



Use of Bandwidth in Instruction

Recommendations:

Federal Communications Commission: 1 Mbps per user

State Technology Education Director's Association Goal: 1 Mbps per user



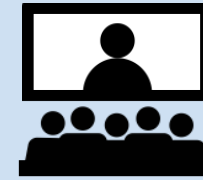
Online Learning

Delivery of core courses or content online.

Example: Ketchikan Digital Academy

Bandwidth Requirements

384 Kbps - 1.5 Mbps per concurrent user
WiFi 54 mbps access points



Virtual Telepresence & Video Conferencing

Delivery of instructional content, professional development and special services from inside or outside the district.

Example: Kodiak Island School District

Bandwidth Requirements

2 Mbps per robot,
2 Mbps per video unit (dedicated)
Robot: Overlapping WiFi



High Access Learning Environments and Personalized Learning

Teachers and students use technology to amplify learning by researching, creating content and digital products, and communicating through email, video and audio.

Example: CDL device per learner (140+ schools)

Recommended:

500 Kbps per user
Wifi Access per classroom, Overlapping



Collaborative Learning

Creativity and communication platform for sharing and tracking high level STEM learning activities.

Example: Trillium Learning/Copper River/KIBSD

Bandwidth Requirements

500 Kbps per concurrent use
(dependent on content)