In 1967, I watched a program in the original Star Trek TV series about the Enterprise encountering a life form based on ammonia. I suddenly understood that biological life is based on combinations of chemicals. Two years later, Comsat gave Juneau one of its first live TV broadcasts: Neil Armstrong’s walk on the moon. Those experiences gave me an enduring personal experience of the ability of TV to educate and inspire.

From 1974 through 1982, I had the privilege of contributing to the development of educational telecommunications in Alaska for what became 52 school districts (K-12). For OT, I wrote the final federal report to HEW about the ATS-6 satellite educational experiments, was then loaned by OT to assist DOE in its planning, then was hired by DOE to implement telecommunications operational services.

1974-75: NASA’s ATS-6 applications satellite was launched in geosynchronous orbit in the spring of 1974. In addition to HEW-funded experiments in Appalachia and the Rocky Mountain regions in the lower 48, in the fall of 1974, ATS-6 began transmitting one- and two-way health and educational programs to more than 20 rural villages in Alaska. The experimental project ending in the spring of 1975, when the satellite was moved to service in India, its primary sponsor.

The ATS-6 15-foot satellite antenna and ground equipment, as well as the educational programming, were managed by the new Office of Telecommunications (OT) in the Governor’s Office. OT contracted with an educational service agency, Northwest Regional Educational Laboratories (NWREL) in Anchorage, to design programming: two elementary instructional TV programs (learning English; health education), with two-way audio interaction segments, and a weekly program for general viewers, “Alaska Native Magazine.” This year-long experiment, which hired part-time village facilitators, proved that the equipment functioned reliably in rural Alaskan villages, and users/viewers welcomed programming relevant to rural Alaskans. The other major outcome of the ATS-6 experiment was a plan for transferring responsibilities from OT to DOE for future development of services for K-12 education statewide.

Over the next four years this goal was accomplished, with significant ongoing assistance from OT. That process is well-defined in three significant planning documents.

1975: At the end of ATS-6’s broadcasts in late spring 1975, OT and the Alaska Department of Education (DOE) negotiated with HEW’s National Institute of Education (NIE) for funding a plan to build on the ATS-6 experience and design permanent K-12 telecommunications services and support. Leadership for this effort came from OT Director Robert Walp and Ernest Polley, Director of DOE’s Office of Planning and Research.

Some instructional TV programming, some in English and Yupik, was regionally broadcast by KYUK-TV and Kuskokwim Community College. The Anchorage School District received broadcasts of two hours of instructional TV daily, via KAKM-TV.
Also that year, the state initiated the $5 million Satellite TV Demonstration Program (TVDP) to install 100 small (15-foot) earth stations in rural Alaska. The first dish was installed in Noatak in November. The Rural Alaska Television Network advisory group (RATNET) was formed to advise the TVDP and select programming (for only TV channel) from commercial and public networks. Initial broadcasts included several hours of ITV.

In November, 1975, NIE granted authority and funds to “A Planning Document for Future Educational Satellite Experiments in Alaska,” which established a contract signed by the director of OT (Robert Walp) and the commissioner of DOE (Marshall Lind) to define responsibilities for planning telecommunications for education statewide.

This 1975 document identified DOE’s priorities. Educational telecommunications must:

- Be cost-effective
- Satisfy students, teachers, and administrators
- Integrate with existing education services & programs statewide

1976: In a major re-organization of rural education, DOE assisted the development of 21 new rural school districts to provide schools to every village with more than 25 residents year-round. This effort was greatly affected by the lack of reliable communications and educational resources; every meeting of the newly elected school board for the Aleutian school district cost the district $20,000 in air fare.

The TVDP installations continued. When this one-phone and one TV channel service reached Mountain Village, the district superintendent in Mountain Village announced the phone number, advising callers to phone early in the day, “and it takes me three minutes to run down there to take the call.”


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Four-year NIE funding resulted in “Educational Telecommunications for Alaska,” the ETA Project. Audio and data technologies were used in a pilot project in four school districts, focusing on 9th-10th grade education, and staff and administrative support.

DOE also created the Office of Technology and Telecommunications, and supported a major effort to inform educators statewide about the potential instructional uses for TV broadcast and interactive satellite-based services. In this “TV for Learning” development, DOE also initiated training in critical TV viewing skills for children, as well as providing teacher guides for some commercial TV programs with educational value.
1979: In April, the legislature passed Senate Concurrent Resolution 35, requesting the Legislative Council (and its Telecommunications subcommittee) to work with the APBC and the DOE’s ITV office to define the feasibility of TV for instructional statewide. The DOE and UA worked closely for the next ten months. Based on existing research, DOE identified 19 guidelines for effective ITV, and developed evaluation criteria for selecting and producing K-12 ITV. DOE also surveyed successful educational telecommunications systems in eleven states and Canadian provinces, defining management, programming, and utilization models relevant to Alaska. UA explored models for audio conferencing for instruction and administration, as well as the delivery of credit courses.

1980-81: In February 1980, the APBC, DOE, and UA completed “A Report on the Feasibility of Telecommunications for Instruction in the State of Alaska.” The report recommended multi-year development of network services based on shared use by a consortium of educational users, regional and interactive services, and continued development of programming and extension of the network to all rural schools. The funding request for FY 81 of $6 million would develop a broadcast center and begin broadcast of an all-educational network managed jointly by DOE and UA. The APBC recommended that it manage the new network. Rural legislators requested a revised plan for faster development, and increased the funding accordingly. Later that year, the Learn/Alaska Network, managed by DOE/UA, began daily broadcasts, with educational and instructional programming for all ages.

DOE awarded $300,000 in grants for school district projects and productions, including support to cultural studies courses. DOE also initiated professional ITV series’ productions and teacher guides, including the award-winning elementary series HOME IN ALASKA by Alaska Film Productions, and an elementary series on Alaska Geography, followed the next year by a high school-level Alaska history and Alaska biography series.

I left DOE in 1982. Learn/Alaska continued to provide educational programming until the network lost funding in 1985. The “vision” behind the initial telecommunications development for education in rural Alaska has been improved or achieved over the years since, and will continue to improve through the combination of local, state, and federal support, as well as commercial services.