

A PRELIMINARY COMPARATIVE EVALUATION  
OF THE EDUCATIONAL PROGRAMS OF  
TWELVE MIDWESTERN COLLEGES

By

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## CHAPTER I

### INTRODUCTION

With the acceleration of research providing a virtual explosion of knowledge, with the convulsive increase and intensification of the problems of society, and with the invasion of college and university campuses by veritable hordes of young people seeking college educations, higher education is facing an unprecedented crisis. Of this crisis Sanford says:

The crisis in higher education is chronic. The great problem today is not essentially different from what it has been for a long time. It is how to do better the things that the colleges were intended to do; how to realize more fully, despite pressures from without and divided councils within, the aim of developing the potentialities of each student.<sup>1</sup>

While the crisis may be chronic, the problem is intensified by rapid developments in research, societal problems, and student enrollments.

This study has been done with full comprehension of the magnitude of the crisis facing higher education, and with the realization that the crisis can be met successfully only if the weight of considerable and diverse research and self evaluation is applied to it.

## The Problem

The problem was to get some indication of the comparative merit of the educational programs of 12 Midwestern colleges affiliated with one of the larger Protestant denominations.

### Purpose and Limitations of the Study

The purpose of the study is to provide the Board of Christian Education of the denomination with an example of the kinds of objective information about the denomination's colleges which can be gathered through a questionnaire study, a study of the college catalogs, and a study of the annual financial records filed in the Board offices.

A second purpose is to illustrate what use can be made of questionnaire, catalog, and financial information in the evaluation of colleges. It is not intended that any final evaluation of the colleges should be attempted on the basis of the information presented in this study. It is hoped that this information can be useful as a preliminary step in a comprehensive program of evaluation of the denomination's colleges.

A third purpose is to give each of the 12 responding institutions some evidence concerning the strength of its educational program in relation to the programs at each of its Midwestern sister institutions.

### Need for the Study:

In June 1958, the 170th General Assembly of a Protestant denomination asked the Board of Christian Education of the denomination to prepare a definitive statement on the church and higher education. "This request grew out of....the general climate of serious concern for....higher education in America in this age of exploding knowledge, competition for technological advantage, and desperate search for meaning and significance."<sup>2</sup>

The Board appointed a committee to prepare, for submission to the General Assembly, a statement that would clearly describe the position and the responsibility of the particular denomination in relation to higher education at this time. The 173rd General Assembly approved the committee statement "The Church and Higher Education" in the Spring of 1961.

The General Assembly then charged the Board to evaluate the denomination's 45 church-related colleges in relation to Chapter IV in the report, "The Church and Higher Education." Chapter IV is entitled "The Church Related College."

In Chapter IV it is stated that in the denomination's colleges there is no place for (1) parochialism or religious dilletantism, (2) academic mediocrity, or (3) inadequately supported colleges. The Board was charged to examine critically the 45 colleges of the denomination on the basis of the

standards set forth in Chapter IV, and report back to the General Assembly.

It is apparent that one of the largest Protestant denominations thinks there is a need for a comprehensive evaluation of its church-related colleges. This study has partially evaluated one aspect of some of the colleges of this denomination.

### Sources of Data

The data used in this study were gathered from four major sources. One, the offices of the Board of Christian Education of the denomination were visited, where the annual financial records of each of the 12 colleges were examined. Two, information was taken from the catalogs of each of the 12 institutions. Three, a 41 item questionnaire was prepared and circulated to the academic dean at the 12 colleges. Four, much of the literature of higher education was surveyed, and pertinent information was extracted and incorporated in the study.

### Basic Assumptions

If the data gathered are to tell anything meaningful about the comparative merit of the 12 institutions of the study, certain basic assumptions must be made. First, it must be assumed that a tabulation of objective information,

such as the per cent of faculty members holding doctor's degrees, the level of faculty salaries, the library holdings, the teaching loads, the student-teacher ratio, and the educational expenditure per student; a study of the stated goals of a college; an on-the-campus examination of the college program; and the careful study of the alumni of a college can provide a valid evaluation of how effective a college is in achieving its stated goals. Second, it must be assumed that a number of colleges can be so examined and given a comparative rating in regard to their effectiveness in achieving their stated goals. Third, it must be assumed that without on-the-scene evaluations of college programs in action and without thorough studies of alumni of colleges, a strong indication of the comparative effectiveness of programs of colleges can be perceived through the study of objective information about the finances, faculties, students, programs and facilities of colleges. Fourth, it must be assumed that the kinds of information used and the standards applied by major evaluating agencies such as the North Central Association of Colleges and Universities and Phi Beta Kappa are valid means of judging the effectiveness of programs of colleges.

#### Review of Other Studies of the Colleges of the Denomination

In the early stages of this study, the writer visited

the national offices of the Division of Higher Education of the denomination, examining available reports of other evaluative studies of the colleges of the denomination. Five self-study reports of colleges were read. A college progress report, a college report to the Synod Board of Visitors, the North Central Association's visitation report on a college, the report of a college to the National Council for the Accreditation of Teacher Education, the inter-college visitation report on an Eastern college, and a Western College Association evaluative report of a college were examined. Where they dealt with colleges of the denomination of this study, state higher education studies done in Missouri, Kansas, and South Dakota were also studied.

Also found in the denomination's Higher Education office files was the report of a comprehensive college study issued by a Survey Committee in 1952. The study, begun in 1950, represented the first attempt of the denomination to evaluate all the denomination-related colleges with a set of common criteria, and there has been no attempt since the 1952 study to apply common criteria to the evaluation of the colleges until the beginning of this study in 1962. Therefore, the writer gave close scrutiny to the 1952 evaluative study of the then 43 colleges related to the denomination.

The earlier comprehensive college study was begun in 1950 in the following manner. The Board of Christian

Education of the denomination called together the presidents of the denomination's colleges, the directors of the university foundations of the denomination, and representatives of the board of trustees of the colleges and the foundations in Cincinnati in January, 1950, "to consider the problems before our Division of Higher Education....The College Survey was an outgrowth of that meeting."<sup>3</sup>

The President of the Board of Christian Education appointed the 1950 Survey committee. President Paul M. Limbert of Springfield College was named director of the survey, and Dr. C. L. Winters was appointed associate director.

Personal visits were made to most of the colleges. The Survey Committee report states:

Either the director of the survey or the associate director visited 36 out of the 43 colleges, spending from one to four days on each campus. Interviews were held in each case with presidents and other administrative officers, some faculty members and a few students. Factual data relating to administrative structure, courses of study and financial operations were assembled from officers or available documents.<sup>4</sup>

After the visits to the colleges, the collected information was organized and written into reports. The Survey Committee report continues:

On the basis of these visits reports were written, ranging from 16 to 48 pages in length, and circulated to all members of the Survey Committee. Reports on the remaining 7 colleges were written on the basis of recent studies by accrediting agencies or extensive documents submitted in response to an outline.<sup>5</sup>

Following accrediting agency standards, Dr. Winters developed criteria and a rating scale for the evaluation of the colleges, but this was not done until after the colleges had been visited. The Survey Committee report explains:

Criteria for evaluation of the colleges and a rating scale were developed. These criteria included 10 main items with a number of subdivisions. Each college was rated on each of these items on a five-point scale ranging from Poor to Excellent. The rating was done in most cases by at least three individuals and was based on the written reports plus personal knowledge.<sup>6</sup>

The criteria prepared by Dr. Winters constituted ten typewritten pages, in which criteria were explained in detail. The rating scale, on the other hand, used only major topics and subtopics from the criteria presentation. Major topics used on the rating scale were (1) General Aims and Policies, (2) Administrative Organization, (3) Financial Resources and Business Policies, (4) Educational Policies: Curriculum, (5) Faculty, (6) Library, (7) Student Personnel Services, (8) Student Constituency, (9) Buildings and Grounds, and (10) Religious Program and Influence.

After the visit to the Board offices, inquiries were made about comprehensive evaluative studies done by other denominations of their colleges. One of the most thorough studies of that type was done by the Methodists in the late 1920's. It is the most recent general study of the Methodist colleges. The Board of Education of the Methodist Church does make individual surveys of four or five Methodist

colleges each year, and these surveys do involve evaluation. However, the Board has an agreement with each college that is surveyed which states that a survey belongs to the college and that only such distribution will be made of the report as the college might determine.

