Ken Anderson, owner of Anderson and Associates, serves as chairman of the Advisory Board for the department.

Multimedia, electronics and the off-campus programs intrigue Advisory Board

Over the years, space has served as a crucial concern for the civil engineering department's advisory board. But for now, the board feels that it has accomplished all that is reasonably possible, and the time has come to move on to the new issues of multimedia, electronics and off-campus programs.

The overriding concern, says Ken Anderson, the current board chairman, is communication. Technology leads to better lines of communication, and in these cases, the mediums are "fun", he adds.

"Space was the main thrust for the two previous chairmen of the CE Alumni Advisory Board," says Anderson. "Today, we have commitments from the University's Provost for all the space we can expect for the future. Jack Hill and Kip Robinson (the two former chairs) worked hard in this area," he adds.

Anderson, owner of Anderson and Associates, providers of engineering, surveying and planning services, is a computer aficionado. He is intrigued by all of the new capabilities computers and electronics bring to the workplace and would like to see more use of the new technologies at his alma mater.

"The University currently has one of the most advanced computer and satellite systems in place. The technology could easily be used for more things, primarily in communication," Anderson says. He hopes Blacksburg's potential status as the first electronic village in the United States would complement the University's capabilities.

The electronic village is the brainchild of C&P Telephone Company, Virginia Tech and the town of Blacksburg. Homes, businesses and schools in the town would be connected by a high-speed electronic system. Electronic mail and on-line discussion

groups would be available, and the system would take advantage of a wide range of business, educational, financial and general communications services. The concept is the subject of a feasibility study by C&P.

Anderson is familiar with the project because he served on the town of Blacksburg's telecommunications committee that investigated the concept.

"I would like to use some of this technology and apply it to the off-campus program," Anderson explains. People should be able to dial up a course....Courses would be similar to a pay-per-view television channel. This concept could significantly expand the influence of the University, and there would be the added opportunity to bring in revenues," Anderson suggests.

Alumnus Ken Anderson sees the need to move on to new issues such as applying the Electronic Village concept.

He also envisions electronics reducing the traditional need for classroom space. With the students' ability to access a course with the pay-per-view idea, class size would not be limited by space.

"Now, the off-campus program is seen by faculty as an added responsibility with no incentives. We need to reallocate resources to recognize the efforts that faculty members make in off-campus teaching," he explains.

At the same time, Anderson warns, faculty need to be creative in their televised teaching habits. "Multimedia programming offers the chance for some imaginative methods of learning; chalk and blackboards have been around for hundreds of years," the alumnus adds.

Multimedia in engineering education means the marriage of television, personal computers, and laser storage disks into one technology. The result might be a CD-ROM, a compact disk played on a personal computer or the Multimedia PC, considered to be the Mercedes of the personal computers.

In civil engineering, a multimedia illustration of the use of trusses, for example, might superimpose a computer diagram of a truss over the photograph of a bridge. The photograph can be copied onto a multimedia's hard disk, and edited or manipulated like text files. Previously in engineering classes, students only saw line drawings.

"It takes a lot more effort to be this creative in the classroom" but the end result will be worthwhile, says Anderson. And, if the class is televised, the concepts should be more easily understood by the long distance learner.

Anderson's vision of the future advancements of the civil engineering department appear to have the time requirements of a full time job. But the 1970 CE master's degree graduate is used to being busy. He started his company while he was in graduate school and became involved in town politics simultaneously.

Soon, he was branching out to regional and state politics, joining the Virginia Society of Professional Engineers, among a number of other organizations. He served as president of the VSPE during 1987-88. The engineer is also active in the National Society of Professional Engineers, serving on numerous committees and as the national director from 1980-84.