A summary is presented of the remarks by the principal speaker regarding the purpose of the School Facilities Council Meeting. Lists are provided of various topics concerning school planning and design, which were presented by--(1) manufacturers and suppliers of educational hardware, (2) architects, and (3) school superintendents. A summary is included of the general discussion and points of agreement for each of the three groups of participants. (PS)
Report of Proceedings,
SCHOOL FACILITIES COUNCIL MEETING,
March 14, 1967

Co-Sponsored by:
The School Facilities Council,
Division of Education, Teachers
College, Ball State University.

L. A. Pittenger, Student Center
Ball State University
Muncie, Indiana
The first meeting in Indiana sponsored by the School Facilities Council was held on March 14, 1967 at Ball State University. The conference was co-sponsored by Teachers College of the University. Dr. Merle Strom, Director of Educational Administration at Ball State University, opened the meeting by welcoming the assembled group of Superintendents, Architects, and representatives of Business and Industry to the first meeting of the School Facilities Council to be held in Indiana. Dr. Strom introduced Dr. Jordon Larson, Executive Secretary of the School Facilities Council. By way of introduction, a brief background about Dr. Larson was provided.

Dr. Larson has been a superintendent of schools for 42½ years in Ames as well as other cities in Iowa and at Mount Vernon, New York. He has been active in school planning since 1936, playing an important part in the planning of the Mt. Vernon High School. He was president of the School Facilities Council for seven years and has been Executive Secretary for the past two years.

Dr. Larson expressed his thanks for the attendance of the group. Braving the inclement weather was evidence of the interest of the members in developing better school facilities.
The School Facilities Council, explained Dr. Larson, was an outgrowth of the AASA Convention in 1956 at which time Dr. Misner brought about the inception of this Council. The implementation of the School Facilities Council was and is an attempt to bring about a change in the lines of communication between the schools, industry, and architects. The School Facilities Council is an organization dedicated to improving such communication.

In the first two years of the Council's existence, there were only eight firms that provided sustenance for the Council. Today there are 44 firms involved in the sustaining role. The School Facilities Council holds meetings throughout the country providing programs for State School Board Associations, State Superintendents Associations, and other interested groups.

Dr. Larson illustrated the Council's role in bringing about change. The Council is not in the position, nor desires to be in the position, to dictate change. Rather, it advocates the following line of reason:

"Why not study things and compare? It is better to be positive about change. Too often we are negative."

He expressed the belief that the general public wants more and better schools. Bond issues are rarely, if ever, defeated by what is in the new school plans. Rather, lack of communication about the need as well as the opportunities which can be provided is the cause of such defeats. The Council has been instrumental in bringing about innovations in carpeting in schools, better classroom lighting, more efficient acoustics,
installment of air conditioning, addition of student parking lots, the use of school dehumidifiers, building school swimming pools, and many others.

Dr. Larson offered the following five questions for consideration by the group:

1. What is it that the educator needs to ask the architect?

2. What services will the architect provide? (Supervision, full or part time?)

3. What does the architect want to learn from the educator? (Educational specifications, educational consultant)

4. What terms need common definitions so that the architect, the educator, and the representatives of business and industry can understand one another?

5. Industry provides research and produces new materials and then must sell their product. In many instances this is done without telling or asking educators what they need or desire in terms of school programs. Is there some way that schools can benefit from industrial research and industrial methods?

Dr. Larson suggested that in order to discuss these questions and to bring about a better understanding for the whole group, the representatives from each category form into "Buzz" groups to discuss these questions among themselves. Basically the question is--What do we want from the other fellow?

The remainder of the morning was spent in the "Buzz" groups with the afternoon being reserved for discussion of questions and topics presented from the morning's sessions.

After lunch, the participants returned with lists of questions, topics, and suggestions to be discussed by the group. Dr. Jordon Larson served as the discussion leader. For convenience in reading, the topics discussed at this
session are presented in segments as listed by each group. Because of the time element, not all of the topics were given as complete a coverage as might have been desirable. However, it is apparent that many of the topics could form the basis of a conference in themselves.

