The North Carolina Research & Education Network

NCREN is operated by MCNC and connects teachers, students and partners to collaborate and apply knowledge. The fiber-optic infrastructure provides Internet, video, audio, data and computing network services to all 16 of North Carolina's public institutions that grant baccalaureate degrees as well as the N.C. School of Science and Math, the nation's first public residential high school for gifted students. In addition, constituents include Duke University, Wake Forest University, most of the state's private universities and colleges, state government, regional community networking initiatives such as WinstonNet and ERC Broadband, and many of the state's medical and research institutions. NCREN also provides access to national and international research networks, including Internet2 and National LambdaRail, enabling global research and collaboration.

In 2008, the scope of NCREN expanded to connect all 115 North Carolina K12 Local Education Agencies through the North Carolina K20 School Connectivity Initiative.

NCREN is a reliable, cost-efficient network that enables partners to share resources including computing resources, software applications, scientific research equipment and even people. Advanced collaboration tools such as video-based distance learning enables expert teachers to remotely deliver classes to students throughout the state.

For more than a quarter of a century, MCNC has advanced education and innovation by building partnerships among academic, research, government and business communities to deliver information technology and communication services through NCREN – one of the nation's first and renowned as one of the world's leading statewide regional optical networks. Building upon the advanced networking capabilities of NCREN, MCNC also provides network-related services including co-location, managed hosting, data protection, and website failover. These services enable NCREN customers to benefit from managing data and computing equipment at the core of the network. NCREN maintains regional points of presence (RPOP) on the MCNC campus in Research Triangle Park as well as in Raleigh, Greensboro, Winston-Salem, Greenville, Charlotte, Asheville, Fayetteville, Hickory and Wilmington.

"The exceptional quality and reliability of NCREN video network allows us to offer distance education programs that simply wouldn't be feasible otherwise... I can't think of a better model than NCREN for servicing the educational needs of North Carolina."

Tom Miller, Vice Provost for Distance Education and Learning Technology
N.C. State University