

KUEN

LOCAL CONTENT AND
SERVICES REPORT TO THE
COMMUNITY FOR 2016



Utah Education and Telehealth Network



KUEN

operates the Utah Education and Telehealth Network. Known locally as UETN, our station connects people and technologies to improve education and healthcare in Utah. We're proud to present to our community and the Corporation for Public Broadcasting the following highlights of UETN's local content and services for 2016 in our three main service areas:

- **NETWORK SERVICES**

In addition to broadcasting three digital television channels, UETN operates and maintains the state's education and telehealth technology infrastructure, including broadband, online and distance learning.

- **APPLICATION SERVICES**

We work with partners to distribute a suite of high quality tools and resources to support education and lower costs.

- **SUPPORT SERVICES**

We provide ongoing support to optimize the educational potential of the network and to keep it affordable for public institutions.

UETN SERVES

633,896

K-12 STUDENTS AT



1,085 SCHOOLS

70+

HOSPITALS, CLINICS, AND HEALTH DEPARTMENTS

3

MILLION PATRONS AT

135

PUBLIC LIBRARIES AND BRANCHES


228,523



POSTSECONDARY STUDENTS AND TRAINEES

67,617

EDUCATORS AND STAFF FROM PRE-K THROUGH COLLEGE

"UETN is a longstanding and essential partner to the Utah State Library (USL) and to public libraries all across Utah. Their services ensure that USL can fulfill its mission to improve the quality of public libraries, especially smaller ones, across the state. This partnership has been a crucial catalyst for three major initiatives benefiting Utah's public libraries: first, Utah's Online Library with in-depth educational resources; second, broadband internet for most of Utah's public libraries; and third, E-Rate assistance that provides broadband access to libraries at substantial savings."

—DONNA JONES MORRIS, STATE LIBRARIAN, DIRECTOR, UTAH STATE LIBRARY DIVISION/DEPARTMENT OF HERITAGE AND ARTS

24/7

EDUCATIONAL PROGRAMMING ON
THREE DIGITAL CHANNELS:

UEN-TV, MHZ WORLDVIEW AND FNX

~ **20,000** STUDENTS

USED UETN'S IVC SYSTEM IN 2016
TO EARN HIGHER EDUCATION CREDITS

1,500+

EDUCATION
AND COMMUNITY
SITES ARE
CONNECTED

VIA
UETN'S
WIDE
AREA
NETWORK



UETN BACKBONE BOOSTS SNOW COLLEGE'S CE PROGRAM

Concurrent Enrollment (CE) gives high school students a jump on the future with credits toward a college degree and a taste of advanced coursework. Yet until recently, many Utah learners couldn't access CE due to a lack of local instructors credentialed to teach at the college level.

All that has changed with Snow College's newly expanded CE program, which relies on UETN to connect faculty with students at 59 locations. With the support of the UETN backbone, thousands of high school students can now choose from a wide range of college courses regardless of the size or location of their schools. With funding from a legislative appropriation, a federal grant and matching funds from UETN, Snow College added new IVC rooms and updated existing connections. UETN increased its interactive videoconferencing (IVC) bridging capacity to accommodate the increased traffic.

Improved access to CE is having a positive impact on learners, particularly those in locations such as West Desert School, a four-hour drive from Snow College. Last year, four of the rural school's eight high school students used UETN's IVC system to engage in several college courses, paving the road to earning postsecondary credentials.

"UETN is a key partner with the Utah College of Applied Technology and helps our colleges serve secondary and adult students to meet employer needs for technically skilled workers. The opportunity for students and faculty to save costs through the various services UETN provides is a significant contribution to the education of Utahns throughout our state."

—DR. DAVID R. WOOLSTENHULME, COMMISSIONER OF TECHNICAL EDUCATION,
UTAH COLLEGE OF APPLIED TECHNOLOGY

COURSE BUILDS ROBOTICS WORKFORCE

It's 6:55 a.m. At a time when other teens hit the snooze button, 140 students are gathering at nine different Utah high schools to learn how industrial automated systems work. Classroom instructors for the AM STEM Academy are joined by faculty from Bridgerland Applied Technology College (BATC) via UETN's interactive video and web conferencing systems to guide the students through everything from fabrication to computer coding. Through the course, the students can earn a 900-hour certificate in Industrial Automation and up to 30 tuition-free credits at local universities. The program, which launched in 2015, celebrated the first group of students to graduate from the Academy in October 2016.