Professor Floyd W. Reeves was selected to direct the comprehensive survey of Methodist colleges started in 1929 and completed in 1931. All the data concerning the 35 colleges studied were collected during personal visits by two or more members of the survey staff, and most of the colleges were visited by from three to five men. In the report of this college survey it is stated that:

During these visits the members of the survey staff not only collected personally the data needed, but also held conferences with the officers of administration, the faculty, representative students, and in most cases with some members of the board of trustees. In this manner the survey staff was able to gather not only objective facts concerning the college but also subjective impressions of great value in analyzing the situation within each institution. At the time of the visit the members of the staff also gave considerable personal counsel and advice to officers and faculty members regarding possible improvements in the service of the college.<sup>7</sup>

Careful examination of the Winters' and the Reeves' studies seemed to indicate two things. First, a study without campus visits could not cover as much ground nor cover it with the depth that the Winters' and the Reeves' studies do. The study directed by Reeves, when written up in general terms, required 72 chapters and 679 pages. Second, the Reeves'

study and the Winters' study used much subjective material which might be difficult to defend from a research standpoint. It was decided, therefore, to limit the current study to the educational programs of the colleges and those things relating directly to these programs. It was further decided to rely heavily on factual, objective information and the objective treatment of this information.

The uses made of the material gathered in the Reeves' surveys indicate the potential usefulness of thorough and comprehensive evaluations of groups of denominational colleges. One, a survey report of a college can aid an institution in recognizing its weaknesses so it can improve its weak areas, and a survey can motivate such improvement. In The Liberal Arts College it is stated that the president of each of the 35 colleges surveyed was asked to read a report in preliminary form pertaining to his institution, and it is pointed out that in many cases a large number of the recommendations made in the preliminary reports were put into effect before the official delivery of the survey.<sup>8</sup> Two, the findings of an evaluating group can be taken into consideration by the Board of Education in making their annual appropriations, and utilized by the institutions as they solicit support. Such uses were made of the Reeves' report.<sup>9</sup> Three, higher education in general can benefit from an intensive survey of a group of colleges. With this goal in mind,

The Liberal Arts College was written.

In the preparation of this volume there has been the attempt to generalize the findings obtained from the program of surveys, as far as the number of institutions included makes possible, so as to be of interest and profit to all colleges of liberal arts.<sup>10</sup>

The first and third uses referred to in the Reeves' survey could be made of the study of the educational programs of 12 Midwestern colleges. However, the second use could be satisfied only in part by the Midwestern study. This study would have to be supplemented by an intensified program of visits to campuses if the second use were to be made of this study.

#### Organization of the Study

The material gathered in the study will be presented in the following manner. The conception of the study and the study plan will be presented in the first chapter. In the second chapter, the implementation of the plan will be discussed. Authority for evaluation and tabulated data will be presented in Chapter III. Ranking of the colleges by factor and by item, and discussion of ranking will be presented in Chapter IV. General conclusions will be presented in the fifth chapter, followed by an evaluation of the conclusions.

#### Identification of the Colleges

The individual colleges and the Board of Christian

Education were very cooperative in making considerable confidential information available for this study. To protect the sources of information, the denomination will not be named in the study, nor will the names of the colleges be used. Each college will be referred to by a code letter throughout the study.

<sup>1</sup>Nevitt Sanford, "Higher Education as a Social Problem," The American College, ed. Nevitt Sanford (New York, 1962), p. 19.

<sup>2</sup>The Church and Higher Education. Philadelphia: General Assembly of The \_\_\_\_\_ Church in the United States of America, (Philadelphia, 1961), p. 3.

<sup>3</sup>College Survey. Philadelphia: Executive Committee Survey of \_\_\_\_\_ Denomination, (Philadelphia, 1952), p. 12.

<sup>4</sup>Ibid., p. 13.

<sup>5</sup>Ibid.

<sup>6</sup>Ibid.

<sup>7</sup>Floyd W. Reeves et al., The Liberal Arts College, (Chicago, 1932), p. 8.

<sup>8</sup>Ibid., p. 9.

<sup>9</sup>Ibid.

<sup>10</sup>Ibid., p. 10.

## CHAPTER II

### METHODS USED IN THE INVESTIGATION

Information used in this study was gathered and analyzed as follows. Much of the literature of higher education was surveyed, information was extracted from the catalogs of the 12 colleges surveyed, financial information pertaining to the colleges was obtained from the offices of the Board of Christian Education, and questionnaires, a copy of which is found in the appendix, were circulated to the academic dean at each of the colleges. An analysis of the financial information received from the Board offices, and the questionnaire information submitted by the deans of the 12 colleges was made involving the use of correlation techniques.

#### Survey of the Literature

Many sources contributed to this study. In addition to the specific accrediting manuals--North Central Association's Guide for the Evaluation of Institutions of Higher Education, and the Revised Manual of Accrediting, Phi Beta Kappa's pamphlet "The Founding of New Chapters," the one most significant volume in relation to this study has been The American College

edited by Sanford. Among the other publications that made substantial contributions to the study are The Liberal Arts College by Reeves, Russell, Gregg, Brumbauth, and Blauch; Accreditation by Selden; Higher Education Series Research Reports such as Salaries Paid and Salary Practices in Universities, Colleges and Junior Colleges, 1961-62; the weekly "Intercollegiate Press Notes," Faculty Work Load edited by Brumell; The Quantity and Quality of College Teachers by McGrath; Memo to a College Trustee by Ruml and Morrison; The American College and Its Teachers by Rosecrance; Achievement in the College Years by Murphy and Raushenbush; and American Education Today edited by Woodring and Scanlon.

#### Catalog Information

Catalogs were obtained from each of the 12 colleges surveyed. Information such as number of faculty, faculty degrees, number of major fields in the curriculum, and the existence of honors and other special programs was available in the catalogs but was not sufficiently refined for use in the study. Therefore, this information was requested in the questionnaire sent to deans. The stated purposes of the colleges were, however, extracted from the catalogs.

#### Board Financial Information

A visit to the offices of the Board of Christian

Education revealed that complete financial information for each college was available. The Board receives each year a full, audited financial report from each of the 45 colleges of the denomination. Complete financial information for the 12 colleges was made available for this study.

### The Questionnaire Survey

Since the inception of the idea for the Midwestern college study, it had been determined that the data for the study would be largely factual and objective, and would be obtained from Board financial records and a questionnaire survey.

### Development of the Questionnaire

Careful examination was made of Chapter IV of the "The Church and Higher Education," which is the official statement on higher education made by the denomination of the study. In Chapter IV, which is entitled "The Church-related College," characteristics of church colleges were delineated. Two of the characteristics are described as follows: (1) "The church-related colleges will have as primary academic policy excellence."<sup>1</sup> (2) "Church-supported colleges should continually seek to attract those students whose intellectual and creative potential will enable them to profit from the education that these institutions provide."<sup>2</sup>

Since the denomination places major emphasis on these two characteristics, and since a noting of the breadth of other college studies not seemingly attainable through the use of financial records and a questionnaire study, it was decided to limit the questionnaire to the solicitation of information that could contribute to an understanding of the degree of academic excellence and the qualifications of students at each of the 12 colleges.

As a basis for the establishment of evaluative criteria which could be represented as queries on the questionnaire, the report published by the United States Department of Health, Education, and Welfare on recent state studies in higher education was examined. In addition, the Guide for the Evaluation of Institutions of Higher Education and the Revised Manual of Accrediting of the North Central Association of Colleges and Secondary Schools and the Examiners' Scorecards used by North Central's institutional evaluating teams were read; the general description of criteria for a chapter of Phi Beta Kappa and the evaluative reports of six institutions--Brandeis University, Chatham College, Fordham University, Hollins College, Lake Forest College and Scripps College--that received chapters in the Summer of 1961 were read; The Liberal Arts College, which was derived from the study of Methodist colleges made by Reeves, Russell, Gregg, Brumbaugh, and Blauch was examined; the American College

edited by Sanford was studied; and the self study report of Cornell College was read.

Then, in early February of 1962, a trip was made to the offices of the Board of Christian Education, where the files of the Division of Higher Education were carefully examined over a period of several days. There were self-study reports, progress reports, reports for synods, NCATE reports, intercollege visitation reports, state higher education studies which included some of the denomination's colleges, and North Central Association visitation reports. There was only one set of data for a large group of the colleges based on the same criteria for each college, and that data was contained in the Winters report. Winters' study was conducted from 1950 to 1952. There was, therefore, no data available in the Higher Education Office that could be used in this study. However, the Winters study was carefully examined as a guide to the establishment of criteria and the development of a questionnaire for this study.

