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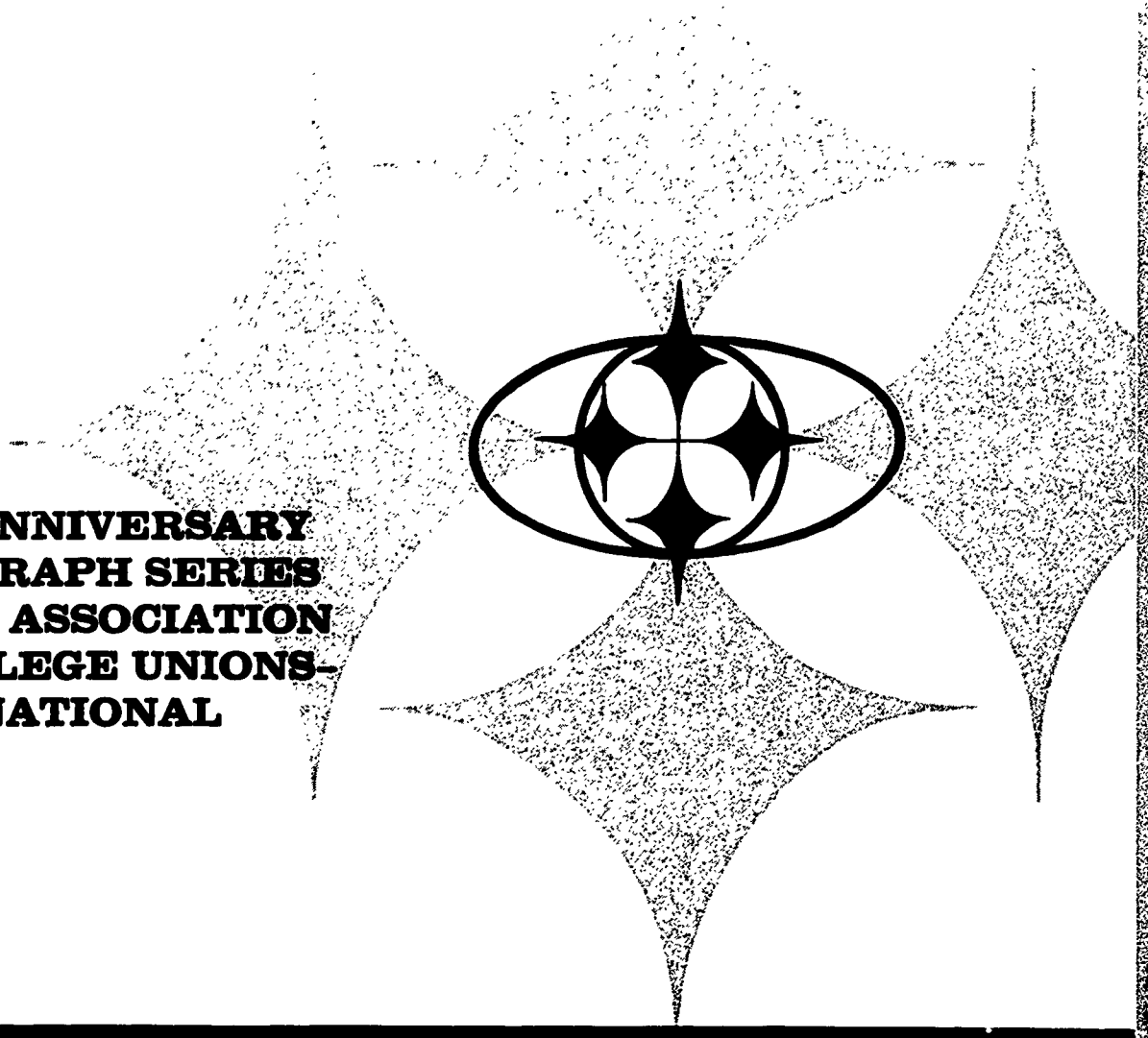
This publication, one in a series of monographs on college unions, focuses on the planning of a student union, taking into consideration both the physical structure and the program for the personal, social, and cultural development of the student. Major topics include: (1) fundamentals of the planning process, (2) basic facts and factors to be considered in planning, (3) the need for thorough planning, (4) basic steps in planning for a student union, (5) variations among approaches to planning, (6) functional relationships to other types of buildings, (7) problems encountered on different types of campuses, and (8) common errors, cautions, and tips for the administrator. A bibliography is included. (BP)

COLLEGE UNIONS AT WORK



50TH ANNIVERSARY MONOGRAPH SERIES OF THE ASSOCIATION OF COLLEGE UNIONS-INTERNATIONAL

Planning For A College Union

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By FRANK NOFFKE

ROLE OF THE COLLEGE UNION

1. The union is the community center of the college, for all the members of the college family — students, faculty, administration, alumni, and guests. It is not just a building; it is also an organization and a program. Together they represent a well-considered plan for the community life of the college.

2. As the 'living room' or the hearthstone' of the college, the union provides for the services, conveniences, and amenities the members of the college family need in their daily life on the campus and for getting to know and understand one another through informal association outside the classroom.

3. The union is part of the educational program of the college.

As the center of college community life, it serves as a laboratory of citizenship, training students in social responsibility and for leadership in a democratic society.

Through its various boards, committees, and staff, it provides a cultural, social, and recreational program, aiming to make free time activity a cooperative factor with study in education.

In all its processes it encourages self-directed activity, giving maximum opportunity for self-realization and for growth in individual social competency and group effectiveness. Its goal is the development of persons as well as intellects.

4. The union serves as a unifying force in the life of the college, cultivating enduring regard for and loyalty to the college.

—Adopted by the Association general membership in 1956.

Planning For A College Union

By

FRANK NOFFKE

The fourth publication

in the

Golden Anniversary Monograph Series

COLLEGE UNIONS AT WORK

William E. Rion, Editor

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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TABLE OF CONTENTS

Chapter		Page
I.	Planning Fundamentals	1
II.	Basic Facts and Factors	3
III.	The Need for Thorough Planning	6
IV.	Basic Steps in Planning	8
V.	Variations in Approaches to Planning	23
VI.	Relationships to Other Types of Buildings	24
VII.	Problems of Different Types of Campuses	26
VIII.	Common Errors, Cautions, and Tips	28
	Bibliography	33

Preface

COLLEGE UNIONS AT WORK constitutes a series of monographs on college unions. Recognizing the Golden Anniversary of the Association of College Unions-International, this series is designed to provide helpful information concerning the operation and management of various phases of the college union. Previous monographs in the series have been "Operation and Administration of College Unions" by Boris C. Bell (#1), "The College Union Outdoors" by Theodore Crabb (#2), and "Art in the Union" by Norman F. Moore (#3). Subsequent papers are expected to include such subjects as recreation areas, food service operations, and crafts programs and facilities.

The planning and construction of college unions throughout the world is continuing at a very rapid rate. Careful and effective planning of the building and the function can save untold millions of dollars in initial construction costs and in later operating costs. We trust this monograph will be most helpful in the development of an understanding among campus planners and college administrative leaders to the end that better physical facilities will be planned with the benefit of greater savings.

In their dedication to the principles and the purposes of the college union and in their eagerness to assist others in the development of unions on their campuses, the members of the ACU-I have prepared this series. Grateful appreciation is extended to the authors, the respondents to questions and surveys, and to Chester A. Berry, Stanford University, and Porter Butts, University of Wisconsin, members of the editorial board. Their cooperation, assistance and patience has made this series possible.

William E. Rion, Editor
Director, Florida Union
University of Florida

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CHAPTER I

Planning Fundamentals

Planning a union may be defined as the science - and art - of coordinating the many details that make up both a well-designed and well-integrated structure; and a program, the objective of which is the personal, social, and cultural development of the college student of today for his career and citizenship of tomorrow. There is no magic to successful college union planning. It requires thoroughness and hard work by informed, experienced, and dedicated people.

Planning is accomplished best when the sub-divisions of the project can be examined at the same time that the project as a whole can be viewed in perspective.

An examination of the entire process of planning college unions, hopefully
- will sober those who over-simplify planning by expecting a building to "happen overnight";
- will frighten those who would copy other buildings;
- will stimulate those who would under-plan;
- will educate those who would not plan thoroughly -- not realizing that time and money spent in planning is time and money saved in building (and later in operations);
- will caution those who are not convinced that each element in the planning process can influence the project's direction, from which there is only costly retreating.

Each factor in planning can affect the entire project severely if its role, position, size, and relationship to other elements are not determined accurately. This is true of any building planned project, but coupled with the sophistication necessary in planning any building is the unique goal of the college union. A union is not simply a complex of basically dissimilar functions such as lounge, bookstore, games area, snack bar, etc. It should not be judged only by its visual attractiveness and traffic counts, but by the effectiveness of the educational program which is produces.

Each union must be tailored to its campus. No two campuses, however similar in size, type, or educational emphasis, are alike in the exact end-effect of all the physical and psychological factors affecting union planning. One must start with an analysis of the special needs and wants (social, civic, and relationship problems) that exist on a given campus.

Many facts and factors which bear upon the project -- e.g., funds available for construction; potential sources of operating income; whom and how many the building is to serve, now and in the future; plans for parking and dining; where the union is to be, or might be; other campus facilities which serve union-like functions; other buildings in prospect for the future, especially in the vicinity of the union site; and many others must be determined.

One must plan to the extent necessary to solve the problem. Many union buildings are too small and become out-moded in two or three short years after they are in operation. Farsighted planning requires careful study of many facts and factors such as those mentioned above.