TANNER DANCE LEAPS INTO NEW TERRITORY WITH UETN

Third graders at Circleville Elementary in rural Paiute County twirl, reach and learn with peers 200 miles away. Using UETN's high-resolution web conferencing system and network, they're participating in a live Tanner Dance Arts in Education class. Through this University of Utah program, a dance specialist travels to South Jordan's Early Light Academy and collaborates with teachers and students at both locations. Together, the students choreograph, practice and perform dances that enhance what they're learning. Piloted in spring 2016, the technology-assisted course is helping Tanner Dance bring its highly successful program to children in rural areas.

"The support from UETN has been beyond amazing. We sat down and said this is what we wanted and they made sure both schools had what they needed to make it work."

—RACHEL KIMBALL, DIRECTOR OF ARTS IN EDUCATION, TANNER DANCE



*Tanner Dance Arts in Education bridged students
200 miles apart with UETN.*

"UETN's statewide broadband, applications and resources are essential to our public schools, libraries, and higher education institutions. They help us deliver high quality instruction and conduct assessments over Utah's vast distances. The Network also provides curriculum resources and the flexibility to deliver services that meet the individual needs of students, teachers and leaders as we seek to assure literacy and numeracy for all Utah children."

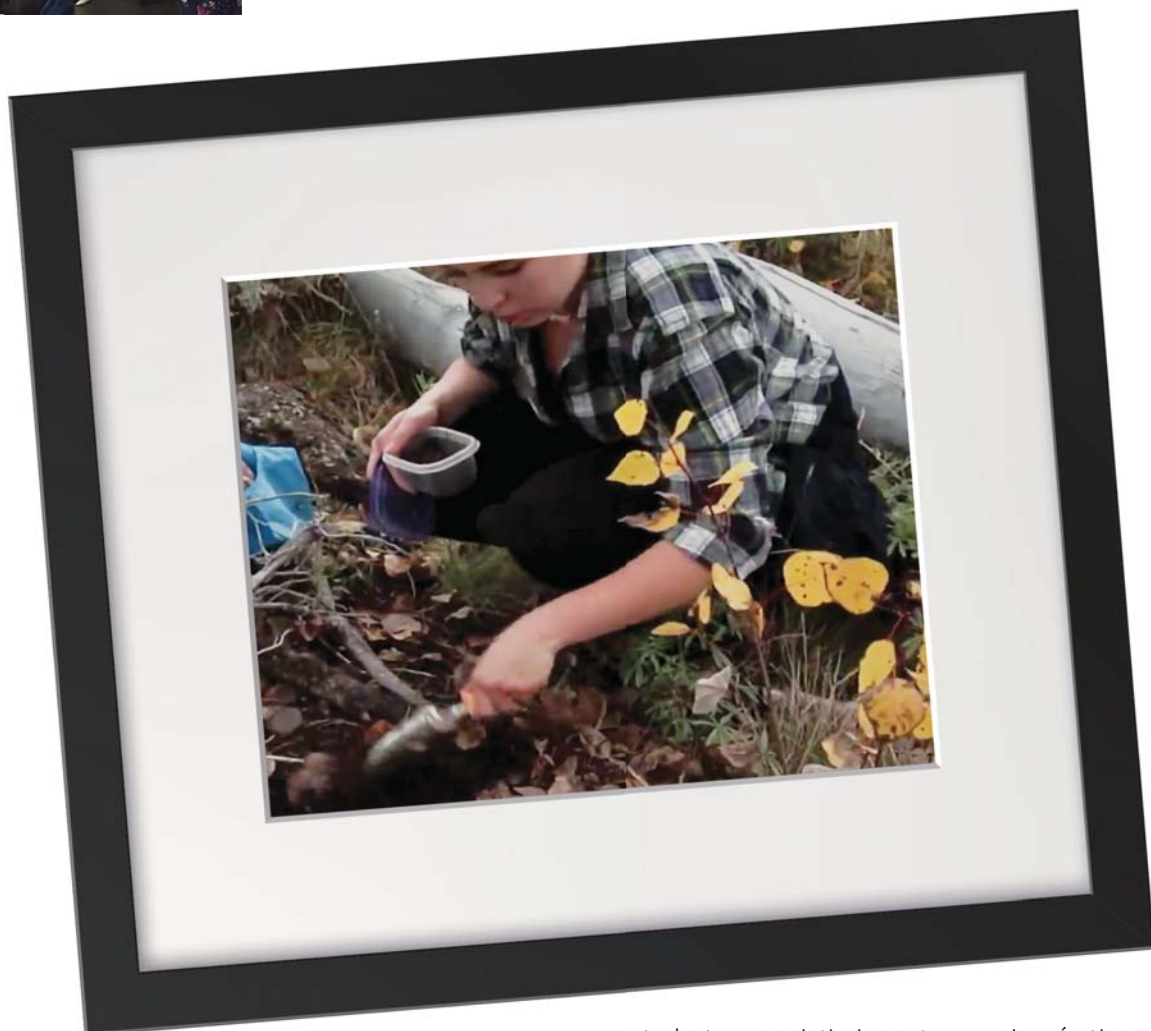
—DR. SYDNEE DICKSON, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION



