Rural Broadband And Quality of Life

To preserve what matters most to rural quality of life, it's necessary to balance digital opportunities and technological disruptions.



n 1970, when I read in the book "Future Shock" that someday anyone could have a personal computer and live and work anywhere via telecommunications, I knew instantly that was my goal. I wanted to have no bosses or employees and to live in a remote, rural location in the Rocky Mountains, where I grew up.

I achieved my goal in 1998, when I founded Lone Eagle Consulting after spending 11 years on the faculty of Western Montana College (now the University of Montana Western). Nearly 20 years later, I've found out that, once online, everyone has the choice of deciding to learn any subject in the world – or not. Aggressive, self-directed, online learning can quickly make a person different from those who forgo ongoing growth in mental capacity and the insights of new knowledge.

Once I got online, I was easily able to interact with others like me, in text only, and it was exciting to find a virtual community of interest that wasn't as limiting as my little town. Among other skills, I learned grant writing, but after I won funding to send free modems to 100 teachers in one-room rural schools, half the teachers sent the modems back, saying, in effect, "That's not how we do things here." Those who used the modems received free online courses, new resources and skills, and a vision for what would be the future of education. The others were left with only what their budgetstrapped schools could provide.

That's when I learned that, beyond gaining access to mere infrastructure, bridging the digital divide depends

on first learning what broadband makes possible and then choosing to do good things with it. Without a rural culture of creativity, the digital divide will persist, even with broadband.

LEARNERS INHERIT THE EARTH

An aphorism that has been attributed to several great thinkers is "In times of change, learners inherit the Earth." The need for lifelong learning, the changing nature of work, and the search for stability and sustainability in a world of accelerating change all raise the same question: What will motivate rural citizens to pursue the education they need for continual change?

As a rural resident, I am concerned about preserving the cherished rural lifestyle despite accelerating change and disruptive technologies. Family values, peace of mind and rural sustainability may be at risk if we do not pay attention to the changes happening around us. We must remain aware of our choices for creative adaptation.

Although the digital devices that impact every aspect of life hold the promise for a sustainable digital future and new freedoms for an ideal rural





lifestyle, these benefits are possible only if rural residents can stay ahead of the avoidable downside risks.

And risks certainly do exist. Hatemongering, fake news, anti-science propaganda, hacking and ransomware are only a few of the dangers that await internet users – and corrupt the society and body politic of the United States.

But the benefits exist, too. For those whose love of rural life tops their love of money, online flextime work can deliver supplemental incomes. For the more ambitious, "making the living you want, living wherever you want" is increasingly viable. Increasingly, rural folks learn from others online what's already working for others like them.

TIME IS A FINITE RESOURCE

Even just considering the benefits, there can be too much of a good thing. As time is the most finite resource, for a great many rural folks, particularly seniors, less is more in the age of information overload. As ever faster internet delivers more and more video content and as smartphones, social media and apps take up more hours of each day, immersion in digital media can diminish the rural esthetic and lifestyle. Thus, the shortest way of keeping people updated will matter more and more. Purposefully curated, ongoing updates targeted to individual needs are likely to evolve quickly.

Smarter support services must accompany faster internet services. Time-saving smart services and smarter collaboration can prevent isolated rural citizens and rural communities from unnecessarily duplicating efforts in their attempts to keep current.

Hidden among the proliferating number and variety of apps, which many people find overwhelming and threatening, are time-saving gems that can help people. The challenge is to identify the fast-track training and insights that can turn technofear into welcome empowerment and to find acceptable ways of teaching them. Most rural folks prefer to learn from peers rather than institutions, organizations or government agencies.

Being traditional arguably means staying the same, but the pioneers, of necessity, engaged in creative adaptation to survive as they encountered many unknowns on the new frontier.

LOCAL SUPPORT NETWORKS

Local mutual support networks offer opportunities for people who can share digital solutions to mentor those who need solutions. Mitigating the growing threats to personal security and maximizing the benefits of smarter shopping and quick access to essential information is not just a matter of spending a few hours at a digital literacy workshop.

In the mid-1980s, bulletin board system operators created the first local community networks. They touted the vision of bringing good people together with the efficiencies of online collaboration to build local community capacity. The idea was as obvious as can be: Locals can better support one another through the convenience of online sharing to communicate what's new and useful. Typically, grassroots champions served as the necessary change agents to raise awareness and enthusiasm.

Even though dial-up was slow and expensive, MIT's plasma fusion lab worked with the University of Montana Western to deliver online courses in chaos theory mathematics to seventh-

RURAL BROADBAND

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graders in Montana and Wyoming oneroom schools. At least one student went on to graduate from MIT as a result, but no one paid attention – because this happened in 1992, before the advent of the World Wide Web.