Some useful approaches and reminders in union planning, growing out of the experiences reported by many institutions, are these:

1. Reach agreement as early as possible on the fundamental guiding purposes of the building and the program to be carried on within it.

2. All planning must be considered in light of the college's long-range plan.
3. Planning a union must be for the institution as a whole and not for an individual, a committee, a director, or the present student generation.
4. Determine needs first, before setting a fixed amount of money for the project.
5. As the only certainty in planning for the future is "change", the only recourse is planning in terms of flexibility to meet that change, rather than resorting to a prediction of exact needs of the future.
6. Planning must come initially from the functional and operational point of view. A well functioning building is not incompatible with handsome design. It is the eventual operator's (or consultant's) job to see that the building functions well, and it is the architect's job to see that the functional is made beautiful.
7. Care, thoroughness, and a reasonable amount of time are prerequisites to good planning.
8. Sound relationships and a good understanding must exist among the architect, the consultant, the director (if on the job), and the planning committee. Each must understand and accept the others' role and contribution before the work begins.
9. Planning must include definite provision for expansion. No matter how large the building, nor how thoroughly planned, there should be definite provision for adding space within a period of from five to fifteen years after the building opens.
10. A tentative overall project time schedule should be established for discussion and re-check, with definite slack that can be tightened later.

CHAPTER II

Basic Facts and Factors

What is the union building? People often imagine that the union is a service building only with physical facilities available for casual campus use. It should be made clear that the concept of the union advanced by the Association of College Unions-International is that the building is the physical facility which makes possible an informal educational program which is complementary to the college's formal educational program and which serves as an important factor in the student's personal development and complete education. The building is the means to an end; and this basic concept must be understood and agreed upon before planning begins.

Scope of project. Before developing the facilities program for any college union, it is wise to gain some appreciation of the magnitude and complexity of the task. One gains insight into this matter when he thinks of the many decisions, compromises, and adjustments needed in the planning of a single house for a family. Here is a group, well-known each to the other, without a great variety of needs, and with needed facilities already known. Yet it is very difficult indeed to provide for all the needs of the family and to get them adjusted to the agreement, even for four or five people.

While the many services and facilities of a union are relied upon primarily by students and faculty, they are important also to alumni, friends, prospective students, conference planners, visitors, speakers, lecturers, and, sometimes, the surrounding community. These other needs should be anticipated from the beginning.

For example, if one multiplies the size of a house by 50, and if the family size increases from four persons to 3,000, with many closely knit internal groups of independent identity, one begins to appreciate that though the problems do not increase in proportion, the task of fashioning a program and a structure that will satisfy the majority of individuals and organizations with diversified backgrounds, interests, and needs is nevertheless formidable.

The size of a union operation and the amount of detailed consideration required can be better assessed by regarding it as the moving together of separate establishments, each of which is a substantial activity in itself. Consider what would happen if the following separate functions in the community surrounding the campus were brought together under one roof:

Restaurant and cafeteria	Volunteer service agencies
Bowling and billiard establishment	Youth recreation center
Snack bar	Hotel ballroom and meeting rooms
Hotel catering service	Theater
Bookstore	Art Gallery
Counseling offices	Post Office

and many more

Site. The site is the first important major physical decision. It easily can determine the success or failure of the project, both financially and socially. The careful positioning of the union can help solve many basic problems or, conversely, can complicate them.

How long does it take to plan a union? Obviously no one answer can be given but the following is representative of union experience and can serve as a base from which specific schedules can be set. Obviously the size and complexity of the project will make a difference.

Project phase	Time required
1. The development of the information prior to the writing of the program and the preparation of the program.	Six months to one year, depending on how steadily and rapidly the planning committee and the administration make the necessary decisions.
2. The development of preliminary plans.	A minimum of three months, preferably five months.
3. The preparation of working drawings and specifications.	Five to seven months.
4. The preparation of bid documents, advertising for bids, and the bidding.	Six to ten weeks.
5. Awarding of bids.	Two to four weeks.
6. Period for contractor to assemble the equipment and labor force and get under way.	Two to four weeks.
7. Construction period (obviously varies with the climate, region of the country, time of the year construction begins, size of the building, competency of the contractor, availability of labor force, strikes, unusual weather, etc.)	From ten months at the minimum for a very small building to approximately twenty months; average of about 16 months.

This indicates, then, that it will take a minimum of two years and as much as four years for a large, complex, building from the time serious planning begins until the building opens; with an average of about three years. Other items which must be considered are (1) time allowed for delays and owner acceptance of building -- one to two months; and (2) time allowed for placing furnishings and equipment, and the shake-down period for operating the building -- one to two months. (While it is often possible to do much of the preparational work during the last few months of the construction period, one cannot always depend on this.)

Two specific continuing problems.

1. The tendency to copy what someone else has done. No two college campuses, however alike they may be in physical size, enrollment, and type of location, are ever truly alike.

2. The assumption, on the other hand, that all requisite knowledge concerning a union is present with the architect, or in the business office, or in

the dean's office, or in a committee of faculty and students, and that there's not much to be learned from other unions or in the literature on unions.

Hiring the director. The director should be on the job at least one year, preferably two, in advance of the building opening, or, best of all, at the start of the project, making plans and coordinating the whole planning process. Union experience in general shows large savings made during the planning stages, and later in the operating stage, by having a person experienced in union operation on the job far in advance of the opening.

Unique nature of the union operation. The most important single consideration affecting the eventual success and initially smooth operation of a college union is the thorough recognition of the fact that a college union is operating two to three shifts a day. Realization of the nature of the operation as it differs from the traditional eight-hour day from 8:00 to 5:00 will help bring about the establishment of sufficient funds for thorough planning of a building to meet the demands of three shifts per day.

Paying for the building and the operation. An important general factor in the success of the union is that it must be provided with sufficient capital and operating funds. Students, faculty, and staff of the campus community must expect to pay for this new facility and its operations. It is far too easy to get started with the erroneous idea that the new building will be able to afford services at little or not cost. No one would expect this of any commercial establishment, and the union's business activity cannot be greatly different in this sense from similar commercial establishments. And, of course, a large portion of a union building produces no revenue at all. It is not uncommon for the non-revenue producing areas of the building -- which typically aggregate half or more of the total area -- to have an annual operational and maintenance cost on the order of 8 to 12 percent of the original cost of building and equipping such areas.

It can be shown that students can save more than their union fees in one year if they take advantage of the various facilities, services, and offerings of the union. The same is true for faculty and staff members; therefore, all who pay are certain to get the return on their money within a year's period. They can actually call their union fees a good investment that will save them more than the actual outlay each year. There are limits, of course, to what users of the building can pay in fees and to what the revenue producing departments can earn. This should be recognized early so that the building, in size and kind, is planned in realistic relation to what the college and the building users can afford to pay annually to operate it.

CHAPTER III

The Need for Thorough Planning

To design a building so that its program becomes the expected "all things to all people" would seem to be sufficient reason for the utmost thoroughness in planning. The program of the college union must satisfy the faculty that it is educationally desirable and must satisfy the students (and others) that it meets their needs for daily services and recreation as well as social, cultural, and educational growth. The desired outcome of a building, in order to accomplish these objectives, demands that every step of the planning be examined carefully and that sufficient time be allotted to permit clear-cut, satisfying solutions to the many problems in planning.

Any step along the way can cost unnecessary hundreds or thousands of dollars if mistakes are made -- that is, if the decisions are not patterened to solve the problems. The greatest deficiency in planning is the failure to visualize the final plan in terms of its actual operation, day-by-day, step-by-step, motion-by-motion. Failure to do so is almost certain to mean many hours of staff time lost, inefficiency of operation, and lack of opportunity to reduce staff at minimal traffic times. Not alone is efficiency and savings in plant necessary, but the objective of tailoring the operation and building to meet the needs of the campus so that it "suits" also requires thoroughness in planning. Failure to make an area large enough or failure to provide the proper relationships between and among various units -- the most difficult problem in all college union planning -- can amount not to a few thousand dollars, but to hundreds of thousands of dollars in construction as well as thousands of dollars in additional operating costs each subsequent year. Enough such errors may render the union useless.

Many colleges have begun their union planning all over, after one, sometimes two or more, starts -- usually because the administration just wasn't satisfied with sets of preliminary plans drawn up in the conventional fashion -- that is, conventional in the sense of meetings with the architects in which the desired needs were described quickly and verbally and plans drawn to meet a deadline, without the help of experienced union building and program operators. While there are hundreds of examples, a few will suffice to illustrate:

Example 1. A detailed, written program and resultant plans permitted multiple-use in many areas with a major reduction in space. Bids were two hundred thousand dollars less than first estimates.

Example 2. Careful analysis of everything from roof to basement, including basic relationships, table size, traffic flow, and detailed placement of equipment saved approximately $80,000.

The erroneous concepts of planning, and particularly the planning of college unions, are surprising. One is the idea that this is really, after all, very simple, and "we can do it ourselves." The pitfall here is that when difficult problems must be solved, the time required for thoughtful consideration is simply not available on the part of people already occupying full-time positions. A second is the assumption that the architect has sufficient automatic insight into the needs of this particularly complex, special field and has adequate information, operational know-how, and understanding. A third is the trap of copying what someone else has done. First of all, in the technical sense, no single,

similar plan can occupy two different campus sites. Just the changing of the service entrance alone can dictate the rearrangement of the entire plan. Often adopting or even adapting other plans means adopting or adapting others' mistakes.

There are many other unfortunate outcomes of lack of planning time. One is the failure to consult with the right groups on the campus to determine their needs; another is the failure to get correct information; another is the failure to base planning on factual, objective evidence vis a vis the opinions and/or preferences of a few college officers; and another is the failure to obtain the necessary professional assistance in the various specialized areas.

