

Selected Bibliography

The bibliography is ordered under the general topics of concern as follows:

- A. Instruction spaces, including: classrooms, labs, shops, self-paced study carrels, and libraries.
- B. School organization, including: planning guide, design for pedestrian movement, school siting, and landscape design.
- C. Furniture and audio-visual equipment, including: furniture landscaping, projection AV, television, and the effects of student seating in the classroom.
- D. Environmental requirements, including: thermal, lighting, acoustics, and the related concern of energy conservation.
- E. Building systems, including: a comparative analysis of existing systems and a manufacturer's compatibility study of building systems.
- F. Specific planing programs: planning and programing guides for specific vocational programs.

Each reference is accompanied by a short annotation to aid in directing information searches.

A. Instruction Spaces.

1. Beynon, John. Study Carrels: Designs for Independent Study Space. Stanford, Cal.: The School Planning Laboratory, Educational Facilities Laboratory, Inc., 1964.

A sketch book showing many concepts of carrels, from the simple to the sophisticated. Includes some discussions of lighting, acoustics, visual privacy criteria, and component construction.

2. Educational facilities with New Media. Ed. Alan C. Green, 1966; rpt. Washington, D. C.: National Education Association, 1972.

Essentially an architectural research report, primarily concerned with the designing of education facilities that are conducive to learning. Includes data, design studies, planning premises, reactions, and conclusions.

3. Hacker, Michael. "Architecture and the New Technology." Educ. Telev. Int., 4 March 1970, pp. 31-36.

A discussion of the need for architects and school planners to design buildings which will allow for the optimization of the new instructional technology.

4. Libraries and Study Facilities: A selected Bibliography. Madison, Wisconsin; University of Wisconsin, ERIC Clearinghouse on Educational Facilities, 1970.

Contains a selected reference list of publications of interest in the planning, programming, and/or design of library facilities. Sections included are library planning, carrels and study facilities, library automation and technology, resource and instructional materials centers, building equipment and materials selection, and additional references.

5. Toffler, Alvin, and others. Bricks and Mortarboards. New York: Educational Facilities Laboratories, Inc., 1964.

This brings together information on what is happening in the four major types of campus building - the classrooms, the laboratory, the library, and the dormitory. Each section is written by a different person.

6. Woodruff, Alan P. Career Education Facilities: A Planning Guide for Space and Station Requirements. New York: Educational Facilities Laboratories, Inc., 1973.

Discusses two classes of shared-space programs; that is, discusses spaces and equipment that can be shared by more than one program of a center devoted to career or occupational education. Covering more than the shared facilities, it is a comprehensive guide to planning for all the facilities likely to be encountered in career education.

B. School Organization.

1. Dobrovolny, Jerry. Factors to Consider in Planning Technical Education Facilities. Industrial Arts Vocational Education Supplement - Technical Education. TEI, March 1970.

Discusses factors to consider in planning technical education facilities. Includes sections on component building systems, educational facilities, educational planning, flexible facilities, and technical education.

2. Fruin, John J. Pedestrian Planning and Design. New York: Metropolitan Association of Urban Designers and Environmental Planners, Inc., 1971.

Starting from a discussion of walking, the problems of pedestrians, traffic, and space characteristics of pedestrians are developed in sufficient detail for an understanding of pedestrian traffic relationships. The objectives of pedestrian planning programs and methods of plan implementation are illustrated. The design discussion is supplemented by illustrative examples.

3. Meckley, Richard F. Planning Facilities for Occupational Education Programs. The Merrill Series in Career Programs. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.

Extensive treatment of the subject of occupational education facility planning. Important planning steps from the initial survey of needs to the final building occupancy are included. Includes sections on (1) general principles and procedures, (2) a survey of community needs, site selection, and development, (3) financing the construction of facilities, and (4) post-secondary institutions.

4. Simonds, John Ormsbee. Landscape Architecture. New York: F. W. Dodge Corp., 1961.

A presentation of those facts, concepts, and principles of most value to architects and others concerned with environmental planning and with the siting and landscaping of buildings.

5. Taylor, Lieberfield & Heldman, Inc., Consultants. Horizontal and Vertical Circulation in University Instructional and Research Buildings. University Facilities Research Center Monograph Series, 1960-1961. Madison, Wisconsin: University Facilities Research Center, 1962.

A pilot study of the most severe pressure points in the area of circulation. Intra- versus inter-building time distance factors are considered and staggered scheduling is discussed.