Manufacturers and Suppliers of Educational Hardware

Topics Presented

1. Consideration should be given to the suppliers by the school for payment of supplies at the time of delivery.

2. There should be better coordination of delivery dates so that the supplier is not forced to store supplies or equipment for a long period of time.

3. Who makes decisions in terms of purchasing equipment and supplies?

4. A more suitable marketplace is needed to display equipment and supplies.

5. Specifications for supplies and equipment should be written in detail to state what is really wanted and needed.

6. Some architects are not receptive to change due to their practice of using previously built standard formulas for equipping buildings.

7. Should the general contractor be allowed to shop for materials with regard to equipping and supplying the building?

8. During the building process, what time schedule should apply for the delivery of equipment and supplies?

9. Where does service by the supplier end and the maintenance by the school personnel begin?

General Discussion and Points of Agreement

The suppliers pointed out that as a result of delayed payments they frequently have to borrow operating capital. A continuation of this practice will eventually result in increased cost of supplies and equipment. Delivery dates and
a schedule of payment for supplies should be included in the specifications written by the architect.

The suppliers felt that delivery dates and a schedule of payment for supplies should be included in the specifications and agreed to by the parties involved. This could be a standardized contractual arrangement between the schools and the supplier. A suggestion was made that the manufacturers and suppliers form a committee to draw up a standardized contract. This contract should provide for a 90 per cent payment on the date of delivery (installation) with the remaining 10 per cent to be made at the time of final acceptance. The contract should contain provisions of mutual benefit to all parties.

If at all possible, more delivery dates should be made for winter months. The present practice calls for a large number of deliveries to be made in August. More effective service from suppliers might be expected if delivery dates were specified during periods other than late summer.

Many conflicts occur in selecting school hardware during construction. This often times happens because no one person has been designated as the final authority for making such selections. Should such selections be made by the architect, the general contractor, or the school personnel? The concurring opinion was that one person be designated as having final authority in the selection of equipment and/or supplies. Most felt that this should be a representative of the school—the superintendent or his designated representative. If this person could be named before the job begins, many conflicts could be avoided.
In recent years, the increased number of suppliers and kinds of equipment has made it impractical to display materials in one place such as a national conference. With the vast numbers of persons attending such conferences, little time can be spent in viewing or inspecting such displays. It would greatly facilitate matters if a more suitable method could be worked out giving architects and school persons a more advantageous method of viewing different lines of school hardware.

The suppliers felt that there should be a more efficient and equitable bidding procedure to aid in the bidding of materials and supplies. They offered three suggestions which would be helpful to all parties.

1. Specifications should be strictly adhered to in the bidding process.

2. It should not be the suppliers' responsibility to determine what is needed. This should be decided by the school personnel.

3. The responsibility for final installation and hook-up to drains, etc., should be clearly spelled out.

The suppliers felt that the general contractors should not be allowed to shop for materials and equipment. All specifications for such items should be clearly spelled out and adhered to in all details.

In new buildings, a reasonable time should be given for delivery of materials and supplies after walls, drains, and electrical outlets have been installed. Such a procedure would allow the suppliers to make adequate field inspections for proper installation.

Much confusion exists concerning the guarantee period of materials and equipment. A clear understanding should be had
concerning how long the guarantee period should run and more specifically the exact starting date for such guarantee. The suppliers felt that "defects" in equipment were, in reality, a lack of proper maintenance by qualified school personnel.

It was the general feeling by members of the group that there was need for more and better communication between the three prime parties involved in school facilities—the architect, the school personnel, and the suppliers.

Architects

Topics Presented

1. The architect should be given the general philosophy of the school and the community towards education.

2. An educational consultant is becoming essential in the planning of school facilities.

3. Ideas and desires from the school staff should be provided for the architect. Specific drawings by these persons is not desirable.

4. A more clearly outlined term should be used to indicate adaptability of school facilities to educational needs. The term "building flexibility" says very little.

5. An explanation to the school staff and to the community concerning school budgets and facility limitations should be made before construction is begun.

