in *Education in Rural American Community*. Edited by Michael Galbraith, Krieger Publishing Company, Malabar, Florida. P.149-150.

¹¹ Phillippe, Kent A., and Madeline Patton. 2000. *National Profile of Community Colleges: Trends & Statistics, 3rd edition*. Washington D.C.: Community College Press, American Association of Community Colleges. xii

¹² Rosenfeld, Stuart. 2001. *Rural Community Colleges: Creating Institutional Hybrids for the New Economy*. Rural American Volume 16, Issue 2/Summer. 4.

¹³ Rosenfeld, Stuart. 2001. *Rural Community Colleges: Creating Institutional Hybrids for the New Economy*. Rural American Volume 16, Issue 2/Summer. 3.

¹⁴ Manning, Monica, et al. 2004 . *Capitalizing on the Potential of Minnesota's Rural Campuses*, p.7. <http://www.mnsu.edu/ruralmn/pages/Publications/reports/manning.pdf>

¹⁵ Manning, Monica, et al. 2004 . *Capitalizing on the Potential of Minnesota's Rural Campuses* <http://www.mnsu.edu/ruralmn/pages/Publications/reports/manning.pdf>

¹⁶ Ibid.

- ¹⁷ <http://srcd.msstate.edu/cred/scde/session4/barefield.htm>
- ¹⁸ Rubin, Sarah. Rural Colleges as Catalysts for Community Change The RCCI Experience. *Rural America*, Volume 16, Issue 2/Summer 2001. 15.
- ¹⁹ *Ibid.* 14.
- ²⁰ Treadway, Douglas. 1992. "Higher Education" in *Education in Rural American Community*. Edited by Michael Galbraith, Krieger Publishing Company, Malabar, Florida. 137-138.
- ²¹ Newman, Frank. Lara Couturier, Jamie Scurry. 2004. *The Future of Higher Education*. John Wiley & Sons, Inc. San Francisco. 39-41.
- ²² Jackson, Derrick Z. "The Squeeze on College Funding." *The Boston Globe*. October 18, 2005. http://www.boston.com/news/globe/editorial_opinion/oped/articles/2005/10/18/the_squeeze_on_college_funding/ Retrieved December 1, 2005.
- ²³ Newman, Frank. Lara Couturier, Jamie Scurry. *The Future of Higher Education*. John Wiley & Sons, Inc. San Francisco, 2004, 187.
- ²⁴ *Renewing the Promise*. Executive Summary. 2005. American Association of Colleges and Universities. P. 3-5.
- ²⁵ Vaughan, George. *The Community College Story*. Second Edition. Community College Press. 2000, Washington D.C. 27-29.
- ²⁶ MDC, *Expanding Economic and Educational Opportunity in Distressed Rural Areas: A Conceptual Framework for the RCCI*, Chapel Hill, NC. May 1998.
- ²⁷ Rosenfeld, Stuart. *Rural Community Colleges: Creating Institutional Hybrids for the New Economy*. *Rural American* Volume 16, Issue 2/Summer 2001. 7-8.
- ²⁸ Smith, Peter. 2004. *The Quiet Crisis: How Higher Education is Failing America*. Anker Publishing Company, Inc. Bolton, MA. 149.
- ²⁹ *Renewing the Promise*. 2005. American Association of State Colleges and Universities. Washington D.C. 7.
- ³⁰ Smith, Peter. 2004. *The Quiet Crisis: How Higher Education is Failing America*. Anker Publishing Company, Inc. Bolton, MA.
- ³¹ *Renewing the Promise*. Executive Summary. 2005. American Association of State Colleges and Universities. Washington DC. 3
- ³² Baer, Linda. Ann Hill Duin and Donald Norris, 2005. *Smart Change for Next Generation Organizations*. Presentation at the WCET annual meeting. San Francisco, CA. https://conference.wcet.info/2005/presentations/Baer_Linda.swf
- ³³ Smith, Peter. 2004. *The Quiet Crisis: How Higher Education is Failing America*. Anker Publishing Company, Inc. Bolton, MA. 147, 152.
- ³⁴ *Renewing the Promise*. 2005. American Association of State Colleges and Universities. Washington DC. 33

LINDA BAER earned her bachelor's degree in sociology from Washington State University, her master's degree in sociology from Colorado State University and her Ph.D. from South Dakota State University. Before joining the Office of the Chancellor staff, Linda was the Senior Vice President for Academic and Student Affairs and also Interim President at Bemidji State University.



Linda provides leadership throughout the State of Minnesota and presents nationally in academic innovations, e-learning and services, bridging higher education with the workplace, assessment and accountability, educational transformation, and the development of alliances and partnerships. Her recent publications and presentations include work on the challenge of change, myths and realities of technology-enhanced education, and the blueprint for building strong partnerships. Linda co-authored a book entitled, *Partnering in the Learning Marketplace*. She recently published an article on "Higher Education and Technology: Bridging the Generation Gap."