

SOS Planning Workshop In Anchorage

ANCHORAGE—"We can't run in with the answers. The only way to find any answers is to work together, and work with the village people. There have been many needs assessments, but we may not have asked the right questions," said Dr. Dick H. Bower, director of Planning and Evaluation for the Alaska State-Operated School System.

The comments were made at a workshop on facility and program planning held in Anchorage Dec. 12 and 13. The two-day session was part of a continuing effort to promote cooperative and comprehensive planning between agencies, professional, industrial and community groups, particularly as such planning relates to the construction of new educational facilities in rural Alaska.

Although a great deal of discussion centered around proposed secondary education facilities for St. Lawrence and Nelson Islands, it was not the

purpose of the workshop to engage in any specific planning activities. The meetings were designed to bring together government and educational agencies, architects and engineers, and new approaches in technology and materials design.

Dr. Charles Trotter, director of the School Planning Laboratory at the University of Tennessee, described the "charrette" approach to community based planning. The "charrette" design involves all members of a community, working to recognize problems, seeking solutions, and in the case of educational planning, arrive at specifications for facilities and programs.

Dr. Trotter stressed the importance of commitment on the part of a community. It is also important "to find out who the decision makers are going to be. Maybe the people from Washington (or Juneau) have to be there when the decisions are made," Trotter stated.

John S. Shaver, representing the Ford Foundation's Educational Facilities Laboratories, presented a slide display of new techniques in inflatable, air sup-

ported and tension structures. There are several factors which should make consideration of such structures appealing, according to Shaver.

Construction can be completed quickly; the structures are 1/4 to 1/3 the weight of more conventional buildings; there is less material to transport and shipping costs are reduced. A maximum amount of assembly work is completed within the factory, minimizing work requirements at the building location.

Shaver stressed the importance of visual and acoustical privacy, whatever the type of building being planned. "We're talking about humanizing space," the architect remarked. Shaver noted the need for accountability as well, saying that different approaches to construction must be supported by good reasons.

Workshop participants expressed the need for cooperative exploration of both facility and program alternatives, involving community residents, architects, agency representatives and resource consultants. The group explored the many implications

for construction planning in Alaska, considering the influence of permafrost, insulation and heating requirements, and the already heavy burden on village electrical systems.

John Shaver stated that insulation methods and efficiencies in air and tension structures are really no different from conventional buildings. Anchorage Engineer Ted Creedon suggested that waste heat from electrical generators could be used to heat the Nelson Island school for nine months of the year.

Nationwide resource shortages are currently causing delays of from five to 12 months on certain materials and supplies, and companies find that they cannot make any firm commitments regarding delivery dates or costs. These difficulties are compounded by the fact that many materials are shipped by barge to Alaska on a once-a-year basis. If all key materials are not ready for shipment at the same time, construction schedules can be severely curtailed.

According to John Shaver, such problems could be greatly alleviated through the use of a "Performance Specifications" approach to building design. In conventional methods of design, specific materials and components are defined. Through a "Performance Specification" process, a client defines the end product and qualities desired, but not the particular components. Contractors are then free to choose the most suitable available materials which will provide the desired qualities.

The "Performance Specification" approach is often combined with the "Design/Build" process through which a contractor is involved in preliminary design stages. Both processes are intended to shorten the time from initial conception to completion of a building.

It is possible, Shaver feels, that by using such techniques the opening dates of schools such as those to be planned on St. Lawrence, Nelson and Prince of Wales Islands, could be moved forward as much as one year.

Yet even if material and supply problems are in practice solvable, there was nearly unanimous agreement by workshop participants that the major task which lay ahead may be one of communicating the various alternatives and ideas under consideration, so that they may be explored, and if appropriate, endorsed, by political decision-

makers, the construction industries, architects and design professionals and community members.

Current legislation and funding patterns affecting school construction may have to be reviewed as well, a participant noted. Using St. Lawrence Island as an example, a new high school would mark the introduction of new services and responsibilities on the part of several governmental agencies. Dr. Bower noted that this fact in itself should suggest the need for exploration of cooperative funding strategies between agencies.

Consideration for educational programming were highlighted by a presentation on learning technology by IBM Fellow Reynold B. Johnson, inventor of the first test-scoring machine and holder of over 80 patents. Educational media and technology must be seen as tools which support the work of a teacher, Johnson stated.

While recognizing that the greatest changes in learning will occur through individualizing and "personalizing" instruction, Johnson continued, we must also recognize that a teacher cannot write 30 lessons plans each day. Technological tools are needed to assist in classroom management. While 90 to 95 percent of cognitive development can be achieved as well with educational technology as with the teacher, we must not fail to emphasize the affective domain, where development can be accomplished only with people, he added.

Johnson stressed "cost-effectiveness" as the key to assessing instructional technology. That is, we must be able to achieve our goals through the use of less money, or achieve additional and new goals through the use of the same amount of money.

In reviewing computer technology, Johnson remarked that the main power of the computers is in its logic, as in its ability to make 10,000 decisions in one second. Computers are an indispensable aid in educational administration, they have been used effectively in teaching handicapped children, and will be increasingly useful as a classroom management tool for prescribing student learning, Johnson predicted.

Together with his wife Beatrice, an educational psychologist, and Research and Development Specialist Edwin Dole, Mr.

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Johnson demonstrated recent developments in miniaturized recording systems which should prove to be of great value in bilingual and other language development programs.

Mr. Johnson reminded participants that educational technology is only one part of a total educational system involving people—the parents, brothers and sisters, peers and the total community. The school as community center, the availability of correspondence and tutoring services, and models for teacher training centers were additional aspects of educational program planning considered by participants during the two-day session.