Tentative criteria were prepared, and on February 13 they were presented to the Criteria Committee appointed by the Board of Christian Education. One of the members of the committee was William K. Selden, chairman of the National Commission on Accrediting. The Committee discussed the criteria throughout the day, and made some suggestions for additions and revisions. At this point, a tentative

questionnaire was prepared. The opinions of several deans-- among them Dean Robert Haywood of Southwestern College (Kansas) and Dean Sam Dahl of Nebraska Wesleyan University-- were solicited in regard to the questionnaire, and Dr. Nevitt Sanford, Director of the Institute for the Study of Human Problems at Stanford University, gave his opinion of the instrument. All felt it was a good instrument for use in the type of study planned; the deans did suggest minor revisions in the questionnaire, and these were made.

After discussion with doctoral committee members and final revisions, the questionnaire was prepared and printed. A copy of the final draft of the questionnaire, which was printed and circulated to the 12 colleges, is found in the appendix.

#### Selection of Respondents

Twelve colleges were selected to participate in the study because of their proximity to the institution at which the writer was located so that, if necessary, trips could be made to some of the colleges to aid in the collecting of the desired information.

#### Collection of Questionnaire Data

Since the questionnaire required the gathering of considerable factual information, the study was given authority

by the Board of Christian Education to encourage response by the colleges. Dr. William Morrison, general secretary of the Board, signed supporting letters which were to be enclosed with the questionnaire.

On July 27, 1962, the questionnaire and accompanying letters were sent to the 12 deans. Some deans may have been on vacation; at any rate, the initial response was not good. The deans who had not responded were sent a follow-up letter on August 31. On September 18, each dean who had not responded was sent a second copy of the questionnaire and another letter requesting completion of the evaluating instrument. On November 1, another letter was sent to those deans who still had not responded.

In late November four deans had not returned questionnaires and it was decided to pay a visit to each of the four colleges to assist with the completion of the instrument. Each of the four deans was informed about the exact date and time he would be visited. Deans, registrars, admissions directors, and presidents were visited at the four institutions in early December, and assurances were received from all that completed questionnaires would be mailed soon. By mid-January three of the remaining colleges returned completed questionnaires. Despairing of getting a questionnaire from the fourth college, the writer substituted another college. In early February, questionnaire information was gathered from the

substituted college.

#### Tabulation of Questionnaire Data

Having received at least partially completed questionnaires from 12 colleges, the process of tabulation was begun. It was discovered in late February that information considered vital to the study had been omitted from two of the questionnaires. Several long-distance phone calls were made to the two deans who had submitted the incomplete questionnaires, and the information was received. The tabulation of all questionnaire information was then completed by March.

#### Analysis of Financial and Questionnaire Data

Considerable experimentation failed to reveal any defensible method of using the financial and questionnaire data as the basis for evaluative profile charts for the colleges. So, another method of analysis and presentation of the data was sought. After consulting with several statisticians, it was decided that a factor analysis might be helpful. The following procedure was utilized in the factor analysis.

Upon completion of transferring the raw data from questionnaires to charts, organized by college and by category, it was found that some of the items did not differentiate between colleges. For example, question 32 asked, "Are study groups continually working toward the improvement of the

college program? (\_\_\_\_) What groups? \_\_\_\_\_." All 12 colleges replied in the affirmative to the question, and they all listed some group or groups which were working toward the improvement of the program. Therefore, this question did not differentiate between the colleges. The question was not worthless, however, for in a follow-up visitation to the campuses of the surveyed institutions, an evaluator would have the name of the group or groups supposedly working toward the improvement of the program, and he would then likely be able to determine how much these groups were actually doing to improve the college programs. Questionnaire item 32 and other items that did not differentiate between the colleges were not used in the factor analysis.

Other items for which there was incomplete data on the questionnaire and items that did not lend themselves to mathematical tabulation were also excluded from the factor analysis. For these several reasons, then, replies to the following questionnaire items were not used in the correlation study: 3, 5, 6, 8, 9, 10, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 26, 27, 30, 31, 32, 33, and 41.

Replies to the following questionnaire items and figures from the Board offices under the following headings were listed on the chart. Questionnaire items: 1 (student selection criteria), 2 (freshmen from the top twenty and fifty per cent of high school classes), 4 (per cent graduated),

7 (freshmen dropped for academic reasons), 11 (number of full-time teachers), 12 (full-time teachers holding doctor's, master's, or bachelor's degrees), 17 (student-teacher ratio), 22 (maximum teaching load), 23 (mean teaching load), 28 (honors program), 29 (remedial programs in English, reading, and mathematics), 34 (comprehensive examinations), 35 (number of major fields), 37 (volumes in library), 38 (periodicals received in library), 39 (per cent of total budget for library acquisitions), and 40 (self rating of library holdings). Board items: full-time student equivalent, median salary for instructors, median salary for assistant professors, median salary for associate professors, median salary for full professors, median salary for full-time faculty, expenditure per student, expenditure per student (weighted), per cent of budget for administrative and general expenditures, per cent for maintenance and operation, per cent for faculty salaries, per cent of income from student fees, per cent of income from endowment, per cent of income from gifts, surplus or deficit, and surplus or deficit per student.

The above 41 items were recorded on the chart. Figures from the chart were then transferred to cards, and the cards were processed through a computer at the University of Nebraska. The result of the analysis was that 34 of the items grouped themselves statistically around five major categories. Only seven of the items in the factor analysis study did not

relate statistically in a meaningful way to any other items in the study. A careful examination of items consigned to factor groups because of statistical relationship revealed that most items grouped under Factor I because of their statistical relationship also bore a logical kinship. This was true also of items grouped under Factor II, items grouped under Factor III, and items grouped under Factor IV. The items which were statistically related under Factor I were associated largely with size and affluence of the institutions. The items grouped under Factor II were largely associated with proportional income and allocation. Items grouped under Factor III largely related to academic climate. Most items grouped under Factor IV were associated with the general area of financial stability. Only two items were listed under Factor V, and one of these was negative; therefore, it would be difficult to determine a logical topic of association for the items in this category. Since there was statistical and considerable logical relationship between items listed under the five factor categories, it was decided to use these five major categories of relationship as the basis for an evaluative discussion of each college. The other seven statistically unrelated items were not used as a basis for the discussion of each college, but some of these items are referred to occasionally in the study.

The titles given to the five factor groups are as follows:

Factor I, Size and Affluence; Factor II, Proportional Income and Allocation; Factor III, Academic Climate; Factor IV, Financial Stability; and Factor V, Miscellaneous.

<sup>1</sup>The Church and Higher Education. Philadelphia: General Assembly of the \_\_\_\_\_ Church in the United States of America, (Philadelphia, 1961), p. 22.

<sup>2</sup>Ibid., p. 23.

## CHAPTER III

### BACKGROUND FOR EVALUATION

In evaluating the 12 colleges, the evaluative goals and criteria of established evaluating agencies and groups were used as guidelines. The general standards which must be met by groups at institutions seeking Phi Beta Kappa charters are, in most respects, covered in the criteria used for evaluation in this study. The Phi Beta Kappa standards are as follows:

Each institution is expected to produce both qualitative and quantitative evidence that it has a promising student body, a scholarly faculty, a library and other educational facilities sufficient for the course offerings, an adequate and dependable income, and most significant of all, an educational program that is liberal in emphasis and objectives.<sup>1</sup>

The evaluative criteria used in Chapter IV are covered by the Phi Beta Kappa standards and are divided into two major groups. The first group consists of the 34 items which grouped themselves statistically around five major categories in the factor analysis. The second group is composed of items, from questionnaire responses and college catalogs, which were not used in the statistical study or which showed no statistical relationship to any of the

other items. Colleges were evaluated by use of rank order in relation to items in group one. Items in group two were used to supplement information presented in group one.

The actual correlation tabulations for each of the 41 items in the factor analysis are listed on the next two pages by item under the five factors of statistical relationship. Each significant correlation is underlined.