Another ever-present danger is the tendency to rush the architect to complete plans once the preliminaries have been completed. Everyone assumes that after the approval of the preliminary scheme it is a mechanical matter of "grinding out" the working drawings and specifications. Many, many items are overlooked during this stage because the flow of information concerning detailed requirements seems to stop and no one checks the plan details from the standpoint of operational or maintenance suitability. When contracts are let and the planners start to catch up with the realities of their plan, change orders become the very expensive means of correcting planning mistakes. Very often change orders costs are prohibitive and the college realizes that it must live with serious planning errors for a long time to come.

The college is furtherest ahead which arranges to use temporary facilities during the planning period and then takes the time to provide for thorough planning for the new campus home that will be used for at least 50 years.

CHAPTER IV

Basic Steps in Planning

The typical steps in the planning process are presented in this section. Variations in the sequence may be necessary in particular planning situations; and information given at one point may apply to several steps; for example, checks on construction costs. In general, however, the steps follow in the order indicated.

STEP 1. THE FIRST SPARK. Whenever the first glimmer of a definite idea about having a new union or a necessary extension of an existing one arises, it should be recorded in a memorandum and sent to interested parties, including the college president. As ideas develop they should be treated in the same fashion. Uncovering the problem or the idea is very often the first major stride toward the solution. In short, don't let it die.

STEP 2. ESTABLISHING THE REPRESENTATIVE PLANNING GROUP. When the need for a union grows to sufficient magnitude, the president's endorsement of active work on the project should be obtained in terms of his appointment of a representative planning group to carry out the work from the very beginning in a democratic fashion. Whether the idea for the union or its development arises within a student or a staff group, the best results occur when the representative committee is established to encompass all of the interested elements of the campus -- students, faculty, administration, and, possibly, alumni. Such a committee should be clothed with real authority and responsibility to serve as the clearing house for all proposals affecting the union and it should be recognized as the channel for making official recommendations to the administration.

Not only is representation a matter of fairness to the campus constituency, it is also the surest means of gaining the support which the project must have. Sooner or later financial help, modifications and adjustments in plans already under way by other groups, adjustments in priority, etc., will require agreement. This is likely not to come easily, or without a harsh administrative decision, unless there is proper representation. Understanding of the problem and its needs, plus the good will of the entire campus is accomplished only with proper representation of the parties concerned.

This principle is often violated. Often certain funds become available and are placed under the initiative and control of a given office. The hiring of an architect ensues and technical planning begins before a committee even exists. Retracing of steps often becomes necessary in order to capture the interest and support of key groups, to attain an acceptable plan, and to establish generally the democratic process a union in particular should foster.

A good representative planning committee could include: Three or more faculty members, three students, two or three administrative officers, and, perhaps, an alumnus. A faculty member with no vested interest in the building should be chairman. In many cases a member of the board of trustees most interested in building development is invited to join the initial planning committee.

It is desirable to have a small executive group, sometimes with sub-com-

mittees of students, faculty, and administrative officers, working on designated portions of the project.

STEP 3. OBTAINING THE BACKGROUND FOR THE PROJECT. The committee should insist upon obtaining the necessary background on the nature of college unions and its possible benefits to a campus. The bibliography in this monograph will assist the newly appointed planner. It is highly recommended that one of the first actions of the committee be to obtain multiple copies of reference materials and make them available to all committee members for study purposes.

Visits to other college unions and conversation with directors and students on campuses where there are well established unions can be useful mainly in getting the "feel" of what unions do and how they are used. Caution should be exercised, however, for one should not assume that such visits will produce all there is to know about unions; or that what seems to work on one campus will work on another, and is necessarily the best answer.

Another way to obtain background is to invite certain experienced directors from nearby unions to tell about their own special college union interests and to give an over-view of the college union and its program. Too often the concept of the college union is taken for granted.

STEP 4. THE CONSULTANT AND HIS ROLE. There are several experienced union directors who have served as general union planning consultants on a professional basis, as their time permits.* Such consultants can best be used from the very beginning of the project. The consultant, if at all possible, should follow the project through to the opening of the building and the first few months of operation, advising at each major step along the way. Too often a consultant is called upon too late, or only to give advice when the committee feels that it has problems or lack of know-how. It is best to engage the consultant at the outset and, by close communication with him regularly through the project, let him suggest the times when he can be of most help, subject, of course, to the approval of the college. By way of comparison, it is impossible for doctors or lawyers to make their best contribution if their patients or clients see them only in extreme emergencies.

A knowledgeable union consultant can help a committee set goals and a course of action, assist with setting up a survey of needs and analyze the data in the light of union experience elsewhere, help develop a facility list, with areas, write the Building Program, and check drawings for operating considerations.

Sometimes a consultant can offer useful advice by just making occasional visits to the campus or reviewing drawings. But it should be understood in such cases that the committee is receiving only minimal help and that the consultant can't be expected to have full understanding of the problems or assume any real responsibility for the project with only this limited contact with it.

With all due respect to the many excellent architects, their services are best used when answers to basic policy questions have first been settled and needs fully identified. They then can take the resulting building program (facility list and answers to questions) and develop it into a designed structure. Otherwise, they may spend a year or more executing a variety of preliminary plans trying to extract answers from the college which earlier could have been provided by a good, written program. Typically, special consultants also should be used for the specific food service lay-out, for interior design, for

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* A list of directors who have served as consultants can be obtained by writing the Assocation Office.

bookstore lay-out, for acoustical engineering, and other specialized areas.

A new director is not necessarily experienced in union planning but because he is on the campus he is very often expected to have all the answers. His attempts subconsciously to live up to that expectation may produce unfortunate results. Early professional assistance is desirable.

The result of the survey and of the consultant's efforts is the written building program. This includes a statement of campus needs, a list of the facilities, recommended capacities and square footages, a description of each facility and what it will do for the college, and, possibly, space relationship charts, organization charts, a preliminary construction budget, and a preliminary operating budget.

STEP 5. THE PROJECT'S GOAL-DECISION. A first major step, and a point at which individuals can contribute independent thought, is the determination of the nature and extent of the need on the campus for a college union -- what are the social problems that need to be solved, what are the services needed, etc.

The first milestone for the committee is the development of its statement of the goals of the project.

STEP 6. SURVEYS-QUESTIONNAIRES. The necessary information about the nature of union needs must be obtained on as complete a basis as possible. Typical studies include:

a. A questionnaire to determine individual facility needs and preferences.
b. A frequency-of-use survey.
c. A survey of meeting, banquet, party, assembly and organizational needs.
d. A pedestrian traffic survey. In some cases automobile traffic surveys may be necessary.
e. Answers to policy questions that bear upon planning decisions, e.g., food service master plan, faculty use, relationship to future theater, special conference requirements, etc.
f. Factual data on enrollment projections, housing and dining needs, attendance at organized group functions, and many more.
g. Interviews of key individuals for greater understanding.

There is much discussion about the advantages and disadvantages of questionnaires. It is not the purpose of this discussion to recommend that a particular survey method be used; however, there is no question about the need to have as sound a factual basis as possible upon which to plan any facility.

The preparation of an appropriate, meaningful survey questionnaire and the analysis of the results are highly technical. One should not conclude that he can prepare a list of typical facilities in a college union, obtain a preference tabulation, and then assume that the highly favored items tell the story. The way the questions are asked is vital. The consultant or a college specialist in statistical method can be of valuable assistance. The results should show who wants what facilities. Often it is important to provide for the needs of minorities.

The survey must recognize not only the current habit patterns on the local campus, but also the known successful facilities on other campuses where similar facilities have been tried and the responses of college students demonstrated in practice.

The properly conducted survey not only provides helpful insight and information; it also is an excellent public relations instrument. It involves many students and faculty in the planning process and helps win understanding and support for the project.

Too often the questionnaire reaches the campus as the first instrument or first concrete action regarding union planning and sometimes it is met with suspicion. Even the questionnaire, as helpful as it is intended to be, must be previewed and introduced to get acceptance and support. The covering memorandum of the questionnaire can serve as a progress report. This is especially important on campuses where there has been considerable waiting for the union.

Some important steps in conducting surveys:

a. Call upon a specialist to help draft the questionnaire and set up the tabulation of data.
b. Give the questionnaire a pre-test to clear any misunderstandings.
c. Be sure to obtain a representative sampling of the student body and the faculty.
d. Obtain advance publicity about the importance of the questionnaire.
e. Present the results of the survey in a professional manner, so that you have acceptance of the reliability and the validity of the results.

To rely upon the opinion and the feeling of a relatively few about the actual desires and needs of the whole college population is not sufficient. Both approaches are necessary in the process of planning for the use of substantial sums of money in higher education.

The end result of taking a survey should be the comparison of its results with the views of the committee and staff. In almost all campus surveys, there have been preferences for at least one or two major facilities which were substantially different from what was expected. On one campus the interest in bowling was at such a high level, even though the campus was small, that it was highly inadvisable to exclude bowling lanes.

Regarding traffic surveys, more often than not there is almost no knowledge about the habit patterns of students. In many cases, upon careful examination, it is possible to conduct a pedestrian-traffic survey and an automobile-traffic survey with the aid of mechanical devices. If these are not available from city, county, or state agencies, student crews can be organized to do the counting, using hand counters.

STEP 7. SITE DETERMINATION. The decision on the site for the union is the first major step and the importance of this decision never should be overestimated. For the union to be a "cross-roads of the campus", figuratively as well as literally, it is necessary that analysis from the perspective of the long-range plan of the institution be made carefully.

