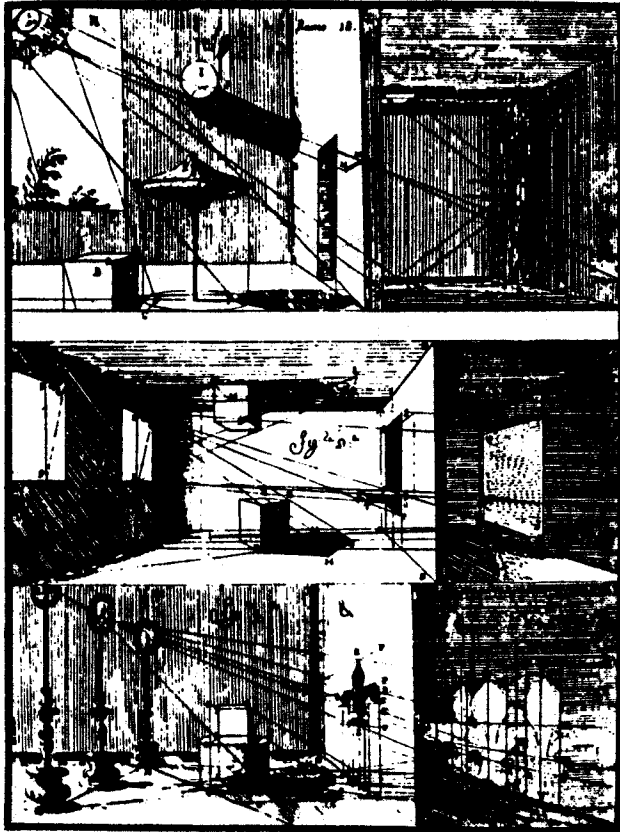


# BUILDINGS IN USE STUDY



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# buildings in use study

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1975; reprinted 1985

BUILDINGS IN USE SURVEY

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Abstract

Results of a two-year post-occupancy evaluation of four elementary schools in Columbus, Indiana, all designed by nationally prominent architects. Two of the schools contained traditional classrooms and two utilized open plan concepts. The report evaluates a wide range of technical and functional factors.

2 Parts, plus Appendix. Pp. v + 258; drawings.

Originally published in 1975; reprinted in 1980 and 1985.

PUBLICATIONS IN ARCHITECTURE AND URBAN PLANNING RESEARCH

Center for Architecture and Urban Planning Research  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, Wisconsin 53201

Report R85-1

ISBN Number: 0-938744-37-2

Additional copies of this report are available for \$12.00 prepaid by writing to the above address.

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## PROJECT DESCRIPTION

The 'Buildings In Use' study is an attempt to examine, in the field, the performance of buildings which have been 'in use' for some time. We believe that such examination is the primary method through which better buildings can be designed. Three major factors are examined: technical performance, functional performance, and the relationship between environment and behavior.

This study has investigated four elementary schools in Columbus, Indiana. These schools, designed by nationally prominent architects, were completed in 1962, 1966, 1969 and 1972. The two older schools contain traditional classrooms; the two more recent buildings utilize semi-open (1969) and open (1972) educational and design concepts. The schools are similar in size (500-600 students) and in the social characteristics of their students.

Technical studies have been carried out in the following areas: exterior walls, roofs, interior walls, floors, ceilings, acoustics, lighting and H.V.A.C.. A "Field Test Manual" has been developed which was actually the basis for testing the technical performance of the buildings. The results of these field tests, as well as discussion of these results and relevant technical specifications and details are documented in the "Technical Factors Report". Over 100 tests and the results of these tests are included in the two reports.

## 'BUILDINGS IN USE' STUDY

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Functional studies include areas of 'activity support' exclusive of furniture. This includes studies of specialized areas and functions within the school as well as storage, classroom display, window usage and some activity support equipment. Measures in this area include capacity, anthropometric fit and amount of usage. Results will be reported in the "Functional Factors Report".

Behavioral studies have been carried out using observation supplemented by questionnaires and interviews. This aspect of the study was aided by participation of faculty from UWM's School of Education. Research questions concerning differences between schools in terms of groups size, type of activity, seating, student posture and spatial usage are addressed as well as studies within schools such as the effect of proximity and territoriality.

This information is directed to architects and clients in order to help them make the consequences of programming and design decisions more predictable. Researchers in this area will be interested in the concepts and methods of this study as part of the larger effort to accumulate experience and findings which have the goal of developing a body of theory and procedure in this field.