CORRELATION TABULATIONS

	Factor I Size and Affluence	Factor II Proportional Income and Allocation	Factor III Academic Climate	Factor IV Financial Stability	Factor V Miscel- laneous
Size of Student Body	<u>0.831</u>	0375	0011	0164	0205
Size of Faculty	<u>0.896</u>	0210	0145	0108	0173
Student-Faculty Ratio	<u>0.033</u>	0014	<u>0753</u>	0203	0167
Per cent in top 20% H.S.	<u>0.726</u>	0253	<u>0148</u>	0338	0370
Per cent in top 50% H.S.	<u>0393</u>	0225	0077	<u>0501</u>	0387
Selection Criteria					
Per cent dropped for academic reasons	0083	0198	<u>0633</u>	0091	0435
Per cent Class 1961 graduated	0067	0195	0408	0401	0062
Per cent Ph.D.'s	0249	0054	<u>0942</u>	0097	0062
Per cent M.A.'s	0241	0018	<u>0867</u>	0144	0180
Per cent B.A.'s	0153	0104	0396	0030	0218
Median Salary-Instr.	0688	0454	0237	0170	0072
Median Salary-Asst. Prof.	<u>0736</u>	0225	0114	0571	0047
Median Salary-Assoc. Prof.	<u>0873</u>	0029	0235	0011	0003
Median Salary-Prof.	<u>0949</u>	0025	0095	0260	0214
Median Salary- Full Time Faculty	<u>0852</u>	0034	0277	0215	0064
Expenditure per student- weighted	<u>0508</u>	<u>0717</u>	0358	0235	0157
Expenditure per student- unweighted	0162	0928	0202	0220	0212
Per cent Administrative and General Expense	0006	<u>0510</u>	0079	0113	0475
Per cent Maintenance and Operation	0228	0145	0143	<u>0709</u>	0073

CONTINUED

	Factor I Size and Affluence	Factor II Proportional Income and Allocation	Factor III Academic Climate	Factor IV Financial Stability	Factor V Miscellaneous
Per cent Faculty Salaries	0346	0024	0230	0181	0010
Per cent Library Expenditure	0323	<u>0760</u>	0082	0060	<u>0777</u>
Per cent Student Fees	0107	0005	0047	0016	0062
Per cent Endowment	0375	0062	0058	<u>0694</u>	0286
Per cent Gifts	0285	<u>0758</u>	0113	<u>0505</u>	0300
Surplus-Deficit	0161	<u>0193</u>	0357	<u>0722</u>	0125
Surplus-Deficit per student	0493	0286	0328	<u>0592</u>	0282
Per cent total budget for library	0323	0005	0082	0060	<u>0777</u>
Number of volumes	<u>0869</u>	0042	0259	0162	<u>0361</u>
Number of Periodicals	<u>0800</u>	0007	0015	0277	0276
Number of volumes per student	0125	<u>0847</u>	0156	0056	0085
Number of periodicals per student	0283	<u>0945</u>	0039	0182	0066
Rating of Library					
Number of Major Fields	0321	<u>0652</u>	0241	0431	0005
Maximum Teaching Load	0208	<u>0369</u>	0637	0093	0200
Mean Teaching Load	<u>0643</u>	0098	0145	0019	<u>0610</u>

### Authority for Evaluative Items

First, general areas of institutional size and affluence are prominently represented among the evaluative items utilized in Chapter IV. Institutions, some represented in this study, which have small enrollments, indebtedness, low faculty salaries, and seemingly unstable sources of income might not only have difficulty in offering a quality educational program, but they also might have difficulty surviving in this area of rapidly rising educational costs. Concerning college size, Ruml and Morrison suggest:

There is of course no precise standard to apply, but the critical minimum size appears to be somewhere between 800 and 1,000 students. If the institution is significantly below this range and is not exceptionally wealthy, it should investigate the feasibility of larger enrollments.<sup>2</sup>

In another instance, Ruml and Morrison state the case against smallness even more positively. They say that

....if we take the college of below-average size--below the simple statistical average--the outlook is not good. Major and heroic labors will be required in reorganizing, refinancing and consolidation to preserve these many colleges, their services and their traditions.<sup>3</sup>

There are undoubtedly many who would quarrel with the use of Ruml and Morrison as authorities in this instance. However, there can be little doubt that the college with a small student enrollment and a small proportion of total income from endowment is going to have difficulty surviving.

But, granted survival, it is very unlikely that such a small institution, exhibiting in addition a low salary schedule and deficit financing, can offer a quality educational program to young people.

A look some years ago at the sources of income of private liberal arts colleges gave the following picture.

Student fees-----	71.7%
Endowment-----	11.4%
State & local gov't.-----	.2%
Federal government-----	.4%
Private benefactions-----	13.4%
Sales and miscel.-----	2.9%

It is seen that, at this point, fees made up nearly three-fourths of private college income, with gifts being a distant second and endowment third. And, endowment contribution to total college income was on the wane, as

J. D. Millett points out:

....endowment income was unable to keep pace with either enrollment growth or inflation.<sup>5</sup>

Apparently the trend toward decreasing importance of endowment in the total income pattern of colleges and universities is continuing and accelerating. Seymour E. Harris seemingly sounds the death knell of the prominence of endowment in income. He says:

The day of the great dependence on endowment is at an end. Indeed, a small number of institutions still rely greatly on endowment, but even for most of those, inclusive of those most heavily involved, the income of the productive funds steadily becomes less important.<sup>6</sup>

This would seem, in the private college, to place a greater share of the burden of providing financial resources on student fees. But in a news story in *College and University Business*, a new trend of increased financial income for colleges is claimed. The article states:

Voluntary support of the leading colleges and universities has more than doubled in the last five years, with alumni setting the pace, according to a special survey by the Council for Financial Aid to Educators.<sup>7</sup>

The article goes on to reveal that the 1959-60 survey credited a 102.5 per cent increase in alumni giving--the largest increase of any source. For most private colleges, however, the major burden for increased financial support will be on student fees, and for this reason, very small enrollments are likely not only to limit the quality of education but also to jeopardize the future existence of some small colleges.

Second, items obviously related to the quality of an educational program--the ability of students, a well stocked library, a dynamic program, a well-trained faculty and the educational expenditure per student--make up a second area to which many of the evaluative items are closely related. Having a goodly number of students is important. Having the right kind of students is important, too. The Guide for the Evaluation of Institutions of Higher Education of the North Central Association of Colleges and Secondary Schools says

that, "An institution should enroll students who can benefit most from its program."<sup>8</sup> In "The Church and Higher Education" it is stated:

Church-supported colleges (those of the denomination represented by the colleges of this study) should continually seek to attract those students whose intellectual and creative potential will enable them to profit from the education that these institutions provide.<sup>9</sup>

It is doubtful that colleges know how to select students who would meet the standards set in these two statements, especially that "creative potential." However, colleges do know pretty well how to select students who will make good grades in college. John Summerskill says that, "Secondary school grades are generally recognized as the best existing predictors of college grades."<sup>10</sup> And while college ability test scores, such as those derived from the American Council on Education tests and the College Entrance Examination Board tests, are helpful in predicting academic success of students in college, Iffert found in a study that:

The percentages...seem to show that standing in high school graduating class was a much better indicator of the probability of graduation (from college) than standing in the placement tests.<sup>11</sup>

High school grades and college ability test scores would seem to be the best elements on which to screen college applicants. To these two criteria can be added ratings on student intellectual and working characteristics by high school teachers, counselors, and administrators. Mercer found that:

...ratings by secondary school principals on the personality characteristics of students did not predict college success or failure, but ratings on students' intellectual and working characteristics did.<sup>12</sup>

So letters of reference might well be a third means by which colleges could effectively select students who are likely to achieve good college grades if admitted.

After determining admissions procedures, it would seem logical to advance to the success of the students once admitted. How many drop out, how many are dropped, how many graduate, and how many receive graduate fellowships, scholarships, assistantships--these are items which will be referred to in regard to success of students.

The area of student autonomy is another that is dealt with in the study. College catalogs often say something to the effect that students are helped to develop responsibility and decision-making abilities, and to mature into effective citizens for a democracy. The Revised Manual of Accrediting of the North Central Association suggests that:

The cooperative formulation on the part of the institution and the students of general standards for guidance, but without compulsion, may tend to stimulate good conduct in students to much better advantage than compulsory rules will force good conduct.<sup>13</sup>

The participation in the developing and the enforcement of rules of conduct will help the student develop for himself standards of judgment and conduct which he will keep after he leaves the college. The North Central Manual goes on to

explain:

The institution should protect its reputation in the community, on the one hand, and, at the same time, it should develop in its students a feeling of responsibility for their conduct in college life which will carry over into their social life of later years.<sup>14</sup>

It would seem that similar qualities of responsibility and maturity might be developed in students if they were given a major share in the responsibility for student publications and considerable responsibility for their own learning through independent study and honors programs. These are items which will be used in the evaluation of the colleges.

