noting, as Mr. Fellows did, that the term "Networks for Knowledge" was first used nationally on November 7 of last year.

The President included the idea in his remarks on the signing of the Public Broadcasting Act at the White House. On the following night, Leonard Marks, the Director of USIA, developed the idea of a world-wide information grid. The occasion was the convention banquet address before the National Association of Educational Broadcasters.

In connection with the previous point, it should be recalled that title III of the Public Broadcasting Act provides for a major study of the uses of electronic educational telecommunication media in the United States. This study should certainly be taken into account in the development of projects based on the Networks for Knowledge Act.

This partnership with the Public Broadcasting Act is weakened somewhat by the fact that the present act provides for establishment and joint operation of closed-circuit television or equivalent transmission facilities.

Certainly the modern university does not stop working at the boundaries of its campus, nor is it limited particularly to broadcasting by television.

We recommend that the sense of section 801(b)(4) be broadened to include establishment of joint operation of educational broadcasting transmission facilities.

The intent of such a change would be to avoid artificial barriers between modes of transmission; the important thing is the job at hand, and not whether a signal is delivered by cable or by conventional broadcast transmission.

With regard to modes of information exchange, we should also point out a section of the act that is likely to be subject to considerable stress. That is section 801(b)(7), which provides for such other projects as in the judgment of the Commissioner will promote the purposes of this title.

The act specifically mentions television and computer networking.

In conducting the educational communications system project, however, we found a number of educational requirements that probably call for teletypewriter, or facsimile, or audio transmission, or slow-scan television, or electrowriter techniques, all of which may be valuable and all of which are much less expensive than television or computers.

We would anticipate a number of projects along these lines, and all would serve the purposes of the title without being responsive to those parts of the legislation that deals with specific techniques or specific hardware.

I want to invite your attention now to a major and highly relevant part of the educational communications system study. This is the premise that networks for electronic transmission should be utilized fully. Among universities there is little point to establishing a computer network and a broadcast network and various other kinds of networks.

Within appropriate technical limits, the network, if you will, has no interest in the kind of electronic information that is transmitted on it. A high-speed computer network, for example, has about the same technical requirements as a television network.

Given proper terminal hardware, a high-quality audio network can as well transmit a large number of ordinary voice channels and even