BROADCAST PROGRAM SPOTLIGHTS STEM INNOVATIONS

As a contributor to the national television series "SciTech Now," UETN shines light on Utah's innovations in science and technology. The station's media team produced segments on innovations in student research, medicine and more, which aired nationally in 2016 and are available to stream or download at uen.org. UETN expanded the educational reach of the program with its grant-funded "SciTech Lounge" at the 2016 Utah STEM Fest, where more than 13,500 youth visited with station staff to learn about STEM concepts and careers, explore the UtahFutures web tools and snap a selfie at the Utah American Graduate photo booth.

UETN invited thousands of youth to see themselves in STEM careers at the 2016 Utah STEM Fest.



Students research the largest aspen clone in the world, Pando Populus, in a segment of "SciTech Now."

COLLABORATION OFFERS FUNDING FOR STARS

Since 2010, the multi-platform program “Cheese Science” has served educational media and STEM career information with one of the world’s favorite foods. The collaboration between UETN, Harmons Grocery Stores and other partners raises awareness of food science concepts and careers. This year, the initiative has grown to provide participants in “Students Taking Action with Recognition” (STAR) a chance to compete for a scholarship from Harmons to fund travel to a national STAR competition.

UETN ASSISTS GLOBAL SUPERCOMPUTING

The largest, fastest computer network in the world was in Salt Lake City last November—and UETN helped make it happen. The temporary network, SCInet, was created for SC16, a supercomputing conference that drew more than 12,000 participants from dozens of countries. UETN provided technical support for SCInet and also facilitated multiple wide area network circuits to the convention center. Lieutenant Governor Spencer Cox described SCInet and the conference as “an amazing opportunity” for our state and identified technology as a valuable tool for increasing educational attainment in Utah.



A range of UETN programs supports hands-on learning for explorers of all ages.

MAKER MONDAYS DELIVERS PROJECT IDEAS

Sparked by growing interest in hands-on, project-based learning, UETN has initiated a new theme block in its broadcast schedule. “Maker Mondays,” running on UEN-TV from 3:30 to 5:30 p.m. each week, delivers expert tips and inspiring project ideas to keep minds growing while having fun. Other UEN-TV weekly program blocks include Teacher Professional Development, Science and Technology, Arts, History and more.

“There is a lot of information on [UETN’s] website that cannot be found anywhere else.”

—JENNIFER CLARK, PARENT

APPLICATION Services and the Community

“UETN’s secure broadband infrastructure links our patients and providers while saving money and improving lives. We rely on UETN’s expertise to provide technical support, resources and consultation with multiple specialists.”