The union should be placed at a point where it will be on the main traffic axes of the campus of the future. The various factors which will draw students into the building must be assessed carefully as well as those which are now affecting traffic. Future location of buildings, size, extent of program, curriculum, etc., must be at hand as this decision is made. The decision rests with officers other than the union planning committee, but it must be made with all of the consideration at hand in order that the union may truly serve its purpose.

Site selection is closely allied to the determination of just what facilities are to be included. This decision must be influenced by the availability of adequate parking space. A union without sufficient parking (what is sufficient must be carefully studied and accurately determined) is subject to disappointment in the use of the building as well as to severe criticism by its users.

STEP 8. FINANCING THE COLLEGE UNION.

Planning costs. Everything costs money. As has been stated often, the best money the college spends is on its planning. In order to get the initial work done, expenses for the committee, for telephone calls, travel, consultant's fees, and attendance at conferences must be defrayed. In some cases the cost is for the interviewing of candidates when the college decides that it wants to have the director on the spot at the earliest moment. The following are some possible sources of money to defray initial expenses -- which may total $5,000 to $20,000, depending upon the nature and size of the project:

a. Appropriations by student government.
b. Administrative reserve funds.
c. General building planning funds.
d. Assessment of student fees in which some of the initial receipts would go to planning. This money accumulates in cash and is not committed until a loan agreement is actually made.
e. Miscellaneous student organizations' balances which often can be turned over to the initial planning fund.
f. Solicitation with college approval of gifts from interested alumni and board of trustees.
g. Funds from the Office of Development.
h. Planning grants.

All of the above ways of raising money are important for they pave the way for planning and for study of the most economical use of subsequent capital, and for operating funds once the union is underway.

Capital funds for structure, fixed equipment, architects fees, etc. (See ACU-I manual on "Planning and Operating College Unions", section on Financial Policies.)

Operational costs. (See ACU-I manual on "Planning and Operating College Unions", section on Operational Costs.)

Fund-Raising sources.

a. A fund campaign conducted by the institution itself through its office of development which taps sources of alumni, corporations, foundations, trustees, and friends of the college.
b. Special fund-raising efforts on the campus by the faculty and staff.
c. Special fund-raising efforts on the campus by students.

While the amount of funds usually derived from faculty, staff, and students, is not sizeable, nevertheless, it is a substantial proportionate amount. It is also one of the best indications to other donors that the college is truly interested in a college union. Recently, at a small college, $10,000 was raised from its faculty and staff alone, all through one well-developed letter-appeal. Students on this same campus have raised $2,000 through fund-raising events of all kinds. This kind of effort can be pointed to by the president, the development officers, alumni secretary, and the local press, showing that the college is truly deserving of assistance as indicated by its own effort to help itself.

STEP 9. WORK OF THE PLANNING COMMITTEE. The building and planning committee, by whatever name, has a tremendous task for it is the nucleus of the effort. Referring to Step 2, this committee when constituted, has the following responsibilities:

a. Orientation of the committee members.
b. Recommendation that a director be selected.
c. Preparation of questionnaires and plans for surveys.
d. Establishing need for:
    1). Conducting interviews with students and faculty.
    2). Conducting traffic survey.
    3). Meetings with campus groups.
    4). Fund-raising efforts.
    5). Certain policy decisions.
e. Review of reports and plans.
f. Recommendation of written program and architectual plans.

The actual work of the planning committee should be designed to do more than listen and participate in judgments. It also must be a communicating agency. It must report to the campus the developments in the committee and it must keep the campus aware of the progress on the union project. It must also be an agency for stimulating interest.

STEP 10. HIRING THE DIRECTOR. Planning a project the size of most unions requires a full-time director. Smaller unions require a part-time director; one whose duties can be combined with other related responsibilities. Sooner or later, the position of director of the union becomes full-time and it is wisest in most cases to hire a director when the committee work seriously gets under way.

The union director is appointed by the college administration upon the recommendation of a representative committee and should be hired when the written program for the architect is to be prepared. He should be the one to help conduct, or direct, a survey of the campus which provides the basis for the written program. He should assist in developing the program, depending on his experience.

This timing is important because it is from the written program that the architect will work in doing his initial layout. This is the time when the experienced director's philosophy, methods of operation, and operational "know-how" begins to be incorporated into the building structure. Another strong reason for hiring a director early is that of economy. This is the reason best understood by presidents, business managers, and boards of trustees.

Besides the financial reasons there are some intangibles which are just as important:

a. Early arrival on the scene provides the director with the opportunity to become acquainted with the campus, develop program activities and events, and help the campus arrive at a plan best suited to its needs.
b. He can assist in welding the campus into one unit and in shaping proper attitudes toward the union program.
c. He can undertake related duties, easing the strain on the building budget.
d. He can supply the essential administrative coordination for the project. Every document, memorandum, paper, plan, etc., should be filed in one place.

STEP 11. THE WRITTEN PROGRAM. The written program is indicated at this point as the projected end result of the investigation, collection and analysis of information, and judgments and conclusions drawn about the project.

The written program is both the definition of the problem and the description of its solution. It compels the resolving of policy and problems. It is the result of the work of the committee, the staff, the planning consultant, and all those who may contribute to the final written descriptive statement of just what the college wants in a union. It should be studied, reviewed, and adopted as the

official description of the college's union needs. The program should then be approved, at least in principle, by the president and the board of trustees. Such an approval gives a firm base upon which planning can proceed. While there can be adjustments in the program, as inevitably there must be as planning progresses, these approvals save time and energy, and often prevent a retracing of steps or starting over in a new direction.

The program serves the following specific purposes:

a. Provides for all parties a basic orientation to the project and its objectives.
b. Serves as the basic document which guides the architects in preparing plans.
c. Serves as an orientation for future union board and staff members.

With a good written program all work will have more meaning and will be done more rapidly and more thoroughly than is possible without it.

With regard to its usefulness to the architect, one architect has put it quite well, "I can design what you need only as well as you can describe it to me."

STEP 12. DETERMINING THE FACILITIES TO BE INCLUDED. Assuming that the interviews, surveys, studies, and reports have been made and the information compiled, it is the job of the consultant or the director and the committee to determine what facilites will meet the needs of the campus.

Certainly a part of the determination is obvious. If people need a place to meet and to eat, then a lounge and a snack bar obviously will help meet this need. Coupled with the more obvious conclusions is the need to analyze carefully the various inter-relating factors in the background of the campus situation that will help assess students' habits, what interests them, and their possible attendance at events in the union.

To solve social problems requires program planning as well as building planning. In fact, program planning must come first and be a part of the total development of the union operation in fact. The planning committee, with any existing campus program staff and program committees, should list the type of program solutions to the campus social needs. For example, if there is a lack of easy means for dating on the campus, then the type of event that will permit stag attendance and easy and subtle means of mixing is necessary. Determination must be made as to how often such events should take place. A study must be made of the week-end habits of the students who leave the campus. The next step after a survey of campus social problems is the preparation of a typical program of events, meetings, and activities that will help solve these problems.

To illustrate the method that could be adapted to most any situation, and drawing upon the information discussed above, one should set up a chart with column headings reading from left to right:

a. Problem, social, or service need.
b. Event or type of program to solve the problem or satisfy the need.
c. Specific facility or type of facility required to house the program event.
d. Brief description of the facility.

Such a line of methodical reasoning should produce a chart giving an overall view of generally what facilities should be in the college union. This is one of the major points at which professional consulting is indispensable for guiding such analysis, for sizing, and for final recommendations.

As in proper planning of food services where we start with a menu and work from it to the necessary facilities, equipment, planning, schedules, etc., to produce this menu, so we must with the college union begin with its program menu, or the types and kinds of events that will provide satisfactorily and wholesomely the menu for students' needs and appetites in out-of-class life.

Following is a list of most of the typical facilities found in a union. Certainly

it is not complete, nor does it indicate that all need to be included. This list is intended to provide a broad base of suggestions from which to make selection. The list is purposely not in any order of importance to give a free approach, rather than to suggest a list generally applicable to all. A basic list, based upon experience of use, may be found in Monograph #1 of this series.

STEP 13. DETERMINING THE SIZE OF THE FACILITIES. Sizing the facilities after they have been determined is a highly technical matter for most of the facilities in the college union. It is at this point that a union consultant can be of great assistance.

In general, before determining a particular size of a major area, one must have determined as well as possible the number of people per hour or per unit to be accommodated. This determination requires the use of all of the background information and the information from any questionnaires that have been used in order to determine volume of people -- in a lounge, for example, or how many people need to be accommodated at one time a snack bar, in the games areas, how many couples in the ballroom, etc. Once this has been determined, it is possible to approximate closely the number of square feet required.

While the size of individual areas may be readily determined, the relationship of those areas with other areas is significant. The use of multi-purpose rooms and flexible partitions in some cases allows for extensions at peaks, and contraction to the normal size at low points. This has a great deal to do with the final determination of the proper number of square feet in the basic units of such flexible areas.