C. Furniture and Instructional Equipment — Audio-Visual.

1. Caravaty, Raymond D. and Winslow, William F. Components for Rear Projection Systems. Establishing Criteria for Rear Projection Systems for Use in the Communication-Lecture Hall Centers, State University of New York. Troy, New York: Rensselaer Polytechnic Institute, School of Architecture, 1964.

Rear projection systems and their requirements and limitations are discussed in the light of projection equipment, screens, the observer, and physical surroundings.

2. Dave Chapman, Inc., Industrial Design Office of Chicago. Design of ETV: Programming for Schools with Television. New York: Educational Facilities Laboratories, Inc., 1960.

A report on facilities needed to accommodate instructional TV and other new educational programs. Includes rationale for educational television, various ETV systems, relationships of size, quality, and height of teaching images to group size, viewing angles and distances, etc.

3. Hubert Wilke, Inc., Communications Facilities Consultants. "The Planning Disciplines for Audio-Visual Facilities." Architectural Engineering Special Report No. 14, Part 1. June 1971; rpt. New York: McGraw-Hill, Inc., pp. 137-144.

Discusses some of the specific design guidelines involved in providing for good sight and sound, and for the new concept of electronic distribution of full range of audio-visual media.

4. Propst, Robert. The Office - A Facility Based on Change. Elmhurst, Illinois: The Business Press, 1968.

A clarification of office functions, needs of the office worker and potential conflicts, and the introduction of the concept of generating, with furniture elements, office environments which respond to particular organizational needs and which are adaptable as needs change.

5. School Media Center. Toronto, Ontario: School Planning & Building Research Center, Ontario Dept. of Education, 1972.

This publication is intended to give guidance to those involved in planning new or expanded facilities for the school media center. Includes sections on controlled environments, instructional materials centers, and space classification and utilization.

6. Sommer, Robert. Effects of Classroom Environment on Student Learning. Davis, California: California University, Davis, 1965.

Investigating the effects of different classroom environments upon students. Seating positions within the classroom are considered as well as classroom furniture and overall classroom environment.

7. Wadsworth, Raymond. "12 No-No's in A-V Presentation." American School and University, August 1972, pp. 30-33.

Discusses problems with room size, room orientation, screen height, light leakage, elevated projections, loudspeakers, and electrical power systems.

D. Environmental Requirements (Heat, Lighting, Acoustics)

1. Berlowitz, Drucker, Scarborough. Thermal Environmental of Educational Facilities. Syracuse, New York: Syracuse University Research Institute, 1969.

A presentation of information concerning the need for and the techniques of good thermal environmental design.

2. Bolt, Beranek and Newman, Inc. Sound Control Construction: Principles and Performance. Chicago, Illinois: United States Gypsum, 1972.

Presents the basic principles of noise control in buildings and discusses the application of these principles in several commonly encountered problems. Contains sections on the nature of sound, room acoustics, and sound attenuation, plus a glossary of terms.

3. Griffin, C. W. The Economy of Energy Conservation in Educational Facilities. New York: Educational Facilities Laboratories, Inc., 1973.

In the section on planning new schools there is a discussion of new construction techniques, such as compact building shape, multi-use occupancy, total energy, wall shading, automatic controls, improved mechanical design, and improved electrical design.

4. Jacques, Richard G. "Performance Criteria: A System of Communication for Mobilization Building Industry Resources." Architectural Record, 139, No. 5 (May 1966), pp. 191-195.

Concerns a library of documents the New York State University Construction Fund is developing which pertain to a specific area of concern. Performance Criteria in work for NYSUCF at this time include: Acoustics, Lighting, Climate, Finishes, Disabled, Concrete, Aggregated, Site Products, Site Planning Equipment, Campus Planning Guide, Utilities Planning Guide, Facilities Planning Guide, and Design Vocabulary.

5. Kaufman, John E., Editor. IES Lighting Handbook Application Volume. New York: Illuminating Engineering Society, 1981.

The technical handbook of the Illuminating Engineering Society. The book presents standards for both the quantity and quality of illumination required for specific visual performance.

6. Lang, Burnette, Moleski, and Vachon. Designing for Human Behavior: Architecture and the Behavior Sciences. Stroudsburg, Pennsylvania: Dowden, Hutchinson and Ross, Inc., 1974.

An anthology of articles relating the concerns of behavior scientists to the process of architectural design. The book also contains a valuable reference bibliography.

7. Newman, Robert B. Laboratory Design Notes: "Acoustics in Research Facilities - Control of Wanted and Unwanted Sound." U.S. Dept. of H.E.W. - Public Health Service, May 1986.

8. Peters, John S. and Schneider, Raymond C. Improving the School Environment. Stanford, California: Stanford University, California School Planning Laboratory, 1956.