—MARK DALLEY, ADMINISTRATOR, GUNNISON VALLEY HOSPITAL



UETN helps researchers evaluate new approaches to healthcare.

HIGHER ED RELIES ON UETN TO HELP NEW MOMS

Approximately 15% of Utah moms experience depression during or after pregnancy. To help more women at risk of maternal depression, the University of Utah’s College of Nursing is using UETN technologies to study the use of virtual group therapy to prevent and treat the condition. So far, 21 women have participated in “Moms’ Mental Health Matters,” in which groups of four to six new moms and moms-to-be meet weekly with a Mental Health Nurse Practitioner for eight weeks.

“Using UETN’s system, participants access high-quality care from their own homes,” says project director Dr. Gwen Latendresse. “For any new mom, but especially for women in rural areas, traveling considerable distances presents a barrier to accessing important mental health services. This virtual group model is proving especially valuable in removing that barrier. Moms and their families benefit tremendously from this approach.”

UTAHFUTURES BOLSTERS JOB SEEKERS

UtahFutures is an online service that matches timely guidance for students and job seekers with the needs of employers and the business community to support Utah’s education, workforce and economic development goals. UtahFutures has grown significantly with nearly 2,500,000 unique pageviews in 2016 and more than 100,000 registered users in December. Software enhancements, an updated interface and expanded training and support resources have made the site even easier to use.

135,135  VIEWS OF VIDEOS ON
UETN WEB PAGES

MORE THAN 1 MILLION
UNIQUE PAGEVIEWS OF
Utah’s Online Library 


254,627
VISITS TO eMedia

“Institutions within the Utah System of Higher Education are large enterprises serving over 170,000 students a year. The quality of those institutions depends on a solid physical and technological infrastructure—not just in instruction, but also research, campus life, public safety and administration. The Utah System of Higher Education values its partnership with UETN in providing this critical support.”

—DR. DAVID L. BUHLER, COMMISSIONER OF HIGHER EDUCATION

59%
GROWTH IN USAGE
OF UTAH'S ONLINE LIBRARY

7,804,693
unique visits
to uen.org,
UTAH'S PUBLIC MEDIA
WEBSITE FOR EDUCATION

61,640 visits
TO PRESCHOOL PIONEER
AND ESCUELA PREESCOLAR,
UTAH'S BILINGUAL LIBRARY
FOR YOUNG LEARNERS

29,000+
PEOPLE REACHED THROUGH
UTAH AMERICAN GRADUATE

196,247
HIGHER EDUCATION COURSES
DELIVERED VIA UETN'S LMS
THROUGH 2016

UETN's "Stories of Champions" gala celebrated the power of mentorship and recognized Utah's American Graduate Champions.

"Excellent event! It was exciting to hear all the incredible things people are doing in our state."

—"STORIES OF CHAMPIONS DINNER" PARTICIPANT

UTAH AMERICAN GRADUATE SUPPORTS COLLEGE AND CAREER READINESS

KUEN's Utah American Graduate (UTAG) initiative completed several projects to support local efforts to improve high school and college graduation rates. With a generous grant from the Corporation of Public Broadcasting (CPB), our station hosted a Round Table for education and community partners, facilitated youth workshops and launched the American Graduate and UtahFutures Reality Check Mobile Apps. UEN-TV also aired more than 2,000 hours of programs that spotlight critical issues, innovative solutions and personal stories related to high school graduation. With additional funding by CPB and public television station WNET, KUEN hosted the "Stories of Champions Dinner," a gala to recognize more than 30 American Graduate Champions who help learners achieve critical milestones. UTAG is part of the national public media initiative American Graduate: Let's Make It Happen, which supports community-based solutions to keeping youth on track to a high school diploma and beyond.





As Utah's education and healthcare network, UETN continually strives to meet stakeholder needs.


UETN WORKS ON BEHALF OF CONSORTIUM TO KEEP NETWORK ACCESSIBLE

As Utah's main applicant for E-Rate funding, UETN continues to support Utah public schools and libraries in applying for reimbursement through the federal program. Through E-Rate, educational institutions can attain necessary telecommunication services at a net rate that is significantly more affordable. In addition to administering the program in Utah, UETN is conducting statewide procurement to qualify contracts for eligible products and services that will lower costs and be made available for use by any and all Utah E-Rate applicants.

