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An interpretive bibliography is presented of 1968 publications having direct relevance to the planning, programing, design, administration, or operation of educational facilities. Introductory comments are directed to --(1) a framework for understanding educational facilities, (2) the status of research on facilities and the learning environment, and (3) the emphasis given educational facilities in the literature delineated in the bibliography. The sections into which the citations are organized are--(1) administration of educational facilities, (2) environmental criteria, (3) programing and planning facilities, (4) facilities design, (5) operation and maintenance of physical plant, (6) case studies and special facilities, and (7) bibliographies. (FS)

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EDUCATIONAL FACILITIES LITERATURE 1968

.... A Bibliographic Review by

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The citations on the following pages are the result of a search of new literature emerging during the year 1968 for publications with direct relevance to educational facility planning, programming, design, administration or operation. As such, the listing identifies sources of new and current information for educational administrators, planners, and designers.

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The interpretive bibliography which follows is adapted from a chapter prepared by the authors for inclusion in Encyclopedia Britannica's annual Review of Research in Education, the first volume of which will be published Fall, 1969.

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ERIC Clearinghouse on Educational Facilities

September, 1969

A FRAMEWORK FOR UNDERSTANDING EDUCATIONAL FACILITIES

Apparent as are educational facilities, it is difficult to describe an educational facility. It is difficult because each of the terms, "educational" and "facility" has very broad boundaries. One learns in many ways and in every circumstance of life; yet the substitution of organized experience calls for methods and materials which define education more narrowly. In like fashion, an artifact is a facility, but many persons think of buildings when the word is used. The imprecision with which such terms are used becomes a formidable obstacle when an effort is made to seek and classify information about educational facilities.

The present state of the literature is such that reasonably clear distinctions can be made regarding the planning of facilities, the design of facilities, and the use of facilities. Moreover, much of what is written has a designated level of application ranging from nursery school to higher education. Perhaps these two dimensions, the one being a process dimension and the other being a ladder, are the most pragmatic concepts to use in organizing and analyzing a segment of literature applicable to educational facilities.

THE STATUS OF RESEARCH ON FACILITIES AND THE LEARNING ENVIRONMENT

The total dollar volume of public resources being invested annually in educational facilities continues to expand, yet the extent of research associated with the understanding and development of facilities for educational processes is correspondingly staggering--or meager, depending upon how one chooses to define facilities research. A survey

of schools of architecture and schools of education in the United States would be expected to yield a surprisingly small amount of active research work in this field compared to the annual expenditure of funds for new facilities. If one adds the amount of product development and research being conducted by producers associated with the building industry the level starts to reach respectable proportions. A further examination of other research efforts whose findings may have applicability to the design of educational facilities would carry one into almost all of the social, behavioral and life sciences as well as the physical sciences. However, at this point in time, the design professions utilize the results of scientific investigations involving human behavior only after they have been interpreted for design use and tried in situations typical of specific building types under active consideration.

Some architects consider their profession as having a potential for the most extensive research laboratories in the world by simply visiting completed facilities and observing them in operation. For the most part, however, this would be an unrealistic procedure because of the pressures of current projects under development and the necessity for time consuming, structured, observational techniques to obtain transferable data from completed buildings. It is not surprising then that the preponderance of architectural advancements are currently treated as philosophical summations for transfer of the principles to future projects.

Structured or controlled experimentation in educational facilities is extremely difficult to conduct because of the large number of variables present in most performance situations. Therefore, educational facilities research having to do with

performance or achievement is confined to small group or individual performance situations involving environmental factors, instructional techniques and the like. Attitudinal studies can reflect an individual's appraisal of himself in relation to elements in his social and physical environment, and form the basis of his personal motivation. A few contributions to the field are being made annually along these lines, but more of the new information released during 1968 can be classified as new educational concepts or extensions of empirical information from experience.

SUMMARY OF THE EDUCATIONAL FACILITIES LITERATURE OF 1968

The emphasis given educational facilities in the literature delineated in the bibliography which follows may be summarized with five words. The first word is "systems". It usually means computer, but the key that unlocks the secrets is called software. Given the right instructions, or software, a computer will work in a bewildering number of ways: planning activities, monitoring construction projects, silently patrolling buildings, and reporting the likely consequences of what we may wish to do.

The second word is "urban". The big city has new problems, and the old ones have not gone away. The outcry is for action. Any idea that sounds good is marketable--hence, linear schools, educational plazas, storefront education, super schools, skyscraper universities, every size, shape and mix.

The third word is "people". Identity and the sense of having a hold over one's own destiny are powerful needs. In the commitment of public funds for capital projects, the people are reluctant to have their judgment replaced by that of experts. There is a lack of philosophical resolve regarding the role of layman and professional, which is

reminiscent of the persistent questions and historic roles of laity and clergy in affairs of church. Yet, there is a sincere effort being made to create social mechanisms which capture the best of both roles. In that respect, the planner is trying to become a social engineer who is a specialist not in where people ought to go but rather in how they may expeditiously get where they want to go.

The fourth word is "standards". The dimensions of educational activities are still somewhat elusive. Standards for facilities remain tenuous in many respects, such as area needed to perform certain functions successfully. They are widely accepted in a few respects such as the illumination of work surfaces. They cannot be said to be non-existent in any respect since someone is always willing to propose a "standard" where one does not currently exist.

The fifth word is "facts". Which ones are really useful in planning and managing facilities? Which facts are really facts? The problem in gathering information to document need is still to get acceptance of the facts as accurate, valid, and descriptive of reality.

Each of these matters is deserving of far more research attention that it received in 1968.

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