

# Great Western Network

**What is the Great Western Network ?** It is a consortium of 40 plus K-12 schools in North Dakota who share teachers through an interactive television system. Teachers and students see and hear each other in real time and operate just like traditional classrooms except that their classmates and teachers are located in different towns. The classes taught are primarily elective classes and college level courses. With teacher shortages, small schools are able to receive classes that would otherwise be prohibitive. Below is a history of how the consortium has evolved. For more information, check out the web site at [greatwesternnetwork.com](http://greatwesternnetwork.com) .

The formerly known WRITC/MVCC (West River Interactive Television Cooperative / Missouri Valley Communications Cooperative) became operational in the fall of 1992. Prior to the linking of the two cooperatives, the West River system had been in operation for three years, starting in the fall of 1989. The Beulah, Center, Hazen and Stanton school districts became the first two way analog interactive television system in the state of North Dakota. Consultants and Designers of the original studios and transport system were Ted Renner and Ed Lethert.

The Missouri Valley system had completed 1 year of operation in which eight schools were on line during the 91-92 school year, including Bismarck High and Century, Riverdale, Turtle Lake, Underwood, Washburn, Wilton, and Wing.

The summer of 1992 became a time of major construction for the newly formed WRITC/MVCC. The North Dakota ETC (Educational Telecommunications Council) had approved the Region 7 grant proposals at its March meeting. The grants funded four additional studios; Golden Valley, Halliday, Tuttle and another Bismarck High School studio.

Funding was also provided for the Interlink between the West River and the Missouri Valley Cooperatives as well as a link with the North Dakota IVN (Interactive Video Network). The IVN connect provided a means for any of the eleven state colleges in the North Dakota University system to deliver courses to GWN schools.

The Riverdale School closing resulted in the move of that equipment onto the campus of Bismarck State College in the summer of 1993. College level and evening credit and non-credit courses are delivered from BSC.

In the summer of 1994 the I-94 cluster (Hebron, New Salem, and Glen Ullin) joined the WRITC/MVCC system which prompted a name change to the Great Western Network. Mandan joined the GWN in the summer of 1995.

Wishek, Linton, Ashley, Napoleon, and Steele schools were added to GWN consortium in the summer of 1996.

With new fiber leases, and equipment upgrades, all GWN schools began hooking up to the internet via their existing leased fiber optic cable through Midcontinent Cable. High speed internet access (10 mbps) through cable modem technology became available to each of the schools by the time school started in the fall of 1998.

The summer of 2001 was a major renovation for GWN as ITD (Information Technology Division) had been funded by the legislature to provide internet access to all North Dakota schools. For most schools this meant an ATM T1 connection. For GWN, it meant utilizing their fiber bandwidth and converting from cable modems running at 10 mbps to gigabit ethernet switches tied directly to ITD in Bismarck. All equipment racks became wall mounted and large back-up power supplies were added.

In December of 2001, the Northwest Region ITV consortium voted to become members of GWN. Schools joining were Garrison, Max, North Shore-Makoti, Parshall, and Max. In addition, 3 new schools were added to GWN, including, Flasher, Carson, Elgin-New Leipzig.

The start of the 2002-03 school year has 30 school districts with at least one ITV classroom in their building. In progress are 2nd sites in Turtle Lake-Mercer, Linton, Ashley, Napoleon. Also, the Bismarck Hughes administration building will be the home of two additional sites. The Washburn school added a third ITV room.

Videoconferencing using h.323 technology became available to most of the GWN schools in December of 2002. Polycom Viewstations (either on a rolling cart or implemented into a full studio) were being used for meetings and events among and outside of GWN fiber boundaries.

The Stanton High School closed its doors in the fall of 2003. Their ITV studio was moved and upgraded to become a 2nd studio in Underwood. The Bismarck High 2nd studio, which had housed IVN events during the evening hours in addition to regular classes, was moved and upgraded to the Hughes Administration building in the South Central High School addition.

The ETC funded upgrades and additions to GWN in November of 2004. Classrooms in Parshall, Max, Garrison, Makoti and Minot were renovated to become capable of handling both h.323 and analog transmissions. The following h.323 schools joined GWN: Berthold, Belfield, Glenburn, Solen, Selfridge and Kenmare.

The Carson High School closed in the summer of 2004 and the studio was moved and reinstalled in Hebron as their 2nd ITV studio.

Dickinson Trinity is joining the Great Western Network as an h.323 school and will have their studio built in the spring of 2006.

Richardton-Taylor High School received a grant from the ETC and will become members in 2007.