While stimulating the learning of the good student is of paramount importance, should not some attention be given to the student who is having difficulty in some areas? Should remedial work be offered? There seems to be evidence that remedial work in one area should probably be offered at some colleges. The studies by Freehill, Johnson, and Pattishall and Banghart demonstrated that college dropouts had significantly lower reading test scores than those students who remained in college, and a study by Hanks found results in the same direction.<sup>15</sup> A study done at College G presents even stronger evidence in support of courses in remedial reading. An examination was made of the scores achieved by members of the College G 1961 freshman class on the American

Council on Education tests. It was found that about 38 per cent of the class made reading scores 20 or more percentile points below their general linguistic scores. Obviously the reading ability of these students did not match their general academic ability, as demonstrated in the test. College G ranked second among the 12 colleges in the per cent of its freshmen coming from the top fifth of their high school classes. If College G needs a remedial reading course, probably such a course would be helpful at the other colleges of the study also.

In addition to the type of program, the scope of the program will come in for cursory examination. The number of major fields of study at each college in relation to the size of the full-time faculty at each institution will be surveyed, because of the disapproval of some evaluators for the National Council for the Accreditation of Teacher Education, among others, of one-man departments.

A final and crucial item obviously related to the quality of the educational program is the preparation of the faculty members. Academic degrees will be evaluated, as will the strength of academic interest of faculty members as evinced by research, writing, and attendance at professional meetings. In regard to the evaluation of faculty, the North Central Guide...says:

It is helpful to begin with information on such items as the percentage of the faculty holding earned doctorates, the percentage holding other advanced degrees, the average amount of graduate study completed by the faculty as a whole, the types of institutions represented by such advanced work, the extent to which persons are teaching in areas in which they have received advanced training, the kinds of work experience the faculty has had, and the extent to which faculty members display scholarly interest through writing and through attendance at the meetings of professional societies.<sup>16</sup>

Most of the items mentioned in the North Central Guide paragraph will be used in evaluating the 12 colleges.

The North Central Association, in evaluating college programs, seems to place considerable stress on educational expenditure per student, although North Central cautions, in the Guide for the Evaluation of Institutions of Higher Education, against comparing colleges on an absolute basis in regard to expenditure per student. The Guide says:

Such comparisons should not be made, however, on an absolute basis but in terms of the questions they raise about the effective use of available funds. For example, the higher the educational expenditure per student, the higher in general the quality of educational program one expects.<sup>17</sup>

The Guide goes on to explain that if a college shows a smaller expenditure per student than do other similar institutions, a number of questions are posed. They are, according to the guide:<sup>18</sup>

- a. Does this low rate of expenditure mean that the institution is being forced to restrict essential services because of lack of funds, or
- b. Is the institution operating more efficiently

than the average institution and thus able to provide a quality program for less money, or

c. Are there special circumstances involved in the operation of the institution that minimize the effect of this low rate of expenditure on the quality of the educational program?

These are questions that could be answered satisfactorily only by visits to the individual institutions. In this study, little more has been attempted in this area than a comparison of weighted educational expenditure per student figures for the 12 colleges.

The educational expenditure per student is determined in the following manner. First the enrollment is calculated on the basis of full-time students enrolled plus the full-time equivalent of part-time students enrolled in the regular year. Then the total annual educational expenditure is computed as follows, according to the Revised Manual of Accrediting.

Total educational expenditure shall consist of all amounts classified as "Educational and General" by the National Committee on Standard Reports, except the items of Organized Research and Noninstructional Extension.<sup>19</sup>

Then the annual educational expenditure per student is computed by dividing the educational expenditure by the annual enrollment of the institution. However, weighting is necessary to compensate for the effect of enrollment differences on the educational expenditure per student figures.

The Manual of Accrediting explains:

The amount of educational expenditure necessary to maintain a program of a given level of excellence varies to some extent with the size of the institution. To maintain a given level of effectiveness, other things being equal, a larger expenditure per student is needed by an institution with a small enrollment than by an institution with a large enrollment. On the basis of careful study of this problem, Table 7 is offered, showing the weightings to be applied to the actual educational expenditure in an institution of any given size in order to equate for this factor of the size of enrollment.<sup>20</sup>

Table VII presents different size weighting elements for institutions of different enrollment numbers. For example, for a college with an enrollment between 911 and 930, the raw educational expenditure per student figure would be multiplied by .96, and for an institution with an enrollment between 431 and 450, the raw figure would be multiplied by .69. The educational expenditure per student figures used in this study have been weighted according to Table VII in the Manual.

Good students, a challenging program, and a well prepared faculty are essential to a strong educational program. But the library is the hub around which the entire academic community revolves, and a good, well-stocked library is basic to a sound educational program. Items in this study used as a basis for evaluating libraries are primarily of a quantitative nature. Number of volumes, number of periodicals, proportion of the total expenditures for educational and general purposes allocated to the library, and relationships with other libraries are evaluative items used in this study.

However, on the basis of these items, only a preliminary evaluation of a library can be made. It will remain for a campus visitation to produce other information essential to a full and proper evaluation of each library. In regard to additional library information needed, the North Central Guide postulates:

More important than the total number of books in the stacks is the extent to which the selection of volumes accurately reflects the needs of the institution as defined by the educational task.<sup>21</sup>

The Guide also points to library usage--by both faculty and students--as an important measure of the adequacy of a library.<sup>22</sup>

Third, faculty morale is an area to which many of the evaluative items are closely related. Even a well-prepared faculty is not likely to engender an effective educational program if the morale of the instructional group is low. Such items as faculty salaries, budget surpluses or deficits in relation to salaries, teaching loads, student-teacher ratios, support by the institution for attendance at professional meetings, and rate of faculty turnover all can have considerable effect on faculty morale, and will therefore be used in helping specifically to determine quality of educational program.

Faculty salaries must be a major factor for consideration in any discussion of faculty morale. And faculty

salaries are generally a good index regarding the strength of an institution. The North Central Guide says:

Comparative figures on salaries are helpful in establishing the position of an institution in relation to other similar institutions.<sup>23</sup>

The Guide goes on to caution, however, that extenuating circumstances might account for low salaries while the quality and preparation of the faculty were not necessarily low. The Guide further points out:

Thus, the salary scale must be interpreted in the light of the purposes and circumstances of the institution and the kinds of persons one actually finds on the staff.<sup>24</sup>

Salaries are used in this study as an independent item, and as one of a group of several items. The salaries of each of the 12 colleges will be compared with the salaries of the other 11, and with the median-mean salaries for the four academic ranks for the Great Plains and Midwest Region, which are as follows: full professor, \$7,540.; associate professor, \$6,510.; assistant professor, \$5,820.; and instructor, \$5,080.<sup>25</sup> Only two of the 12 colleges of this study were consistently above the regional median-mean figures.

It is not likely to be an encouragement to high faculty morale if faculty salaries at an institution are low and the institution's ledgers show a considerable surplus at the end of the fiscal year. On the other hand, the Guide points out that the practice of some institutions of drawing up a deficit

budget rather than denying the faculty members the kind of salaries the institution feels they should have has been a tremendous morale booster.<sup>26</sup>

Teaching loads would also have to be accorded a high position among determinants of faculty morale. The Guide makes strong mention of equitable service loads as a determinant of high staff morale.<sup>27</sup> Both maximum and mean teaching loads are used in the evaluation of the 12 colleges.

Closely related to teaching load is the student-faculty ratio. The Revised Manual of Accrediting states that:

The measure of this criterion is the ratio of the equivalent number of full-time students to the equivalent number of full-time staff members.<sup>28</sup>

The student-teacher ratio can be a figure of doubtful value in the evaluation of an institution unless the evaluator possesses considerable information concerning the pattern of class sizes at the institution. In this study student-teacher ratio figures are supplemented by information concerning number of classes enrolling fewer than ten students, number of large classes, and size of large classes. This should help differentiate between the college that has few small classes and many classes of 50 or 60 students, and the college that has many small classes and some very large lecture sections. Judging only by the student-teacher ratios, both colleges would seem to have the same type of faculty workload and they would both seem to provide the students with a

similar amount of, or lack of, small-class instruction.