Check and coat rooms
Information center
Bookstore
Ticket office
Barber shop
Beauty shop
Post office
Maintenance shop

Repair shops
Lost and found
Rest rooms
Janitorial spaces
Bulletin boards
Bank
Western Union
Delivery area

Trash rooms
Elevator
Mechanical Rooms
Storage
Employee locker areas
Pay telephones
Corridors
Public address system

Food Services:
- Snack bar
- Cafeteria
- Private dining rooms
- Coffee shop
- Restaurant
- Faculty dining room
- Commuters' lunchroom
- Banquet rooms
- Offices
- Kitchen
- Dishwashing room
- Garbage room
- Bakery

Ballroom (Multi-purpose room)
Meeting rooms
Lobby
Lounges
Faculty lounge
Music listening room
Library or Reading room
Guest rooms
Dormitory spaces
Chapel

Commuters' lockers
Box lunch lockers
Commuters' resting rooms
International center
Student activities center
Student organization offices
Campus newspaper
Yearbook

Art room or gallery
Games lounge
Table tennis room
Card room (chess, etc.)
Billiard room
Bowling lanes
Photographic studio
Art studio

Craft shop
Outing club headquarters
Amateur radio transmitter
Art lending library
Music lending library
Auditorium

Music recital room
Music practice room
Television room
Conference facilities
Parking lot
Sun decks
Patios
Picnic areas
Swimming pool
Ice skating rink
Ski slide

Theater:
- Stage
- Dressing rooms
- Shops
- Lobbies
- Projection booth
- Stage house
- Costume shop
- Costume storage
- Rehearsal room
- Ticket office
- Offices

The conditions one wishes to obtain govern to a great extent the number of square feet or the size of a room. For example, if one wants the most economical space layout and is satisfied with a tight seating area for the cafeteria, perhaps eleven square feet per seat is sufficient (depending, of course, on the overall size of the room, columns or no columns, etc.). If you wish to have more room, wider aisles, etc., 12 to 13 square feet is indicated. In a special dining service room 15 square feet or more per seat is necessary. In food areas, consultants should be relied upon to provide the correct size for seating areas under the various types of service conditions desired, and for the kitchen, for cafeteria lines and the like. In the final analysis, each area must be laid out to determine the actual number of square feet required.

For the purpose of general estimation of the size of building required and to obtain the estimated cost of the project initially, certain rules of thumb are helpful; but they can be misleading. The best approach is to get professional help so that the initial estimated cost will be as close to reality as possible. One of the greatest disappointments in all of college union planning is to have the initial building budget become the absolute ceiling. The disappointment comes about when later, thorough planning indicates essential needs are larger than first estimated or that different facilities would better serve. Of course, with a specific maximum amount of money determined as available for the structure, this then means that the choices will have to be made at least for a "first unit". This lends all the more importance to careful planning. It means that buildings must be planned on an expandable basis so there may be orderly progression to the total necessary plant rather than costly remodeling when after-thoughts and new needs require major upheaval or adjustments in the building. All this has direct bearing on the sizing of facilities. Once again,

the cost of planning is a mere drop in the bucket to the cost of major changes.

Certain areas with which individuals on the campus are particularly acquainted, such as office layout, can well be determined by them -- providing the committee retains a check on sometimes exaggerated statements of need. Again, the size and number of offices is dependent upon the facilities necessary to provide for the program and services intended. The development of the organizational pattern also is necessary. This has considerable effect upon the number and sizes of offices, where, for example, combining may be in order. This is all the more reason for early, thorough planning to complete a program before using "working estimates".

To attempt a comprehensive "key" to the sizing of union buildings would be to pre-judge vital segments of union needs without the essential local determining information. Helpful estimating information is found in Planning a College Union Building by Chester Berry; available from the Association offices.

Naturally, in some smaller unions the whole planning program is simplified; however, some of the greatest mistakes made in planning smaller buildings have been failures to observe the basic precautions being given in this monograph.

STEP 14. RELATIONSHIPS AMONG THE FACILITIES. Once the facilities to be included and their sizes are determined, then comes the most intricate part of college union planning: the proper functional inter-relationship of the various facilities, including a determination as to floor level. The inter-relationships to provide maximum flexibility and multiple use of areas is extremely important and is best done by experienced professional help.

STEP 15. ESTIMATING THE PROJECT CAPITAL OUTLAY COST. Very often the cost of a union building is regarded as not basically different from that of other college buildings. College union buildings are "notorious" for their surprising increased costs and the planning, from a cost position, must be studied very carefully. Such requirements as a sound system, music listening, information desks, food service equipment, bookstores, air conditioning, etc., must be very carefully weighed. Costs are complicated also by the need to put under one roof varying types of facilities with different ceiling heights, different equipment requirements, and different ventilation and heating requirements.

The capital outlay cost may be estimated using the following:

Construction only _____ gross square feet	
at $____ per square foot	$_____
Architect's fee at _____% of construction cost	$_____
Fixed equipment:	
Kitchen equipment	$_____
Bookstore equipment	$_____
Special equipment	$_____
Furnishings and portable equipment at _____% of construction cost	$_____
Utility connections	$_____
Site preparation, walks, landscaping	$_____
Interim financing and administrative costs	$_____
Contingency at _____% of construction cost	$_____
Land acquisition (if any)	$_____
Consultants' fees	$_____
Total	_____

STEP 16. ESTIMATING THE OPERATING BUDGET. To estimate the income and expense of an operation that is two to three years away from the early stages of plan ng seems to be a formidable task. With experienced staff resources on the college campus, such a task can be reduced to its sub-divisions and each one attacked. The estimated operating budget, of course, cannot be brought into completed form until the facilities to be included are determined, with sizes and numbers to be accommodated in those facilities.

The two chief uses of the advance estimated operating budget are (1) to enable the college to know whether its operating income potential can cover the operational and maintenance costs of the union; and (2) to enable one to determine the amount of the student fee required to cover the operating expense of the non-revenue producing areas and the amortization of the capital cost of the building, the fixed equipment, etc. Particular attention should be given to depreciation so that the initial operating budget may include funds to be set aside for the repair and replacement of furniture and equipment. Failure to do so means inevitable severe financial problems or a worn out, rundown look for the union.

The estimated operating budget should be approximated at the earliest possible time after the basic facilities have been determined and then be refined concurrently with development of the plans. The operating budget is a check on the planning, on whether the college can actually afford the size building it would like to have. To fail to prepare a detailed operating budget is to invite severe problems and disappointments as the operation gets underway.

STEP 17. STUDENT (UNION) FEES. The level of student fees varies from $3.00 per year per student at some colleges to as much as $100 per year at others. For the most part, the smaller the enrollment, the larger the fee, and vice versa. It is an unfortunate fact of life that the fee at the smaller college, usually the private institution, must be greater in order to provide for the minimum necessary facilities. The larger institutions can often charge a smaller fee because there is a great number of students. Concomitant with this premise is the fact that basic facilities and structure have a cost which cannot be reduced in direct proportion to the size of the student body.

STEP 18. ORGANIZATIONAL MATTERS, The organizational pattern of the union must be resolved in terms of overall out-of-class life as well as the business operation. The staff organization and the student committee organization must be studied. The number of staff members and their relationship to various offices is a vital determination. Activities headquarters for student organizations, in turn, must be analyzed for maximum efficiency of office arrangement, the proper number of offices, and the proper relationships among offices, student areas, and the overall building administration. Equally important is the development of the proper heirarchy and relationship of both student committees and staff positions to the college organizational plan. Too often organization is determined after the building is planned with a certain number of offices alloted, hoping that this will "work out".

STEP 19. PRESENTATION OF PROGRAM TO COMMITTEE, COLLEGE ADMINISTRATION AND TRUSTEES. Once the program is complete, it needs to be formally presented. An open meeting called by the planning committee and presentations to an administrative council and board of trustees is often in order.

STEP 20. APPROVALS BY COMMITTEE, COLLEGE ADMINISTRATION AND TRUSTEES. Each group can later deliberate, review, and act upon the program. Eventually, the program itself should be adopted by the trustees as the official description of the needs and requirements of the project.

STEP 21. SELECTION OF ARCHITECT, The architect ordinarily does not enter the picture until the written program is completed. There are several circumstances, however, under which the architect's presence may be very valuable:

a. When the architect has already been retained, or there is a college architect, he can be very helpful on site questions and building cost estimates.

b. When architectural renderings and sketches for fund-raising purposes are desired, although it is dangerous to embark upon sketches that are too definite before the actual needs are determined.

c. When an architect is to work with the planning committee or consultant by sitting in on some committee discussions, he can get a better "feel" for the project and assist in the development of a written program. He can at times aid by drawing schematics and isometrics that illustrate graphically the requirements of the program.

It should be pointed out again that there is no substitute for the point of view of the experienced operator, due to the union's complexity, its financial operating requirements, its labor costs, its needed concern over details in day-to-day operation, and many other reasons.

The process of the selection of an architect can be accomplished (1) by a "competition", which is time consuming and means extra expense; (2) by interviewing all architects indicating interest in the project; (3) by consulting with the president of the local or area AIA chapter for invitation and selection systems; or (4) by continuing with architects who already perform the college's work. Most important, the architect chosen should:

a. Have a record of sound design and success on other projects.
b. Be one who considers function first and then a design to make the function beautiful.
c. Evidence willingness and cooperation; that is, willingness to utilize all techniques and skills in the freshest possible manner, and cooperation in providing good solutions for maximum operational service and efficiency of the resulting facilities.

In turn, the architect must receive the opportunity to study the entire project thoroughly and completely, the opportunity to do research as he desires and to match it with the written program, time to develop schemes, and the opportunity for travel to see unions in operation. He needs understanding and recognition on the part of the client, the committee, and the consultant. He should be given opportunity to create designs to solve problems as they are depicted in the program. Above all, the role, function, and relationship of each party to the planning project must be clearly understood from the very beginning. Ideally, each party should look to the other for advice, information, and suggestions.

A point that must be resolved in every planning relationship is that the reputation of the building will not hinge solely upon how it looks and how it is designed, but also upon the quality of the service it makes possible.