When the web arrived, people could independently find nearly whatever they wanted online, so "bowling alone" replaced the idea that "if we all share what we know, we'll all have access to all our knowledge." The exponential potential of "the power of all of us" was replaced. Emphasis shifted from building local collaborative capacity to individual independence.

Broadband opportunities have to do with human sharing, peer-based skills transfer and mutual support at the same time that they empower solo individuals as self-directed learners and earners.

THE INNOVATION ENGINE

In a global economy based on knowledge, reputation and innovation, whether a person chooses to be a proactive learner and innovator versus a passive consumer, unable to contribute anything of value to society, will matter a great deal.

According to Oxford University researchers Carl Benedikt Frey and Michael A. Osborne, 47 percent of total U.S. employment is potentially automatable over the next decade or two. If artificial intelligence and robots replace low-skill jobs, can unlimited free online education and training unlock the potential of the billions now online, who will be joined by another 3-plus billion in the next decade?

As individuals learn to earn online and gain skills to produce meaningful content aimed at helping others learn to earn, new markets should emerge for a broadening array of information products. Demand for local human mentoring services should grow, and social services are not likely to be replaced by artificial intelligence or robotics.

However, cultural differences in the appetite for education vary widely.

EXCERPT FROM THE CONSTITUTION OF THE ASSOCIATION FOR COMMUNITY NETWORKING (1993)

We, the members of AFCN, hold these truths to be self-evident:

- That increased connectivity among caring people will build local community social and organizational capacity
- That our collaborative effectiveness will increase as we all gain experience and as the tools improve
- That resources and effective practices are evolving rapidly and need to be systematically shared between communities
- That we must and can invent new ways of inclusive organization
- That we can learn more together than separately.

Learn more: http://lone-eagles.com/incubat.htm

In India and Asia, the opportunity for unlimited online education is insatiable. In the rural United States, the current generation is the first to be less educated and less motivated than its parents. This striking contrast should be of concern.

TOO MUCH, TOO FAST?

Is there too much change, too fast? The new voice command home products of Amazon and Google might offer convenience and efficiency, but artificial intelligence interaction might not be a priority for rural homes already impacted by the growing use of smartphones.

Convenience and simplicity in an increasingly complex world might make sense in some instances, but the right balance to sustain quality of life is coming into question.

Those who find online, self-directed learning exciting find themselves in stark contrast to others who want only entertainment. Getting online help sustains motivation for growth among some people but not everyone.

One Alaska Native elder told me, "Elders don't want to hear about something they know nothing about."

Research suggests that around 16 percent of rural citizens are naturally self-directed learners, often entrepreneurial, and naturally attracted by new ideas and actionable opportunities to explore. This leaves 84 percent who choose to stay the same while the "creatives" embark on the frontier of the future.

The effort and risks of growing a high-tech startup business are not for everyone. But all rural and urban Americans need to become aware of how easy many new entry-level digital entrepreneurship opportunities have proven to be. The greatest rural export in the United States is young people, who don't know how to play a key part, yet, in ensuring their rural communities' digital futures.

There are entry-level telework jobs, such as taking orders for pizza, taking reservations and more. Though the wages might be only \$11 per hour, the training is also minimal. Those able to engage in online, self-directed learning can acquire more skills and potentially reap higher incomes as self-employed freelancers. (A 2016 study commissioned by Upwork and the Freelancers Union indicated that the freelance workforce represents 35 percent of the U.S. workforce and that nearly three-quarters of these workers use technology to find work.)

E-commerce has become commonplace, but small rural retailers are intimidated by competing with the ongoing innovations of online ordering and two-day delivery of Amazon (and now Walmart, Target and even Google). To address this need to stay current amid accelerating change, new e-learning services are growing. They provide tips on how best to benefit from apps that address each user's priorities.

Essential benefits can save time and money, such as smarter online shopping, remote telehealth services, and quick access to government information as necessary. New e-learning services can help rural residents take advantage of opportunities to earn their livings online, to shop wisely and to access health care and government services.

Voice commands and dictation can now turn a voicemail into a text email or the reverse. Users don't need to learn to type, or even read, to interact online. That means all citizens can learn to help both themselves and others. It means nations will compete economically and socially on their challenge to engage and empower all citizens.

Lending my wings to others was my original hope as I set out to share my new freedoms and abilities. After having enjoyed 20 years as a Lone Eagle, self-employed and teaching online from a rural ranchhouse in southwestern Montana, to my chagrin, I've found more resistance than acceptance. But that lesson sets the stage for the present challenges. �

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