

What is EduCast, and how is it used for remote learning?

EduCast is an educational datacasting service that uses powerful public television signals to deliver classroom content to students that do not have viable internet access at home. Datacasting content is accessed in the home using a laptop or tablet; it does not involve watching TV. Teachers and school districts can share the same content to all of their students, regardless of their Internet access at home.

Why use educational datacasting for remote learning?

- Bridges the digital education gap in places where viable broadband is not available or is just too expensive.
- No extra workflow for teachers. EduCast can interface with the same learning management system (LMS) tools teachers already use today.
- **Provides the experience of using the internet**, while limiting access exclusively to teacher-curated content.
- **Content goes directly to students.** No more paper packet pickups at school, or access only when parents drive to Wi-Fi hot spots.
- If limited Internet is available, that provides a return path to teachers even if it is not functional for learning.

What are the advantages of educational datacasting?

- **Public television's long-standing mission.** Backed by the mission and commitment of public television, educational datacasting works anywhere you can receive the station's powerful broadcast signal. The goal is equal access to educational materials so students with limited connectivity do not get left behind.
- Infrastructure is ready now. A portion of public television spectrum is used to create a new secure wireless data network with broad rural coverage. Public television has proven resilience even in situations where other networks might be compromised by power outages or severe weather.
- No monthly fees per receiver. Unlike regular internet service, including LTE hotspots, there is no recurring monthly fee per receiver.
- Security via targeting. File delivery can be targeted to specific individuals or classes.
- **Ready to serve.** Like the TV signals it rides on, datacasting is one-to-many: ready to deliver to large numbers of students.

What equipment is needed?

At the television station, a gateway server inserts teacher-curated content as files into the transmission. This does not impact regular TV programming.

In student homes, the EduCast receiver and a powered window antenna are all that is needed. Both are typically provided at no cost to the family. Students connect to the receiver's Wi-Fi signal from their Chromebook, tablet, or other Wi-Fi enabled device. One EduCast receiver can serve multiple students in a household, homeschool, or pod.



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How does it work?

Teachers continue to post assignments and learning materials to their LMS, just as they do now for their students that have broadband. Datacasting works seamlessly in the background pulling in content from the LMS for datacasting students and inserts those files into the TV broadcast. Teachers can share materials to all the students in their class, or send content just to individual students.

Students connect to a web page generated by the datacast receiver in their home to access content just like they were on the actual internet using a laptop or tablet. Students are essentially on a teacher curated closed **Intra**net.

Datacasting has many advantages, but it is not the internet. Like the TV signals it rides on, it is one-way. An intermittent or unreliable internet connection can be used as a return path, making datacasting two-way. When little or no internet is available, datacasting still allows students access to the same content they would if they had broadband.



How can we get started with educational datacasting?

Your public television station is willing to make a portion of their TV broadcast available for this service. Grant funding is available to cover the start-up costs, including gateways, receivers, teacher training, and support. Please contact your public television station or SpectraRep for further information or to schedule a demonstration.





Further information and resources on educational datacasting:

IPBS Datacasting site

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