

**TESTIMONY BEFORE THE SUBCOMMITTEE ON RURAL DEVELOPMENT,  
RESEARCH, BIOTECHNOLOGY, AND FOREIGN AGRICULTURE  
HOUSE AGRICULTURE COMMITTEE**

**Field Hearing on "Broadband Access in Rural Economic Development"**

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Mr. Chairman, members of the Committee, my name is Ray Schroeder. I am a professor emeritus and director of the Center for Online Learning, Research and Service at the University of Illinois Springfield.

I have been engaged in online learning for the past 15 years, including founding the Office of Technology-Enhanced Learning in 1997 that more recently became the Center for Online Learning, Research and Service on our campus. I have been humbled to receive national recognition in a number ways, most recently as the inaugural recipient of the Frank Mayadas Leadership in Online Learning award from the Sloan Consortium. I am fortunate to have worked on this campus for the past 34 years and another half dozen years on the Urbana campus of the University of Illinois. Among our three campuses, the University offers more than 100 online degree and certificate programs. From the Springfield campus, we now serve 1,425 online-only students enrolled in our 17 online degree programs and various certificate programs. These students are located in 49 states and 12 countries this fall semester. The average age of our online students is 34. They are, for the most part, early and mid-career professionals seeking to complete degrees and certificates to enhance their careers and understanding of the rapidly changing technological, economic, social and political environment in which we live. Our online programs are noted nationally for excellence in online teaching and learning; student engagement; and success in degree completion.

The Sloan Consortium, the leading national association dedicated to quality in online teaching and learning, reported that more than 4.5 million US students took at least one online class in 2009. That number has since risen to an estimated more than six million students in the past year. This represents thirty percent of the twenty million students enrolled in post-secondary education in this country. In the state of Illinois, the Illinois Virtual Campus has been tracking the growth of online learning for the past dozen years. It is an impressive record of annual increases in enrollments among students in community colleges as well as private and public colleges and universities across the state: <http://www.ivc.uillinois.edu/report/pdf/Spring11.pdf>. .

Online learning provides access to higher education for those busy Americans who are working, caring for families, and/or seeking to advance their careers. The University Professional and Continuing Education Association (UPCEA) and the Association of Continuing Higher Education (ACHE) just last week co-sponsored a national Summit on the Future of Online Learning in Chicago. The Summit examined the important and growing role of online learning in adult, professional and continuing education. UPCEA will convene the organizations represented at the Summit in a follow-up conference to be held in Washington, D.C. in the coming months. Several organizations with a stake in adult and online programs will develop a joint policy agenda and a blueprint for expanding access to quality online learning programs.

Access to online learning in the U.S. is provided, in most cases, for those with disabilities, those with non-traditional work schedules, those who cannot travel to a campus. But, online learning does not provide access to all Americans. Many of those Americans who reside and work in rural areas of our country are disenfranchised from the 21<sup>st</sup> century delivery mode because they are not served by the affordable broadband connectivity required to fully participate in online learning.

I teach online every semester and most summers. Among the courses I have developed and continue to teach online is "Internet in American Life" for which I am the lead instructor of the five sections we are offering this fall. As you might suspect, the readings for our course are from the Pew Charitable Trust ongoing initiative of the same name. As part of the course, for the past several years, we complete a module on broadband access in rural, suburban, and urban areas. The research is consistent with our student anecdotal reports - broadband stimulates learning, economic development and opportunity; the lack of such access is detrimental to schools and business (both small and large) development. From that class, as recently as last week, I can relay comments from students residing in rural locales reporting their frustration with having to pay nearly \$100 a month for less-than-reliable broadband service capped at as little as one or a few gigabytes. The fear of exceeding the limit causes parents to restrict Internet access to children doing schoolwork. It is far different in urban areas where smart phones connect at 4G speeds and free access to high speed Wi-Fi is available at libraries, MacDonald's and coffee shops around the corner.

I would like to briefly relate the experience of my younger daughter, a graduate of UIS, who founded a small business in a rural area near Cobden, Illinois in 2008. The business, InBlue, specializes in leather bound journals; iPod and iPad cases; wallets; and related leather bound articles that are personalized with ink drawings and lettering. This small business began as a storefront on the boardwalk in the small community of Makanda, Illinois. The business only became successful when she was able to move to Carbondale, and eventually to Asheville, North Carolina. Her success in both communities was not due to local sales, a scarcity of workers or supplies, but to the

more than 90% of her sales that are made online. She credits the success to access to broadband services that allowed her to reliably connect to clients who now span the globe from large U.S. cities, to Amsterdam; London; Sydney; Abu Dhabi and other points around the world as she sells online at <http://inblue.etsy.com>. This is a thriving small business that employs several staff members utilizing American made and produced supplies (leather, ink, thread, etc.), creating a positive cash flow into the small city of Asheville, NC, through sales to other countries and elsewhere. Imagine how many such small businesses in rural areas fail, or fail to launch, simply because of lack of access to that which we take for granted in more urban areas, broadband Internet service.

Speaking as an individual with expertise in this area, I personally believe that among the fabric of solutions that may be woven to address this problem are:

- Expansion of 3G and 4G services to deep rural areas - not just along the interstate highway system
- Support for telephone and cable companies -as well as rural entrepreneurs - to expand services to connect rural residents
- Expanded use of available microwave frequencies to serve areas where this distribution mode is practical
- Support for further expansion of satellite services in ways that enable asymmetric services that provide practical and useful service levels
- Support for school systems, libraries and related educational enterprises to offer broadband services for both educational, and where appropriate, general access
- Support for higher education, including community colleges, colleges and universities; to extend programs online in support of degree completion as well as rural economic development

As you meet here in Springfield, Illinois, I remind you that our great forefather, Abraham Lincoln, had the vision and foresight to bring higher learning to the people of our country through the Morrill Act in 1862, conceiving land grant universities, including the University of Illinois. The vision of Abraham Lincoln is realized in the 21st century through online learning. In many ways, the Internet has become the land, the location, of campuses and learning. We have the same obligation 150 years after the first Morrill Act to open learning opportunities and advantages to the citizens of all parts of our country.

Thank you, Mr. Chairman, and members of the Committee, for your kind attention.