STEP 22. USE OF ADDITIONAL PLANNING ASSISTANCE. These are the professional planners to consider in addition to the general union consultant:

a. Food service layout consultant. Of all the sub-areas of the union, the food service area is by far the most sensitive and complex. Every union should have its food service facilities planned by a reputable food service consultant. Food service is both an art and a science; and such a sensitive area, so dependent for success upon its quick service, smooth operation, and control of the margin of profit, demands the very best possible planning. The food service consultant should be engaged at the time of the approval of the written program and before the architect develops basic kitchen and counter layouts.

b. The interior designer. An interior designer should be engaged unless the architect has had experience and demonstrated ability in this area. In any case, the interiors should be developed as in integral part of the architecture to produce a harmonious whole. In any sizeable union the volume of dollars spent in equipment and furnishings warrants the closest possible control. An area of considerable specialty is the creation of useful and beautiful interiors and furnishings to carry out the theme. While it is not possible to guarantee that the interior designer-decorator can save money in every case by virtue of his services, it is safe to say that you have assurance of a better coordinated plan, the fee for which is insurance against interiors which do not properly express all of the thought and effort that have gone into the development of the project to that point.

c. Acoustical engineer, stage and theater designers, etc. should be engaged as special facilities require.

STEP 23. DEVELOPMENT OF PRELIMINARY PLANS. Once the program is approved and the architect selected, the development of preliminary plans begins. The architect's first job is to study the program carefully, then to do the necessary research, to travel if he wishes, and to begin through discussion with the operator or consultant to develope a complete and thorough understanding of the program.

The architect should analyze the program, raise questions, and discuss every phase with the operator or the consultant which is not absolutely clear. Completed programs are well worth re-reading and re-studying many times. They save endless hours of future questioning and of costly errors. From this point, the architect develops early sets of plans and schematics, checks them with the director or consultant until he gets the proper schematic, the proper allocation of space, level by level, and the proper relationships between and among facilities at the various levels.

Plans on which architect and consultant or director are in accord are then reviewed by the committee. The development of specific plans by the three parties to the planning project makes possible the resolution of the details which will be presented to the large committee, for review and suggestions. This process keeps up until the committee finally accepts and approves the preliminary plans. These in turn are recommended to the president and the board of trustees for approval as preliminary plans. Checks on costs should be frequent and are integral to each phase in the development of preliminary plans. If government funds are involved, an early communication with the Regional Office of the Housing and Home Finance Agency is desirable.

STEP 24. CHECK(S) ON COSTS. In the early phases of preliminary planning a specific and detailed check on the costs of the plans must be made. Too often it is assumed that the original budget is satisfactory, and planning proceeds without an exhaustive check, later to find that costs are up, or the space is over the program, and the required money is greater than the available funds. Also, a special check should be made by estimating the cost of the building on the basis of preliminary plans as though it had several alternative styles of architectural, structural, and mechanical design. The comparative costs may show that alterations or adjustments in the basic designs are necessary in order to achieve the budget. It also may show that money saved by certain designs could be put into other facilities. When this check has been made and there is assurance that the budget can be met, then, upon approvals, the project goes next into the next phases of preliminary planning and later into working drawings and specifications. Detailed "take-offs" should be made at an early phase in working drawings to assure cost control.

STEP 25. DEVELOPMENT OF WORKING DRAWINGS AND SPECIFICATIONS. The same process of architect, consultant or director, and committee working together is followed with most of the detailed work being done by the architect and consultant. Too often little attention is given to the working drawing phase by the consultants and committee. Often the rush of getting drawings completed prevents satisfactory attention, with the result that costly operational headaches develop later because of omissions, inefficient arrangements, changes made by the architect to accommodate the structure or design, which, unknowingly, change the intent of the program or even make a facility unworkable.

A check of all working drawings and specifications by a building operator before they are completed is necessary to account for the myriad of matters affecting operational details.

STEP 26. TAKING THE BIDS. While the taking of contractors' bids is the responsibility of the architect, it seems wise to provide a few cautions at this point. The length of time required for taking bids should be realized by the college so that this amount of time can be fitted into the overall schedule. There are certain requirements by law for most bidding, particularly if federal funds are involved.

Plans and specifications usually contain a number of alternates on which bids are taken, so that if the bids are running high and money is short, the college can elect to accept certain of these alternates, thereby reducing costs. It is necessary that the administrator in charge of the project have an initmate acquaintance with just what is involved in the alternates. Failure to do so can mean a great many headaches when one finds that one whole area is stripped or a portion of the building always "understood to be included" is no longer possible.

One should realize that once the bids are in they are binding for approximately thirty days, depending upon the state, and the contractor is bound by law to honor his bids for that length of time. It is also possible to ask the contractor to extend the time in which he will honor bids.

There are various ways in which bids can be requested. For example, kitchen equipment can be either within the general contract, or outside of it, but usually costs more to include this equipment in the general contract. It is possible, if federal funds, or public bidding are not involved, to proceed on a cost-plus basis. The various ramifications of bidding, ways to obtain them, and advantages and disadvantages of each, constitute too large a subject for this monograph and should be developed with the local or college architect.

STEP 27. DURING THE CONSTRUCTION PERIOD. Once contracts are let, the long, tortuous, and exciting construction period begins. No doubt the first step is the ground breaking ceremony, the reward for the long, painstaking planning period.

The construction period is the time for the refinement of the organizational pattern, the development of the operating budget in detail, the development of specific equipment and furnishings list and costs, the work with the interior designer, and the detailed development of the program which this new union is to serve. This is the time also for beginning the transformation of the college union planning committee into an operating or governing board. It is at this time that the union director is developing the operating policy for discussion and approval by the union board as well as detailed operating procedures pointing toward opening day.

At the end of the construction period, all must be in readiness for the opening and operating of the building. While it is not the purpose of this pamphlet to cover operations, it nevertheless must be realized that operations must be planned during the construction period and everything must be charted, scheduled and ready by the opening day.

Much depends upon the ability of the contractor to produce the building on time. Safeguards for the construction schedule should be investigated, advisability of penalty clauses should be studied, understanding and rapport with the contractor and his foremen, the superintendent, the architects, inspector, and the clerk of the works should be established. These are important but often overlooked relationships.

STEP 28. CHANGE ORDERS. The best of plans are not perfect; hence, the "change order" permits minor changes during the construction period. Very often there are technical problems in construction which are unforeseen. This constitutes for the most part the reason for change orders; however, it may be necessary to change certain materials, wall surfaces, and the like at the interior decoration stage.

The great precaution to observe is to make sure that change orders follow the same channel of approval as those of the original plans. Certain exceptions may be necessary, especially when there is a technical change (without additional cost) such as in plumbing or heating, ventilating and the like, when the approval of the architect is sufficient. It is necessary, however, that the college administration be aware of each change and approve each since it must authorize the dollar adjustments involved.

CHAPTER V

Variations in Approaches to Planning

The basic steps listed in Chapter IV constitute the desirable, methodical, step-by-step, thorough planning approach. Variations from this theme sometimes are caused by factors beyond the control of college administrators.

Some colleges have gone to great lengths to establish the right concept of the college union project and have taken from one to three years just in planning; exclusive of the construction period. One institution had representatives travel extensively, visiting many unions, recording observations, consolidating the good points and eliminating bad ones. They then came up with "their ideal union building". So long as this approach is fitted into the overall pattern as described in Chapter IV, this is a complement to the planning process. But copying the features of other buildings without sufficient interpretation of how those features actually succeed, or without thought for the educational philosophy and conditions of one's own institution, can mean copying mistakes or building the "ideal" college. Of course, we have to have the ideal college before we can then match it with this model!

Another institution developed the college union plans through the classes in the School of Architecture. Here the general process was followed closely, with the information which the committee assembled and the information from the written program being made available to the students in the architectural class. After individual schemes were developed, the better schemes went into further competition. These schemes were then judged by a jury composed of union directors, architects, and representatives of the planning committee. This process served as a valuable teaching project for the students but had as its greatest value, the refinement of the written program prior to its submission to the commissioned architect for the project. This procedure, of course, takes a good deal of time and requires an architectural curriculum.

Some institutions seek short-cuts to planning but there is no short cut to planning a college union properly. After a conference is held to answer the question "what do we need?", some are content to prepare a list of facilities, pass it along to architects, and expect them to have some preliminary plans by a certain tight deadline. This usually means a high order of disaster, particularly when compared to what might have been.

CHAPTER VI

Relationships to Other Types of Buildings

Occasionally one finds the union combined with other types of facilities; with savings in view, or to achieve certain convenience goals. The building may have separate entrance ways to the different units, or there may be two buildings which adjoin.

Combination of the union and residence halls. Unions occasionally are combined with residence halls. Sometimes the need for a union in close proximity to the living location of students makes it seem inadvisable to separate the buildings, often because of the limited land available. Food facilities as a part of both the residence hall and union services often represent a considerable economy. They also become an easy bridge to providing flexible seating areas which can be converted into large banquet halls for special occasions, into a dance floor, or to provide a greater variety and volume of food services to the students, faculty, and guests. Problems of security, traffic control, and separation of living areas from the "campus living room" all require careful thought.

In the cases of union-residence hall combinations the extent of recreational facilities within the residence halls themselves properly can be reduced. In some respects such a combination insures that the residence living groups are not too isolated from the campus as a whole, as they are when lounges and recreation areas in residence halls are developed so completely that the students have little inclination to intermix with the rest of the campus at the union.

Combination of the union and the library. In general, it is a good principle to have the library and the union located close to each other; the traffic to one supporting the other. Close proximity makes for ease of taking breaks from study. The study problem in the union often becomes acute and can be minimized by referring students to the library for study.