The Guide points to the rate of staff turnover as another important factor in judging faculty morale.<sup>29</sup> In this study the rate of staff turnover during a four-year period, in some instances, gives important information for the evaluation of staff morale. The faculty-turnover rate is supplemented by information concerning the amount of turnover attributed to resignations and the amount to dismissals.

Two further items affecting faculty morale are the availability of leaves of absence and opportunity to attend professional meetings. The opportunity for sabbatical leaves with at least partial salary for the professor while he is on leave is a morale booster, and one that the North Central Association inquires about in evaluating an institution.<sup>30</sup> It is stimulating to a faculty and it boosts faculty morale if professors are given the opportunity to attend professional meetings in their fields, especially if the college pays at least part of the cost of meeting attendance.

Fourth, after the items enumerated in this chapter are presented in Chapter IV, the results are examined in light of the college goals as stated in the official college bulletin of each institution.

#### Data Tabulated by Factor

The following are the data from questionnaires returned

by the 12 colleges and from the financial records of the Board of Christian Education of the denomination related to the 12 colleges of the study. The colleges are referred to by code letter.

TABLE III

## Factor I - Size and Affluence

	Size of Student Body	Size of Faculty	Per cent from top 20%	Instr.	Asst. Prof.	Assoc. Prof.	Median Salary Prof.	Full-time
A	394	36	33	\$4,500.	\$5,500.	\$6,150.	\$6,700.	\$5,800.
B	576	30	24	4,768.	5,345.	6,480.	6,447.	6,200.
C	551	40	25	4,900.	6,150.	6,600.	7,550.	6,750.
D	312	26	5½	3,860.	4,910.	4,600.	5,000.	5,000.
E	633	39	21	4,950.	5,500.	5,500.	6,500.	5,500.
F	466	30	37	4,000.	4,800.	4,800.	5,500.	4,800.
G	750	45	50	5,000.	5,350.	5,700.	6,800.	5,700.
H	544	25	26	5,100.	5,200.	5,200.	5,800.	5,200.
I	2,180	99	72	5,350.	6,000.	7,000.	8,875.	6,825.
J	394	33	20	4,700.	6,250.	5,800.	7,500.	6,000.
K	601	38	33.4	4,833.	5,833.	6,192.	6,858.	6,217.
L	1,009	63	46	4,800.	6,050.	7,000.	7,700.	6,500.

	Total Volumes In Library	Periodicals	Expenditure per Student (weightee)	(Negative) Mean Teaching Load
A	64,000	360	\$1,221.24	12
B	45,000	220	588.62	14
C	61,000	230	1,052.77	12
D	22,000	190	689.63	17
E	38,000	250	583.34	13.5
F	44,000	304	535.28	12.5
G	50,000	325	754.60	15.2
H	34,000	175	464.94	14
I	97,872	725	828.02	10.6
J	42,000	275	1,088.02	16.5
K	37,146	270	863.62	13
L	70,000	310	1,019.84	12

TABLE IV

## Factor II - Proportional Income and Allocation

	Expenditure per student weighted	Expenditure per student unweighted	Per cent of budget for adminis. & gen. exp.	Per cent of income from gifts	In Library number of volumes per student	number of periodicals per student
A	\$1,221.24	\$1,850.36	40.75	57.74	165	.91
B	588.62	745.09	28.99	34.21	78	.38
C	1,052.77	1,349.70	31.66	25.42	111	.42
D	689.63	1,168.86	43.31	42.87	71	.61
E	583.34	702.82	37.56	20.01	60	.39
F	535.28	753.91	29.67	29.88	94	.65
G	754.60	802.77	35.09	28.20	67	.43
H	464.94	603.82	32.08	19.92	63	.32
I	828.02	828.02	34.96	17.50	45	.33
J	1,088.02	1,648.51	39.57	29.09	107	.70
K	863.62	1,066.20	31.63	28.22	60	.45
L	1,019.84	1,030.14	34.63	19.34	69	.31

	(Negative) Per cent of income from fees	(Negative) Number of Major fields
A	37.52	12
B	68.08	22
C	67.96	16
D	56.63	18
E	97.13	14
F	53.42	18
G	60.94	24
H	63.11	17
I	71.14	24
J	28.23	12
K	64.85	18
L	73.10	21

TABLE V

	Student- teacher ratio	Per cent of faculty with only M.A.	Maximum teaching load	Per cent of faculty with Ph.D (negative)	Per cent of students dropped for academic reasons (negative)
A	13 1/8-1	53	12	36	10
B	17 -1	70	15	27	5
C	12.5 -1	37.5	12	60	11
D	16 -1	53.8	18+	42.3	19
E	17 -1	64	18	17.9	6
F	14 -1	50	15	40	6
G	15 -1	48.9	16	48.9	9
H	15 -1	76	15	16	0
I	16.3 -1	47	12	46	7
J	19 -1	76	15	18	4
K	15 -1	60.5	15	37	14
L	13 -1	46	12	49	10

TABLE VI

## Factor IV - Financial Stability

	Per cent from top 50% of H.S. class	Per cent of expenditure for maint. and oper.	Per cent of income from endowment	Per cent of income from gifts	Surplus or Deficit	(weighted) Surplus or Deficit per student	(Negative) Median salary Asst. Prof.
A	84	17.34	19.45	57.74	\$89,524.	\$972.	\$5,550.
B	52	19.06	15.62	34.21	57,179.	608.	5,345.
C	52	12.23	04.30	25.42	-24,995.	487.	6,150.
D	29	15.16	04.41	42.87	- 2,725.	931.	4,910.
E	69	10.09	03.01	20.01	42,067.	530.	5,500.
F	80	15.56	12.59	29.88	11,011.	606.	4,800.
G	86	15.56	09.40	28.20	30,788.	432.	5,350.
H	66	13.37	13.17	19.92	27,466.	489.	5,200.
I	90*	12.47	18.12	17.50	43,956.	155.	6,000.
J	32	12.17	03.60	29.09	-293,313.	0	6,250.
K	64.1	12.43	06.78	28.22	-3,864.	481.	5,833.
L	77	13.74	13.24	19.34	45,512.	336.	6,050.

\*Top 40%

TABLE VII

## Factor V - Miscellaneous

	Mean Teaching Load	(Negative) Per cent of total expenditure for library
A	12	3.05
B	14	4.92
C	12	4.34
D	17	2.55
E	13.5	3.67
F	12.5	6.04
G	15.2	2.82
H	14	3.04
I	10.6	5.64
J	14	4.92
K	13	3.05
L	12	3.54

<sup>1</sup>\_\_\_\_\_. Phi Beta Kappa, The Founding of New Chapters (Washington, 1961), p. 3.

<sup>2</sup>Beardsley Ruml and Donald H. Morrison, Memo to a College Trustee (New York, 1959), p. 66.

<sup>3</sup>Ibid., p. 26.

<sup>4</sup>\_\_\_\_\_. Sources of Educational Income of Public and Private Institutions (Washington, D. C.), p. 292.

<sup>5</sup>Ibid., p. 307.

<sup>6</sup>Dexter M. Keezer, Financing Higher Education, 1960-1970. (New York, 1959), p. 67.

<sup>7</sup>\_\_\_\_\_. College and University Business, October, 1961, p. 90.

<sup>8</sup>\_\_\_\_\_. Guide for the Evaluation of Institutions of Higher Education, The North Central Association of Colleges and Secondary Schools, p. 30.

<sup>9</sup>The Church and Higher Education, p. 23.

<sup>10</sup>John Summerskill, The American College, ed. Nevitt Sanford, (New York, 1962), p. 634.

<sup>11</sup>Ibid., p. 635.

<sup>12</sup>\_\_\_\_\_. Revised Manual of Accrediting. North Central Association of Colleges and Secondary Schools, p. 9.

<sup>13</sup>Ibid.

<sup>14</sup>The American College, p. 635.

<sup>15</sup>Guide for the Evaluation of Institutions of Higher Education, p. 13.

<sup>16</sup>Ibid., p. 11.

<sup>17</sup>Ibid.

<sup>18</sup>Ibid.

