

Level 2 – Videoconferencing plus Content Sharing Software - \$2900 (approximate) plus cost of computer, monitor and external speakers

Adding content sharing software to level 1 equipment enables the user to display computer content (videos, power points, websites, etc.) to videoconferencing systems made by other manufacturers.

Level 3 – Mobile Unit - \$6-8K

Videoconferencing unit with a built in codec, camera, microphone. (Since the unit has a built-in codec, a computer is not needed.) LCD projector or a flat panel screen with speakers and a cart is needed as well.



Level 3 Mobile Unit

Level 4 – Fully Equipped Classroom - \$30-40K

Teaching by videoconferencing requires instructional tools to engage the distant student. Course subject and level dictate additional equipment needs. Technology is available to provide live streaming and archiving. A list of suggested equipment is available upon request.



Level 4 Equipment



Tips for Equipping North Carolina Classrooms for Videoconferencing



North Carolina School of Science and Mathematics



When considering videoconferencing in schools, the first question to decide is, "How will it be used?" Program goals, staffing, equipment needs and budgets need to be addressed.

The Northwest Educational Technology Consortium website offers "Digital Bridges". Their "Planning for Videoconferencing in K-12 School Systems" section outlines important questions to consider:

<http://www.netc.org/digitalbridges/planning/>

Videoconferencing requires bandwidth and a well designed infrastructure. Prior to making any equipment purchases, an up-to-date assessment of the school district's bandwidth and school WAN is necessary. Contact MCNC Client Network Engineering (CNE) group to request assistance with an assessment of your network's functionality and ability to support videoconferencing: www.mcnc.org/services/network-assessment.html

Purchasing Equipment

Prior to making equipment purchases, contact Ed Chase, the e-rate consultant at DPI, echase@dpi.state.nc.us for information on e-rate eligible purchases and Video Network Services. Note: prices vary by vendor.

Equipment Levels

A classroom can be equipped for basic videoconferencing for a minimal expenditure by using existing equipment. Larger expenditures are needed to equip the room to handle a wider range of features.

Level 1 – Minimum Cost Classroom Setup - \$400 plus cost of computer, monitor and external speakers

Enables a class of students to participate in videoconference sessions. Configuration supports content sharing only with other videoconferencing units that have the same equipment.

- Videoconferencing software: Necessary codec software available for \$199-398 (or less on state contract)
- Camera: High end webcam \$99-120 will display most of the students in a class of twenty-four.
- Microphone: Desktop USB microphone \$90-125 with built-in echo cancellation
- Computer: Videoconferencing software must be loaded on a laptop that is fairly robust; 2Gig dual processors, 3 USB 2.0 ports, and 1Gig memory running Windows XP Pro.
- Monitor: LCD projector or a flat panel screen
- External speakers



Level 1 Setup