GROUNDBREAKING RESEARCH TAPS INTO TELEHEALTH NETWORK

Work is proceeding for the NSF-funded project, "Remote Management of Deep Brain Stimulation (DBS) Patients Using Utah Telehealth Network." The two-year study investigates a model that may reduce the need for patients with neurological conditions such as Parkinson's Disease, traumatic brain injury and depression to travel to major medical centers to receive follow-up care. UETN's network provides the capacity and security required for this project, which has the potential to impact many Utahns.

**\$15.8
MILLION**



**IN TELECOMMUNICATION FUNDS RECOVERED
FOR UTAH SCHOOLS THROUGH THE E-RATE PROGRAM**

**7,304+ UTAH EDUCATORS
PARTICIPATED IN 538 HOURS OF
UETN PROFESSIONAL DEVELOPMENT**

"Working with UETN staff has been consistently positive! They have been extremely knowledgeable and supportive. In fact, they provided direct guidance on our NSF US IGNITE grant that made the application much stronger and I believe helped it get funded."

—DR. CHRISTOPHER BUTSON, DIRECTOR OF NEUROMODULATION RESEARCH, UNIVERSITY OF UTAH



TEACHERS TURN TO UETN FOR WORKSHOPS

UETN's wide range of professional development courses helps licensed and pre-licensed educators effectively integrate technology into their teaching. These courses typically fill quickly—many on the day they're posted—and new courses are added in response to emerging technology and educator requests. To meet the demand in 2016, UETN added to its Professional Development staff and expanded its rich catalog of options with new courses including "College and Career Readiness with UtahFutures" and "Creating Critical Thinkers Through Coding."

UTAH ADULTS CAN GO ONLINE TO GET AHEAD

Adults looking to build new professional skills or engage in lifelong learning now have a new resource: Skills Online Utah brings more than 4,500 affordable, digitally accessible courses to Utah. Working in partnership with Utah Applied Technology College and Vegas PBS, UETN now offers this option for adults looking for competency-based training in a wide range of industries from Manufacturing and Healthcare to Information Technology, Financial Services, Graphic Arts and more.



Utah Education and Telehealth Network

"UETN plays an invaluable role in bringing high quality educational media resources to schools that they wouldn't otherwise be able to afford."

—SARA BRYANT, SOUTHEAST EDUCATION SERVICE CENTER

Purpose



We connect people and technologies to improve education and healthcare in Utah.

Initiatives



NETWORK

We will administer a secure, advanced, and stable network.

Grow capacity > Mitigate security incidents > Support HPC for research > Merge UEN and UTN infrastructure > Leverage peering

APPLICATIONS

We will curate and support high quality resources and tools.

Align to core needs and standards > Focus on graduation > Maximize cost savings through consortia

SUSTAINABILITY

We will secure ongoing funding for our work.

Be transparent and efficient > Maximize E-Rate and HealthCare Connect funds > Seek grants and partnerships

BROADCAST

We will extend programs and projects to benefit our community.

Manage FCC spectrum repack changes > Leverage the IP network > Produce new media

DEVELOPMENT

We will provide excellent professional learning experiences.

Expand Canvas training > Develop telehealth training > Staff adequately to reduce waitlists

Values



Service: *open, honest, clear and respectful*

Innovation: *new ideas and creative solutions, a responsible risk-taking culture*

Diversity: *respect for all*

Equity: *statewide access*

Fiscal Responsibility: *stewardship, public trust*

Empowered Staff: *opportunities for professional growth*

Communication: *seek input, give voice to staff and stakeholders*

Performance Indicators



1. Net Promoter Score
2. 100% of sites connected at sufficient capacity to meet need
3. Network uptime and availability at 99.9% or greater
4. # of Videoconferencing events and classes
5. Website metrics
6. \$ Savings through consortia purchasing
7. # of PD courses and credit hours completed
8. Finances are stable and sustainable