<sup>19</sup>Revised Manual of Accrediting, p. 12.

<sup>20</sup>Guide for the Evaluation of Institutions of Higher Education, p. 16.

<sup>21</sup>Ibid.

<sup>22</sup>Ibid., p. 36.

<sup>23</sup>Ibid., p. 37.

<sup>24</sup>Salaries Paid and Salary Practices in Universities, Colleges, and Junior Colleges, 1961-62, Higher Education Research Report, 1962-R2 (Washington, 1962), p. 5.

<sup>25</sup>Guide for the Evaluation of Institutions of Higher Education, p. 37.

<sup>26</sup>Ibid., p. 36.

<sup>27</sup>Ibid., p. 3.

<sup>28</sup>Ibid., p. 36.

<sup>29</sup>Ibid., p. 39.

## CHAPTER IV

### EVALUATION OF THE COLLEGES

Evaluation of the 12 colleges in this chapter is done on the basis of numerical rank, quartile rank, and rank in relation to the median. The numerical rank for each college in relation to each of the other 11 colleges is given in regard to each of the five correlation groupings and the items listed in each group. According to the criteria, the authority, and the tabulated questionnaire and financial data presented in Chapter III, a ranking of number one would be the best possible ranking in regard to Factors I, II, and IV, while a ranking of 12 would be the best possible ranking in regard to items listed in Factors III and V. For ease of comparison, however, rankings in Factors III and V were reversed, making number one the top ranking and number 12 the bottom ranking for each item under each factor. Quartile rankings for each college in relation to each of the five factors is presented. It must be remembered that the fourth quartile represents the top ranking, and the first quartile represents the bottom ranking. Each college will also be ranked in regard to position relative to the median for each college in relation to each of the five factors.

## Twelve College Profiles

College A

Factor I - Size and Affluence	Rank
Size of Student body.....	10.5
Size of faculty.....	7
Per cent from top 20 per cent of high school class.....	6
Median salary, instructor.....	10
Median salary, assistant professor.....	6
Median salary, associate professor.....	6
Median salary, full professor.....	7
Median salary, full time faculty.....	7
Total number of volumes in library.....	3
Total number of periodicals in library.....	2
Educational expenditure per student (weighted).....	1
Mean teaching load (negative).....	3

Factor I: total rank, 68.5; third quartile,  
2 above median.

## Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	1
Expenditure per student (unweighted).....	1
Per cent of budget for admin. and general expenses.....	2
Per cent of income from gifts.....	1
Number of volumes per student in library.....	1
Number of periodicals per student in library.....	1

Per cent of income from fees (negative).....	2
Number of major fields (negative).....	1.5

Factor II, total rank, 10.5; fourth quartile,  
6 above median.

#### Factor III - Academic Climate

Student-teacher ratio.....	10
Per cent of faculty with only M.A.....	7
Maximum teaching load.....	9
Per cent of faculty with Ph.D. (negative).....	5
Per cent of students dropped for academic reasons..... (negative)	8.5

Factor III, total rank, 39.5; fourth quartile,  
4 above median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	3
Per cent of expenditure for maintenance and oper.....	2
Per cent of income from endowment.....	1
Per cent of income from gifts.....	1
Surplus or deficit.....	1
Surplus or deficit per student (weighted).....	1
Median salary, assistant professor (negative).....	7

Factor IV, total rank, 16; fourth quartile,  
6 above median.

#### Factor V - Miscellaneous

Mean teaching load.....	10
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Per cent of total expenditures for library (negative).. 4.5

Factor V, total rank, 14.5; third quartile,  
2 above median.

Final quartile rank of College A for all factors..... 1

Final rank in relation to median for all factors..... 1

College A had fewer than 400 students at the time of this survey. A college this size is one that Ruml and Morrison would say faces a difficult task to survive, and an even more difficult task to present a quality educational program. Because it is so small, it gets only 37.52 per cent of its total income from student fees, ranking it eleventh in this category. This places a heavy burden on endowment and gift incomes. In per cent of income from endowment, College A ranks first among the 12 colleges, and in per cent of income from gifts, College A ranks first. Per cent of income from gifts is 57.74, which is about 15 per cent higher than the gift income per cent of the number two-rated institution in this category. This seems to be placing a too heavy burden on a rather unstable source of income, gifts.

Does this somewhat unstable income picture adversely affect the college program? At first glance it would appear not, since College A has the highest educational expenditure per student, either weighted or unweighted. In regard to median salary paid to full-time faculty, College A ranked

seventh among the 12 colleges. College A salaries were well under the median-mean figures for the Great Lakes and Plains Region in each of the four ranks. College A salaries ranged between \$4,000 and \$7,000, while College I ranged from \$4,000 to over \$12,000. College I has 25 faculty members receiving salaries between \$8,000 and \$9,000, and 9 receiving salaries between \$7,000 and \$8,000. College C has 20 faculty members receiving salaries between \$7,000 and \$10,000, and College L has 20 faculty members receiving salaries between \$7,000 and \$9,000. It would seem possible and even likely that Colleges I, C, and L have many faculty members of a calibre that college A could not afford. College A ranked only ninth in the per cent of Ph.D.'s on the faculty, and one-ninth of the College A faculty members have only B.A. degrees. Apparently the faculty members are doing no research or writing at College A.

College A ranks first among the colleges in the amount of surplus shown on its books at the end of the fiscal year. It would be interesting to investigate the possible effect on faculty morale the surplus--over \$32,000 more than the surplus of the college ranked second in this category--has when faculty members view it in relation to the mediocre salary schedule at College A. It is unfair to assume that the large surplus is the cause or even a cause of poor

faculty morale, but the fact remains that the faculty turnover rate over a four-year period is higher than that at any of the other colleges in the study. In all but one of the four years, the number of dismissals was larger than the number of resignations.

College A ranks third in total number of volumes in the library and second in number of periodicals. Of course college A, with its small student enrollment, ranks first in volumes and periodicals per student in its library.

The students at College A would seem to be well-qualified to undertake a strong college program. Thirty-three per cent of the freshman class ranked in the top fifth of their high school classes. This figure represents a gain of 15 per cent from the top fifth over a four-year period. Eighty-four per cent of the freshmen were in the top half of their high school classes, and this figure represents a 31 per cent gain over a four-year period.

College A has, of all 12 colleges, the largest number of young persons admitted who do not eventually matriculate. This undoubtedly means that students who apply at College A make multiple applications, and a large number, then, when they are admitted by other institutions, choose the other colleges over College A. Before this could be construed as a reflection on the quality or the reputation of College A, a study would have to be made of applicants to College A

concerning what other colleges the applicants attend who do not matriculate at College A.

Of the students who do matriculate, about 50 per cent graduate, and an upward trend in the percentage over a four-year period is noted here, too. Information about those attending graduate school and those receiving graduate scholarships, fellowships, and assistantships is not available.

College A, with 36 full-time teachers, would seem to have a staff of adequate size to teach a program including 12 major fields. College A has the third smallest student-teacher ratio among the 12 colleges, and it offers a large number of small classes. College A's largest class enrolls 110 students, so apparently the large-class lecture system is used.

A United Nations semester was the one unique phase of the program listed on College A's questionnaire. College A has no honors program, no non-Western studies program, no program of library orientation, and no remedial reading program.

Apparently students at College A are given considerable opportunity to develop responsibility and leadership qualities. The students allocate student activity fees, and supervise the publication of the college newspaper and yearbook. Student dormitory councils and a student court bear a major share of responsibility for student conduct control, and students have had some share in establishing student

conduct rules.

As was indicated earlier, the evaluative items concerning the college are examined against a backdrop of the college goals, as stated in the official college bulletin. The goals of College A are stated as follows:

Basically all students are assumed to need certain tools: the ability to read, write, speak, and communicate with others; the building and maintaining of health and physical fitness; a degree of knowledge in at least one foreign language.

Beyond this each student is asked to study a combination of general and special courses in his four years at \_\_\_\_\_. He is asked to know something of the world of nature and the scientific method; of the society in which he is to work and live; of the historical perspective and human achievements known as the humanities; of the eternal values studied and practiced in religion.

Through the leadership of a sound faculty, the resources of a good library, well-equipped laboratories, and such a liberal arts curriculum, the student is given the opportunity to acquire a rich store of facts, concepts, and values; to develop skill in organizing, evaluating, and interpreting facts; and to develop habits of intellectual integrity, objective thinking, and independent problem-solving.