6. The school should have a person working with the project who has the ability to read and interpret blueprints.

7. Accurate information regarding product quality and pricing of a comparative nature in the form of product specifications data sheet should be provided by producers of school materials and equipment.

8. The suppliers should provide more information regarding new types of materials and equipment being made available.
General Discussion and Points of Agreement

The term "flexibility" has lost much of its meaning with regard to school facilities. A more appropriate term might well be utilized as a substitute for flexibility of school facilities. Terms suggested were changeability, adaptability, or freedom of choice. Regardless of the term used, a rather detailed outline of the educational objectives should be made available to the architect in planning the facilities to fit the educational plans.

Much consideration and thought should be given the educational needs before radical departure from standard building designs are undertaken. Such changes are costly. The building should be planned for the present as well as the future. Buildings should be adaptable to present needs as well as the anticipated needs of the future.

It was felt helpful to define the terms educational consultant and planning consultant. An educational consultant is employed by an architect or the school board to assist educators in such areas as school organization or curriculum. A planning consultant is employed by the architect to assist on matters such as selection of building materials or equipment. As a general rule, an educational consultant should be used in planning facilities for the educational program. He may be hired by either the school or by the architect. The cost of paying the educational consultant is normally not included in the standard fee charged by the architect. However, the architect can select such consultants and provide
them at additional cost to the school. It is often easier to pay for such services if hired by the architect.

Building plans should not be placed on a "crash" basis. Long range building plans are necessary to sustain educational objectives through quality construction. In this way, consultants, architects, business firms, and contractors are not placed on an emergency basis in school construction.

Quality school facilities should precede low-cost facilities in the selection of an architect. Selection should be made on the basis of what the architect has done. It was also noted that the employment of a resident consultant by an architect may influence the selection of the architect by a school board due to the consultant's philosophy.

The concept of square-foot costs has been imposed on the architect. Since there are many ways to compute the cost of a facility, low square-foot costs does not mean that quality is being lost nor quality maintained.

The architects expressed a desire not to be limited by specific drawings provided by school personnel who are often not experts in the area of construction. It is considered much more essential that school personnel provide general ideas rather than specific drawings.

With the exception of certain specifics such as lighting panels, there are many "grey" areas in school construction in which educators, architects, and business must work together. This will help to avoid drawing from pre-conceived notions and popular myths.
School Superintendents

Topics Presented

1. What recourse can schools take if they are unhappy with the limitations of design?

2. What can the school expect of architects or builders after the one-year period elapses?

3. What can the school expect of the architect in terms of how many other jobs are in process by his firm? How can the school get more reliable estimates of deadlines?

4. What kind of supervision can the school expect and how does it know if it is adequate?

5. What items should not be a part of the architect's fee?

6. Should the school hire a clerk of the works?

7. How can the school get good quality hardware? Can schools get rating standards to compare quality?

8. Are there areas in which schools should not use carpeting? Can wool and nylon carpeting be compared?

9. How can the school evade early obsolescence? What are architects doing to keep up with modern trends?

10. How valuable is the state's review of school building plans?

11. Why doesn't the school get credit on change orders?

12. Why don't architect representatives stop more often to see the superintendent?

General Discussion and Points of Agreement

A clear and open discussion between the owner and the architect is imperative. Most architects will be pliable and cooperative if an open dialogue is established. If you are unhappy with preliminary plans, let the architect know immediately what you want. For example, if you want a pitched roof, you should make it a requirement for the job before the
final drawings are accepted. In fact, any recourse must be taken before the final drawings are accepted.

Most architects are available for the life of the building to work with the owner to serve as consultants. If the builder did not complete some part of the building, the owner should work through the architect to determine a possible solution. The architect is responsible to the board of education—the engineer is responsible to the architect.

It is the owner's responsibility for the maintenance of the building. School systems need to have custodial personnel who know how to care for equipment and exercise preventative maintenance. Custodians should be properly trained to take care of buildings and equipment. Also, prompt reporting of malfunctioning of equipment is very important.