As a close partner to the library on the college campus, the union amplifies its service role in the academic process, but even more importantly it seems to become a part of the heart of the academic emphasis of the institution.

Combination with (or proximity to) athletic facilities. The opportunity for combining with physical recreation activities seems to be a good one. In some cases the union has been built next to, or combined with, the gymnasium. A union adjacent to a gymnasium can be connected by tunnels so that swimming pool, exercise rooms, lockers, etc., for the gymnasium are readily accessible from the union. Between, before, during and after athletic contests, it is only a step to the union for refreshments, use of the lounges, and all of the services of the union. Union bowling and other recreation facilities can enhance the physical education curriculum.

At urban institutions and medical schools where there is no physical education program at all, a welcome answer in providing some physical recreation outlets for students is frequently found by incorporating gymnasium, swimming pool, and special exercise rooms in the union.

Combination with the theater. A major, significant combination plan is the association of the union with the campus theater. This combination has many advantages and there are great savings in investment and operating costs. Reference is made to the union-theater combinations at the University of Wisconsin and at Louisiana State University.

Combination with the conference center. The union is in many respects naturally and automatically a conference center. It is often combined with conference facilities which are specifically designed to capitalize on the resultant savings in investment and operating costs, and to accomplish, at the same time, the necessary separateness, and protection of every day use of facilities for students and faculty.

Students do not like to pay more than is absolutely necessary for their education. One way in which the student fee can be kept to a minimum is by holding educational and professional society conferences and meetings at the union. A union should be planned so that conferences do not infringe upon student use of the building to any unsatisfactory degree. It is necessary also that students understand that the college union's financial substance is based upon the multiple use of the building. A good conference program can assist in paying for such items as depreciation of equipment and the expenses of non-revenue producing areas.

The amount of conference business can make the difference between solvency and a financial struggle. In addition, there are those inherent values in bringing different groups to the campus who may wish to learn about the many fine college programs for their own benefit. These groups come to the college campus to take part in the educational offerings of the college and a well planned, well coordinated conference program can bring benefit to all concerned.

Conference facilities are worthy of special attention in union planning. The union typically can handle several conferences per day along with its regular business. Conferences at colleges with no summer session program of note may provide invaluable revenue and staff stability during "down" time.

CHAPTER VII

Problems of Different Types of Campuses

The small campus. The small campus is well known for its need to combine facilities, due to limited funds and the obvious need for a smaller building than is required for a large campus. Quite often one sees the temporary use of a basement, a portion of a classroom building, library, or other building devoted to a snack bar, bookstore, meeting rooms, etc. Sooner or later the space is required for the basic function and the union must move out.

The most logical combination of buildings at the small college is with the dining hall where centralized food services provide the means of extending the food service to encompass all of the hospitality functions as well as the residence hall needs at one central location -- with one kitchen, one staff, and greater efficiency. It is in this way that many campuses are able to have a union, that is, a recreation building which also has essential dining facilities available. This combination of food services, recreational, lounging, and other hospitality services as well as student activities headquarters, is likely to continue. One trend is to combine the post office with the bookstore in the union to provide another "magnet", as well as combining post office and bookstore personnel.

The large campus. Here the problem becomes diametrically opposite, namely, the need for the college union to be a separate building -- one encompassing all the necessary component union facilities. Generally speaking, the basic purpose of the union, unity of the campus, (as well as economy and efficiency) is thwarted when the focal point is not developed for all the campus constituency at one location. Certain rare exceptions, of course, are possible, but should be adopted only with the greatest of care and caution.

Instead of one union on some of the largest campuses, sometimes there are branch or satellite buildings -- where distances are so great that students can't be expected to reach the central union for food service or short-term recreation during class breaks.

The residential campus. The problem of union planning for a residential campus becomes one of relating the function of the union and its unifying, centralizing, and recreational purposes to the program of closely knit groups in the residence halls. The proper balance between recreational facilities and program in the residence halls is an area about which the residence hall administrator and the union director must be in constant cooperation. Usually a residential emphasis includes a dining hall as part of the residence hall, which means that the food facilities are not based in the college union. This has the effect of hindering the union in providing for large campus food service events because of the task of a full preparation kitchen and large dining hall.

Again, there is no set answer to a given union problem and it must be tailored to the needs of the campus. It is imperative, however, that the union on residential campuses be planned so that its flexibility will permit the gathering of as large a group as possible; and that its kitchen facilities be planned so that, if necessary, food can be prepared in a central kitchen in some other building and trucked to the union and served there. This latter solution is indicated only as a stop-gap measure, a bridge to utilizing the facilities at the union for food service

to the greatest extent possible. In discussing this problem, it is essential that the purpose of the union be well understood. At one campus the results of a questionnaire survey had the surprising indication that residence hall students would use the lounge and snack bar at the union more than would the commuter students, although they have their "own home" in the residence halls on campus.

The urban campus. The variety of union problems in this area, ranging from the small city college or junior college to the large urban university, is formidable. The chief problems are (1) finding enough space for the building and (2) finding enough space in the building for those who wish to use it at coffee break time or for lunch at noon; peak times for use by commuter students. Buildings teeming with activity at the peak times of mid-morning, noon, mid-afternoon and the dinner hour (when evening classes are held) may be found empty and barn-like at the early morning hours, evening hours (even late afternoons), and on weekends. Union directors are constantly working with program events to fill these gaps.

The site of a union at urban universities is also quite important within the campus boundaries and in relation to parking and traffic, for if it is not on the major traffic lanes, it can miss a great deal of business and the opportunity for service to a great many more students.

CHAPTER VIII

Common Errors, Cautions, and Tips

The following list, culled from many sources,* suggests the "mistakes of others, from which all can profit." These reminders, of course, must be used with caution and in perspective.

Too few meeting rooms
Too few small meeting rooms
The amount of storage space often inadequate
The union director not consulted in the original planning
Food service facilities not grouped together
Food service spaces not large enough
Food service equipment not adequate
Dining areas not air-conditioned or soundproofed
Not enough private dining rooms
Dining spaces not flexible enough
Buildings not large enough for the growth of program of campus
Careful thought not given to flow of people and materials
Lighting often inadequate
Both service and passenger elevators are needed
Not enough employee locker and wash room space
Not enough employee dining and recreational space (in larger unions)
Buildings not planned for partial operation (dance, bowling, guest rooms)
Storage for tables and chairs near ballrooms not sufficient
Coat room arrangements not satisfactory
Game rooms not large enough and not expandable
Game rooms too near food service and quiet areas
Game rooms not soundproofed
Number of bowling lanes inadequate
Lounge spaces either much too large or sometimes too small
Administrative spaces inadequate
Ballrooms not flexible enough
Arts and crafts shops missing

Others caution against:

Lack of creative and cultural facilities (workshops, music rooms, theater, motion picture facilities, art galleries, darkrooms).

Lack of recognition of the universal 'coke' and date habits, resulting in oversize formal lounges and too little snack bar space as a lounging center, the heart of the modern union.

Lack of a small, theater-type room with projection equipment and stage

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*Berry, Chester, Planning a College Union Building, pp. 199-200; McCoey, Thomas, "Main Short Comings of Union Buildings," College Unions - 1947 Report of Proceedings of the Twenty-fourth Annual Convention of the Association of College Unions (1947), pp. 21-25; and Butts, Porter, "Before you Build a Student Union," College Unions - 1946 Report of Proceedings of the Twenty-third Annual Convention of the Association of College Unions (1946), pp. 19-20.

Lack of conference rooms
Inclusion of hotel, bookstore, shop and other "commercial" facilities which overshadow recreational and cultural facilities
Grandiose, monumental lobbies
Acceptance of "white elephant" gifts which prevent flexible use or change of rooms
Conflicting dual purpose uses
Lack of music listening rooms
Art exhibition space in corridors only, (vs. separate rooms), or in out-of-the-way locations
Lack of work spaces (storage, offices, repair shops, etc.)
Lack of replaceable standard equipment and parts
Lack of overages of original building materials for later repair and replacement use
Lack of conduits for utilities (radio, TV, telephone, 220V lines, public address system)
Failure to consult student groups about their needs and wishes during planning

Certainly the most common error evident after the building is built is that it is not large enough. Union experience shows that shortly after the building is occupied, it becomes used much more completely than anyone expected, although not in every case. The union building must be planned so that units can be added. Not alone do we miscalculate the numbers of students coming to the campus, we also fail to account in advance for the increasing use when the union "catches on" with even a stable college enrollment. As the union becomes known and accepted, a broadened student program, new interests, conferences, meetings of community groups, etc., begin to demand greater space.

Another error is the failure to conduct a space utilization study of the entire campus. Often this shows that when clubs, organizations, and certain decentralized functions are properly relocated in the union, much space is freed in academic and other facilities. A common statement, "Oh, we have all that," when discussing the union potential, tends to place a block to one of the prime advantages of a college union -- that of centralization of facilities. This does not mean that we must centralize all student out-of-class facilities in the union, but it does mean that there are many advantages to centralizing and these must be carefully probed.

A third general error is separation or decentralization of like facilities within the union building. Combining certain facilities that otherwise might be decentralized means that one desk area can serve as the control-service-supervision point for many areas. This is especially true of the games area, where bowling, billiards, table tennis, checkers, table games, informal lounge, lobby, and sometimes post office boxes or the crafts area can all be served by one central desk. It has not been uncommon for unions to have two or three desks where one could have served the purpose as well. In fact, it is possible to design most unions so that there can be three major control desks located (1) in the games area, as described above; (2) as the information desk or reception center at the lounge-lobby-hospitality area of the building; and (3) at the activities headquarters or student-group planning center, at which the activities secretary or a clerk may handle the master calendar and serve as a general supervisor-receptionist.

