

Everett Rogers in his classic book, Diffusion of Innovations  $4^{th}$  Ed. (1995) discusses in great detail the process of how innovations are spread through social systems. The theoretical approach described by Rogers is in many respects a cookbook for effective change. He explains in easy to understand and well documented terms how innovations succeed or fail. Unfortunately, Rogers' entire process is only rarely followed.

Recently in South Dakota, a series of events have occurred that read almost like a laboratory exercise for the successful implementation of an innovation based on Rogers' ideas. South Dakota has set out to infuse technologies for teaching and learning and distance education into all aspects of the state's educational system. This is not to say that distance education and use of technology are new ideas in South Dakota. Just the opposite is true. The state's educational community has long been heralded for its effective implementation of instructional technology tools and techniques. What is new is the systematic approach followed in recent years largely because of the vision of Governor William Janklow.

Janklow, a long-time believer in effective change and problem solving approaches and an ex-Marine, decided a few years ago to make a serious commitment to educational technology and distance education. He formed a vision, developed a plan, marshaled his forces, obtained external support, and demanded excellence of all involved. The result has been a unique blend of public and private support for educational change focused on increased use of instructional technology and distance education. This issue of *TechTrends* describes events in South Dakota that serve as a

model for other states and organizations that desire to effectively change the process of teaching and learning using technologies of instruction.

The first article in this special issue is by Tammy Bauck, the Director of the Office of Technology in South Dakota. If Governor Janklow was the architect of the move to technology in South Dakota Education, Director Bauck is the prime contractor. It is her organization's responsibility to implement the activities underway in the state and explained in this TechTrends issue. Tammy Bauck's article, "Distance Education in South Dakota: A Historical Perspective," gives a background overview of the state's many technology projects. It also provides a foundation for understanding more recent events.

The next article is by the Secretary of the Department of Education and Cultural Affairs of the State of South Dakota, Ray Christensen. Ray explains a truly interesting and probably unique project called *Wiring the Schools*. This project used minimumsecurity inmates under the direction of master electricians to wire every school in South Dakota for modern telecommunications. Ray Christensen understands the *Wiring the Schools* project well because he directed it before becoming Secretary of Education.

A second project in South Dakota was called *Connecting the Schools*. John Moore, Director of the Division of Education Services and Resources, describes this project. The Connecting the Schools (CTS) project followed the Wiring the Schools activities and seeded schools with equipment that used the state's new network. The CTS project also finished building what is now called the Digital Dakota Network (DDN), South Dakota's telecommunication network. The DDN is the infrastructure for distance education in the state.

Certainly, the human factor was not forgotten in South Dakota. Two interesting efforts are described in the next two articles. Melody Schopp and Marlene Rothermel describe the Technology for Teaching and Learning Academies (TTL) conducted to provide teachers with the skills needed to use technologies effectively. Next, Doreen Gosmire and Judy Vondruska explain the Distance Teaching and Learning Academies (DTL) that provided South Dakota educators with the skills needed to be effective in teaching distance learners. The TTL and DTL Academies are models for other states and organizations to follow. They are comprehensive, lengthy, rigorous, and practical. They meet real needs of real teachers.

The social and philosophical side of innovation diffusion was not forgotten. Governor Janklow and his state's education leaders realized that new ideas are not indigenous to one state and that South Dakota could benefit from the perspective of external experts. Governor Janklow's Capital City Distance Education Conclave on brought a dozen experts on distance education and instruction technology to the state. This group, almost immediately labeled the Dakota Dozen, shared their visions with the Governor, his staff, and 50 invited leaders from the state. These leaders, dubbed ambassadors, were to take the ideas presented in the Conclave back to their home communities to be spread and shared with others. Shawna Paskert and Tracy Young explain the Conclave in the article "The Governor's Conclave: Starting the Process of Change" in this special issue of *TechTrends*.

There is a shared perception that South Dakotans are practical, downto-earth people. They do not accept new ideas without proof of effectiveness. The final article in the South Dakota section of this special issue of TechTrends by Michael Simonson and Kristin Sparks explains the comprehensive evaluation plan they implemented that examined the impact of the WTS project, CTS project, TTL Academies, DTL Academies, and Governor's Conclave. Evaluation information was used formatively to finetune projects as they occurred and as a baseline to document change in teaching and learning in South Dakota.

It is only rarely that an entire state unites behind an idea. In South Dakota this appears to have happened. The serious, down-to-earth folks that inhabit one state of the nation's heartland have not just recognized the need for change in education, but have established a process that will very likely bring success. South Dakota's systematic approach is one to be followed by others. They have answers to questions that many others in instructional technology and distance education are asking. This issue of *TechTrends* shares many ideas from South Dakota that can be readily adopted by other states with similar visions.

## REFERENCES

Rogers, E. (1995). Diffusion of innovations, 4<sup>th</sup> Ed. New York, NY: Free Press.

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