When does the "one-year period" begin? This is particularly a point of question for equipment which is installed and used before the building is accepted. There needs to be a clarification of when acceptance starts. Contracts do not always make it clear whether the warranty starts with the use or with building acceptance. When equipment is installed the architect should certify approval of installation and recommend acceptance. The board of education should then pass a resolution of acceptance.

The number of other jobs which the architect has in progress is a matter to be discussed in the selection interview. The board of education should examine the past building ventures in which the architect was involved. School people want a realistic estimate of work schedules. They would
prefer an over-estimate of time needed for constructing a building rather than an under-estimate.

Architects and owners must be frank and honest with each other. It would be helpful to architects to have a date of need stated by school people as the schedule is developed. Changes in design will often cause great delay. At this point, communication is very important. There must be a careful understanding of problems involved in revising drawings through change orders.

The kind of supervision which the school expects should be spelled out at the very beginning in the contractual agreement. It should be agreed upon by both parties. Dr. Larson suggests that the cheapest thing you can buy is a clerk of the works.

Items that are not included as a part of the architect's standard fee depend upon the contract. The discussion from this point centered on a concern of the architects regarding payment. In the past the holding company paid the architect. The contract with the holding company was a gamble. This would be true if the project was discontinued during early involvement. Indiana law now provides that school boards can hire and pay architects without a prior appropriation. Therefore, the contract with the school board is a binding agreement.

If a competent person can be obtained, most architects agree that a school hired clerk of the works could be most helpful. Architects have no objections if the person hired is competent and free of politics. The clerk of the works
would be hired by the board of education, but he would be under the direction of the architect. He would report to the architect. The architect, in turn, would report to the school board.

Careful specifications should be written in terms of need and use of school hardware. The architect knows how to write good specifications. Therefore, work closely with him. Good hardware is vital. You should demand the very best quality. Often this means that one must use more than one supplier. It is difficult to determine quality of hardware except by visiting other schools to see how it works in use.

Carpeting can be used in all areas of schools as long as commercial carpet is used. Carpeting is being accepted more and more for use in schools. Purchases should be made from competent and reliable dealers since there is no realistic rating standard which can be easily used for judging quality carpeting. High quality commercial carpeting is available in either wool or nylon. There are also high quality miracle fabrics which can be used.

Early obsolescence of school facilities can be evaded by insuring adaptability, flexibility, and changeability in the construction. Architects are making every effort to keep up with modern trends. They attend such conferences as the AASA Convention; read current publications in the field, acquire additional schooling, and hire educators in an effort to keep abreast with recent redneds.

The value of the state review of building plans varies between states and within different state departments. It
depends largely on the quality of people in the state positions. School officials must work closely with state officials in order to insure minimum standards.

The architect is the only man who can help in the problem of giving credit for change orders. Change orders are generally expensive and they should be avoided as much as possible. It is difficult to make changes without running into extra costs. Therefore, schools cannot expect to get full credit on change orders.

It was generally agreed that architects should make it a point to visit with the superintendent whenever he visits the project. This aids in communication and makes for better relations.

In summary it might be said that the conference established many areas of common concern. The areas can be resolved to the mutual satisfaction of school personnel, architects, and suppliers with some understanding of the problems which face each of the respective groups. Free and complete communication within and between these groups is an essential aspect to the resolving of problems which may occur in the school construction and equipping plans.

It was felt that most problems can be avoided by the careful delineation of all specifications. Once the specifications and points of possible misunderstandings have been carefully drawn and formulated, strict adherence to these points is essential to all parties involved. It is where possible points of conflict are not clearly spelled out or where points that are spelled out in detail are not adhered
to that conflicts and misunderstanding will arise. When misunderstandings cannot be resolved, all parties are prone to suffer. In the essence of compatibility, it is quite essential that communications be complete and that the dignity and integrity of each party to the program be recognized.
ROSTER OF PARTICIPANTS

Representatives of the
School Facilities Council

Dr. Jordan Larson, Executive Secretary, School Facilities Council of Architecture, Education and Industry.
913 East Wildwood Drive, Prospect Heights, Illinois, 60070. 312 - 537-8247

Participants From Business and Industry

Mr. R. J. King, President, King School Equipment Company, 340 West Main Street, Danville, Indiana.