There has been much said lately about the low maintenance cost of carpeting

as compared to resilient tile, which must be waxed and polished. One must not lose sight, however, of the permanency of a one-purpose use when carpeting is laid down. Permanent carpeting prevents use of the room for certain activities. While it is true that the entire building need not be multi-purpose or flexible, a decision on use of carpeting must be made very carefully if the union is to be the complete service facility it could be. These cautions are especially important for smaller colleges where as many square feet of space as possible must be used for a variety of purposes. A good substitute for carpeting is a rug cut in interchageable sections so that they can be used or stored as the case may be, and so cut that they may be turned 90 degrees or 180 degrees to prevent traffic wearing away and making unsightly one portion only.

Another useful device is the hidden picture molding placed at two levels above the door height. This molding permits the hanging of pictures at varying heights and on many walls of the building, thus creating an artistic environment for the building and adding to exhibition space. It also permits the placement of bulletin boards, signs, etc., at points around the building without damaging the walls.

A carefully planned sound system is essential to the operation of the union. It should contemplate:

a. a public address system
b. a system for paging employees
c. a record playing system and a radio playing system
d. a broadcast system of live programs for both radio and TV originating within the union
e. a television antenna and conduit system to provide for future closed-circuit television on the campus as well as television reception for programs of interest to all.
f. tape recording system

(A specific and detailed description of the sound system should be prepared separately.)

Throughout the building there should be display space including:

a. Many large bulletin boards, in every logical location, always mindful of esthetic appearances.
b. Lighted display space, with depths of 12''-18'', which is lockable from the front.
c. Wire mesh bulletin boards which can accommodate individual pictures or on which whole bulletin boards can be placed.

Every wall surface should be treated so as to receive special-occasion decorations without damage to the surfaces -- especially in the ballroom and party rooms. These various types of treatments are as follows:

a. Hidden picture mold
b. Knobs, hooks, or screws at intervals in ceiling and wall joints and other unobtrusive spots, from which wire can be strung. Brick or stone walls can be furnished with inset screws.
c. Window frames, sills, etc., with appropriate hooks, knobs, or projections. It is advisable to have an art exhibit area treated with a locking device for wire hangings for valuable pictures, thus discouraging theft.

It is absolutely essential that there be parking within close proximity of the union if there is to be the degree of success desired both financially and in program. "The automobile is here to stay" and it has become more of an essential in our lives than a luxury. Non-student general parking space for both day and night is essential. A detailed study of campus plans is essential to provide a proper parking plan.

Air conditioning is almost standard in union planning. It insures considerable additional use and revenue for the spring, fall, and summer months. The union should be able to serve well as a conference center in warm months. Summer school enrollments are increasing everywhere. The off-campus facilities with which the union competes are usually air-conditioned. An air conditioned union helps solve many financial headaches. In any event duct work and space for future air-conditioning equipment should be planned so that the total building can be air conditioned.

One of the great factors in keeping the building looking like new and in reducing maintenance costs is to keep the walls, doors, and door jams protected from bumping of carts and furniture. All single doors, therefore, should be a minimum of 36" wide, and preferably 40" to 42" in service areas. Double doors alone will not do the job, as janitors and patrons are often in too great a hurry to open double doors. Also double doors tend to give a rather industrial appearance if employed too frequently. All door casings should be protected with metal edges. The doors in service areas themselves should be protected with bumpers of appropriate design. If strictly adhered to, this principle makes possible indefinitely durable finishes on doors and casings.

Protection of walls from chair-back and other furniture markings is necessary, and is strongly recommended. A proven device is a buffer sill in all rooms of 5 inches width around all walls where feasible, rising to 1 inch or 1 1/2 inches in height above the level of the floor. Such a device makes possible placing of chairs around the edges of the room without the backs and arms knocking off paint and requiring re-painting within one year or less -- or damaging paneling or other types of wall coverings. Operationally, the cost of total refurbishing of walls in most rooms can be postponed for a period of five to ten years.

A complete telephone system is needed, including, if possible, free local service, and definite control over long-distance dialing. Union customers are heavy users of telephone services. Telephones for public use should be within view of the control desks.

An important essential to a smooth operation is "intercom" communication. An intercom system which does not require the usage of the same incoming channel or instrument, as the telephone, is needed for rapid inter-departmental handling of the many requests of the union.

Lockers for commuting students are indispensable for many unions. Facilities for securely storing wraps, books, lunches, etc., are essential. In addition, it is highly desirable to provide "wash-up" facilities nearby -- including one or two showers for the commuters who may wish to refresh for an early evening appointment, having been away from home from morning till night. It is desirable to locate lockers near a major traffic lane as an open room or alcove. This may be of secondary importance, however, to other space requirements. Lining a wide corridor with lockers is sometimes a workable solution.

Bibliography

"Avoid These Mistakes in Union Building Planning," College and University Business, February, 1948.

Bell, Boris, "Administration and Operation of College Unions," Monograph Series "College Unions at Work," Association of College Unions, 1965.

Berry, Chester, "Planning a College Union Building." A published doctors thesis. Association of College Unions, Ithaca, N.Y., 1960.

Butts, Porter, "A Good Union Building is Tailor-Made," College and University Business, August, 1946.

_____,"Before You Build A College Union," Association Proceedings, 1946.

_____,"Building Facilities and Equipment Which Strengthen the Union Program, "Course in College Union Operations. Wisconsin Union, University of Wisconsin, Madison, 1962.

_____, "Goals of the College Union -- Historical Background, Current Trends," Course in College Union Operations. Wisconsin Union, University of Wisconsin, Madison, 1962.

_____, "Government and Staffing of the Union," Course in College Union Operations. Wisconsin Union, University of Wisconsin, Madison, 1962.

_____, "Relationships of the Union to other College Agencies," Course in College Union Operations. Wisconsin Union, University of Wisconsin, Madison, 1962.

_____, "The College Union Story." American Institute of Architects Journal, March, 1964.

"College Unions: Administrative Study No. 4." A portfolio of plans, photos, and articles. College and University Business, June, 1960. "College Unions -- Fifty Facts." Association of College Unions, Ithaca, New York, 1963.

"Creative Planning: The Student Center." New Dimensions in Junior College Planning, 1958. School Planning Laboratory, Stanford University, 1958.

Fallman, Robert B., "Living Facilities on a New Campus," American School and University, 1961-62.

Hare, Michael M., "Planning the College Union," American School and University, 1948-49.

Higgins, Fuller, and Jones, "College Union Planning Aids," College and University Physical Facilities Series, bulletin of the U. S. Office of Education, August, 1962.

Kottner, Loren, "Planning for a Union Building," College and University Business, February, 1958.

_____, "Thorough Planning Makes a Union," College and University Business, September, 1958.

Mania, Georgette, "Eleven Years of College and University Union Construction" (1950 through 1960), American School and University, 1960-61.

Noffke, Frank, "In Planning a College Union, Consultant Has a Place." College and University Business, February, 1960.

Osterheld, Douglas C. and Butts, Porter, "Financing Union Operations and Programs," Course in College Union Operations. Wisconsin Union, University of Wisconsin, Madison, 1962.

Planning and Operating College Union Buildings. Association of College Unions, Ithaca, N. Y., 1964.

Starr, Gordon L., "What is the Function of the College Union," College and University Business, December, 1959.

Williams, R. C., "Aids in Planning a Union," College and University Business, May, 1950.

OTHER REFERENCE SOURCES:

Illustrative articles on individual buildings appear frequently in College and University Business, and a few in Progressive Architecture and American School and University. (For bibliography see "College Union Planning Aids," College and University Facilities Series, bulletin of the U. S. Office of Education, August, 1962).

A 40-minute color-sound film, "Living Room of the University," may be rented by writing the Wisconsin Union, University of Wisconsin, Madison.

The following, available from the Association of College Unions International, Willard Straight Hall, Cornell University, Ithaca, New York, would also be helpful:

Numerous articles on union purpose, planning, design, facilities, and operation are found in the annual Proceedings and Bulletin of the Association.

The Proceedings and Bulletin of the Association are available on microfilm, and are obtainable from the Association.

An exhibition of photographs of representative buildings and a collection of color transparencies are available from the Association.

Bibliography sheets covering many sources are available from the Association, at 10¢ per page. Titles directly pertinent to planning are: Building, Descriptions, Plans; Planning and Construction; Planning, Cost, and Facility Notes.

Association of College Unions-International

The Association was founded in 1914; it is one of the oldest intercollegiate educational organizations. Its purpose is to provide an opportunity for unions to join in studying and improving their services, and to assist in the development of new college unions.

The Association membership numbers approximately 750 colleges and universities, including junior colleges, in the United States, Canada, England, Australia, New Zealand, Japan, Taiwan, the Philippines, and Puerto Rico. Included are many "Houses", "Halls", and "Centers" which serve as community centers for the campus, whether they be found at co-educational, men's, or women's colleges. It is not necessary to have a building to be an Association member.

Regional Representatives from 15 geographical areas of the United States and Canada assist in the general development of the Association, advise on matters of policy, and arrange for regional conferences in the fall which emphasize both student and staff participation.

An international conference is held annually for staff members.

A central headquarters, information service, and employment service are maintained at P. O. Box 7286, Stanford, California, 94305. Copies of all Association publications may be obtained from this office. Also on file are copies of surveys and studies made on many aspects of union operation.

The standing committees of the Association foster studies and programs concerned with the arts, recreation, junior colleges, international relations, public relations, professional development, research, joint efforts with other educational associations, and special projects.