Includes guidelines for creating improved educational environments, printed with supplementary drawings, diagrams, and photographs. Physical control functions are developed according to physical factors affecting classroom environment, meeting individual classroom needs, improved viewing conditions and mechanical system implementation. Functional design is explained in terms of criteria for changing school design needs and aesthetic functions.

9. Rutgers, Norman. Thermal Environments. Reno, Nevada: Nevada University, Department of School Administration, 1967.

The role that a good thermal environment plays in the educational process is discussed. Design implications arise from an analysis of the heating and ventilating principles as applied to vocational-technical facilities. The importance of integrating thermal components in the total design is emphasized.

10. Sampson, Foster K. Contrast Rendition in School Lighting. New York: Educational Facilities Laboratories, Inc., 1970.

A report on lighting to determine how the contrasts in light from different sources affect the ability to see visual tasks in schoolrooms. Based on extensive field research, the report is concerned with the amount and the kind of light right for the best visual performance.

E. Building Systems

1. Adinolfi, Anthony G. and others. Interior Finishes: Floors, Walls, Ceilings. Albany, New York: State University Construction Fund, 1968.

An interim report giving performance criteria for interiors. Includes exposure criteria, space classifications, test methods, and procedures and standards.

2. Building Systems Information Clearinghouse. Newsletter, Ed. John R. Boice. Stanford, California: Systems Division, School Planning Laboratory, School of Education, Spring 1969.

A comparative analysis of existing building systems. Includes a discussion of SEF, RAS, GHS, URBS, and SCSD.

3. Benet, James and others. SCSD: The Project and the Schools. New York: Educational Facilities Laboratories, Inc., 1967.

A report on the School Construction Systems Development Project in California, the first school system-building project in North America. Includes sections on the components (ceiling and lighting, air conditioning, interior partitions, cabinets, and lockers), educational requirements, and performance specifications.

4. Industrialization Forum. Ed. Colin H. Davidson, University of Montreal, Washington University, St. Louis.

Industrialization Forum publishes research articles on the industrializing and systematizing of the building construction process. Each article published is cataloged by keyword for quick retrieval. IF's keyword system also refers to other publications of research on industrialization of building.

5. Building Systems Information Clearinghouse. Manufacturers Compatibility Study: Special Report No. One. Ed. John R. Boice. Stanford, California: Systems Division, School Planning Laboratory, School of Education, n.d.

This is the first edition of a catalog which provides specialized and comparable product information and reliable data concerning product compatibility for architects and school planners as a partial answer to needs not adequately covered in the area of systems building by existing manufacturers' data. This edition is limited to building products which could be used in a post-SCSD school building system.

6. Robertson, Claron A., Jr., and others. Facility Planning Module Analysis and Design for the Integrated Facilities System. Washington, D. C.: Planning Research Corporation, Volume III, Part 2, December 1969.

One in a series of IFS documents prepared for the Department of the Army, Deputy Chief of Staff for Logistics, Director of Installations.

7. Systems: An Approach to School Construction. New York: Educational Facilities Laboratories, Inc., 1971.

This report documents the industrialized techniques and materials of systems construction. Includes case histories of SEF, RAS, SCSD, and others.

8. Trost, F. J. and others. Higher Education Facilities Systems Building Analysis: Summary Report and Documentary Work Report. College Station, Texas: Architectural Research Center, Texas A&M University's College of Architecture & Environmental Design, 1971.

A report studying the possible benefits in cost, time, and facility utilization of a systems building approach for Texas college and university construction. Includes trends and architectural implications, building delivery, conventional process versus systems building, and utilization studies.

F. Specific Planning Programs.

1. Adams, Jon P. A Guide for Planning Facilities for Occupational Preparation Programs in Automotive Service. Research and Development Series No. 23. Columbus, Ohio: The Ohio State University, The Center for Vocational and Technical Education, 1969.
2. Meckley, Richard F. and others. A Guide to Systematic Planning and Vocational and Technical Education Facilities. Columbus, Ohio: The Ohio State University, The Center for Vocational and Technical Education, 1970.
3. Sitterlee, L. J. A Guide for Planning Facilities for Occupational Preparation Programs in Electrical Technology. Research and Development Series No. 24. Columbus, Ohio: The Ohio State University, The Center for Vocational and Technical Education, 1970.

Gives a total perspective of the sequential tasks involved in the process of program and facility planning. Includes chapters on principal planning activities, systematic plans, including PEAT networks and principal activities time sequence, plus a definition of terms and a selected bibliography.