Mr. O. R. Van Dore, American Seating Company, Grand Rapids, Michigan.

Mr. Richard C. Chapman, Vice President, Mutschler, Inc. Napanee, Indiana.

Mr. E. L. Staller, President, Allied, Incorporated, 339 North Capital Avenue, Indianapolis, Indiana.

Mr. John V. Michael, Master Lock Company, 18 Northway Drive, Huntington, Indiana.

Mr. Riggs Miller, Schlage Lock Company, 7903 Kimbrough, Indianapolis, Indiana.

Mr. Carol Farmerlee, Imperial Equipment Company, 630 Cromer Avenue, Muncie, Indiana.

Mr. Emil Nigro, 10754 South Union Street, Chicago, Illinois, 60628.

Participants From Architectural Firms

Mr. Richard Miller, Keene, Macrae Association, Inc. and Richard Paul Miller, 2204 California Road, Elkhart, Indiana, 46518.

Mr. Jack Swindell, Shaver and Company Architects, 100 West South Street, P. O. Box 501, Michigan City, Indiana, 46360.

Mr. Robert Ehrngott, Lennox, Mathews, Simmons & Ford, Inc. 2201 East 46th Street, Indianapolis, Indiana.

Mr. Louis E. Penniston, Lennox, Mathews, Simmons & Ford, Inc., 2201 East 46th Street, Indianapolis, Indiana.
Mr. Sam Woodruff, Louis C. Kingscott & Associates, Inc.
401 East Hanna Avenue, Indianapolis, Indiana

Mr. Conrad Jankowski, Bradley and Bradley Architects, 4009 East Street, Fort Wayne, Indiana

**Indiana Superintendents Participating**

Dr. Donald Turosh, Superintendent, New Castle Community Schools, New Castle, Indiana

Mr. Forest M. Stoops, Superintendent, Carmel-Clay Schools, Carmel, Indiana

Mr. Lee G. Glantzer, Superintendent, Mt. Pleasant Township Community Schools, Yorktown, Indiana

Mr. Edwin Prible, Superintendent, MSD of Bluffton-Harrison, Bluffton, Indiana

Mr. Harold Dick, Superintendent, Madison-Grant United School Corporation, Fairmount, Indiana

Mr. Mardy Logan, Superintendent, Jay School Corporation, Portland, Indiana

Mr. Thomas Thomas, Jr., Superintendent, Alexandria Community Schools, Alexandria, Indiana

Mr. V. A. Simmons, Superintendent, Manchester Community Schools, North Manchester, Indiana

Mr. J. M. Benson, Superintendent, Northern Wells Community Schools, Ossian, Indiana

Mr. Lloyd Biberstine, Superintendent, Southern Wells Community Schools, Poneto, Indiana

Mr. A. F. Allen, Superintendent, Adams Central Community Schools, Monroe, Indiana

Mr. Robert M. Mantock, Northwest Allen County Schools, Fort Wayne, Indiana

**Ball State University Participants**

Dr. Paul W. Nesper, Associate Professor of Education
Dr. Merle T. Strom, Professor of Education

Mr. Ross Sharp, Doctoral Fellow, Educational Administration
Mr. James Hart, Doctoral Fellow, Educational Administration
Mr. Dean Speicher, Doctoral Fellow, Educational Administration
Mr. Charles Jordan, Doctoral Fellow, Educational Administration
Mr. Roy Swihart, Doctoral Fellow, Educational Administration
Mr. Lahai Sogbandi, Doctoral Fellow, Educational Administration
Mr. George Poltz, Doctoral Fellow, Educational Administration
Mr. Ed Merryman, Doctoral Fellow, Educational Administration
Mr. John Wright, Doctoral Fellow, Educational Administration
Mr. Donn Kaupke, Doctoral Fellow, Educational Administration
Mr. Joel Whitman, Doctoral Fellow, Educational Administration