At the same time the student is encouraged to form habits of physical and emotional well-being; acquire interests, skills, and other constructive uses of leisure; develop the tastes and deportment which mark the cultivation of a person. All are inspired to construct an adequate philosophy of life, to acquire moral stamina, and commit themselves to a courageous program of life.<sup>1</sup>

This would seem to be an ambitious statement of goals, and there is not enough information about College A available in this study to make a judgment of whether or not the

performance is in accord with the stated goals. There is a good library, a well-selected student body, and a good number of well-prepared faculty, which would seem to permit the possibility that the college might be able to help its students achieve many of the stated goals. The absence of a reading improvement course, and the one-ninth of the faculty holding only B.A. degrees would seem to throw some doubt on the institution's ability to meet all the stated goals.

In summation, it would seem that College A has a very good library, in terms of numbers of volumes and periodicals; it would seem that it has a well-qualified student body; it graduates about 50 per cent of the students who matriculate; it gives the student considerable opportunity to develop responsibility; it has the highest educational expenditure per student of any of the colleges; it has a staff large enough to provide major work in 12 fields; and it offers many small classes. These factors, along with the number one rating of College A in the statistical part of the study, speak well for College A.

On the other hand, the high percentage of the college income from an unstable source; the large financial surplus weighed against the less than mediocre salary schedule; the ninth place rating among the colleges in the number of Ph.D.'s on the teaching staff and the fact that one-ninth of the staff hold only B.A. degrees; the absence of any reported research

or writing by the faculty; the high rate of faculty turnover; the large number of students admitted who do not matriculate; and the apparent lack of inventiveness of the program--these items raise some questions about the soundness and the quality of the institution.

On the basis, then, of the information gathered for this study, it would seem that College A is one of the better of the 12 colleges studied, but it is doubtful that College A deserves the number one ranking which it received in the statistical part of the study.

#### College B

Factor I - Size and Affluence	Rank
Size of student body.....	6
Size of faculty.....	9.5
Per cent from top 20 per cent of high school class.....	9
Median salary, instructor.....	8
Median salary, assistant professor.....	9
Median salary, associate professor.....	4
Median salary, full professor.....	9
Median salary, full-time faculty.....	5
Total number of volumes in library.....	6
Total number of periodicals in library.....	10
Educational expenditure per student (weighted).....	9
Mean teaching load (negative)...(reversed).....	9

Factor I: total rank, 93.5; second quartile,  
3 below median.

Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	9
Expenditure per student (unweighted).....	10
Per cent of budget for admin. and general expenses.....	12
Per cent of income from gifts.....	3
Number of volumes per student in library.....	5
Number of periodicals per student in library.....	9
Per cent of income from fees (negative)..(reversed)....	9
Number of major fields (negative)....(reversed).....	10

Factor II: total rank, 67; second quartile,  
2 below median.

Factor III - Academic Climate

Student-teacher ratio.....	2.5
Per cent of faculty with only M.A.....	3
Maximum teaching load.....	5.5
Per cent of faculty with Ph.D. (negative)...(reversed).	4
Per cent of students dropped for academic reasons (nega- tive)..(reversed).....	10

Factor III: total rank, 18; second quartile,  
3 below median.

Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	9.5
Per cent of expenditure for maintenance and operation..	1

Per cent of income from endowment.....	3
Per cent of income from gifts.....	3
Surplus or deficit.....	2
Surplus or deficit per student (weighted).....	4
Median salary, assistant professor (negative).....	4

Factor IV: total rank, 25.5; fourth quartile,  
5 above median.

#### Factor V - Miscellaneous

Mean teaching load.....	4
Per cent of total expenditure for library (negative)...	9.5

Factor V: total rank, 13.5; third quartile,  
on the median.

Final quartile rank for College B for all factors.....	6.5
Final rank in relation to median for all factors.....	8

College B's income pattern seems reasonably stable, as the college ranked third in per cent of income from gifts, third in per cent of income from endowment, and third in per cent of income from student fees. In 1961 the college had a sizeable surplus, which enabled College B to rank second among the 12 colleges in the surplus-deficit category. The expenditure picture does not, however, look as bright. College B ranked ninth in the category weighted educational expenditure per student. College B was well under the Great Lakes and Plains median mean salary figures in each of the

four rank categories, although in median salary for full-time faculty members College B ranked fifth. It would seem that with a stable income, more could be spent by the college for the education of its students, and, specifically more could be spent for faculty salaries. While salaries are not good, it should be noted, however, that the college provides for leaves of absence for faculty with partial pay, and 99 per cent of the faculty attend professional meetings and the college pays the costs.

Twenty-seven per cent of the College B faculty have doctor's degrees, to earn the college ninth place in this category. But College B ranks at the top in regard to the category concerning number of faculty members who have only a bachelor's degree; College B has only one bachelor's degree teacher. Fifteen, or half of the faculty, are doing research, and 12 are doing writing. So, while the faculty picture is not extremely good, it is not really bad, either.

The library situation is similar. In total periodicals in the library, College B ranks sixth, and it ranks tenth in total periodicals. In volumes per student the ranking is fifth, and in periodicals per student the ranking is ninth. It should be noted, however, that there are two excellent large municipal libraries within 80 miles of the college, and a large memorial library is not that distant. The college claims an excellent inter-library loan system. So, the

library situation would seem fair to good.

The student-teacher ratio is high--17 to 1. College A has 394 students and 36 faculty members, while College B has 576 students and only 30 faculty members. College B has 49 classes with ten or fewer students, and the largest class enrolls 69 students, with the next largest having 55. Apparently the large lecture system is not in use, and it would seem that there must be many classes of a size not too different from the two large classes mentioned.

College B ranks ninth in percentage of incoming freshmen who ranked in the top fifth of their high school classes, and their 24 per cent in this category shows only a 4 per cent increase over a four year period. College B also ranked ninth with 52 per cent in the category of freshmen from the top half of their high school classes. The 52 per cent represents a decrease of 6 per cent over a four-year period. So, the student body quality may be poor. College B graduates 76 per cent of the freshmen who enroll, a figure 16 points higher than that submitted by any of the other 11 colleges, and only 5 per cent of the freshman class were dropped for academic reasons in 1961. It must be concluded that some powerful teaching is done at College B, or standards of achievement are very low.

Students at College B apparently are given considerable opportunity to develop mature judgment and responsibility.

Students allocate fees for student activities; they supervise the publishing of the student newspaper, yearbook, and magazines; they have dormitory councils and a student court which play major roles in conduct supervision; and the students are given an opportunity to help develop college regulations. On the academic side, students are given the opportunity to develop into self-starting learners through independent study and honors courses.

Apparently College B has many unique facets to its program. It has an advanced placement program for incoming freshmen, independent study and honors program, a non-Western studies program, a Summer orientation for incoming freshmen and their parents, a Washington Semester program, and a European Semester program. Only two of these unique phases of the program--the independent study and the honors programs--are listed in the college catalog. There is no mention, either, of the student court or the student part in conduct control. It would seem that these things should be published in the catalog in order that the college might reap public relations dividends therefrom.

What does all this evaluative information about College B indicate about the success the institution is having in meeting its stated objectives? The objectives as stated in the college bulletin are as follows:

College is a College of Arts and Science. Through the years the College has made its dominant purpose and aim the maintenance of a good, four-year cultural institution where, in an atmosphere of Christian ideals under good scholarship requirements, one may pursue studies in liberal arts, sciences, and the prevocational courses, and lay the foundations for sound character and worthy living. The educational program seeks to help all students to attain five general objectives:

1. A broad and integrated understanding and appreciation of our culture.
2. Concentration within a limited field of knowledge.
3. Basic preparation for certain vocations or for graduate study.
4. Creative scholarship.
5. Effective personality and Christian character and leadership.<sup>2</sup>

Judging the achievement of a college in relation to its stated goals is impossible without firsthand knowledge gained in a not-too-brief visit to the institution. However, it is possible to raise a question about "good scholarship requirements" in light of the fact that previous academic records of incoming freshmen are unimpressive, a small percentage are dropped for academic reasons, and a very large per cent of incoming freshmen eventually graduate.

In summation, College B can point to a number of things which would indicate strength and quality of institution. It has a reasonable stable income which has produced a sizeable surplus. It has a faculty that attends institutes, workshops, and professional meetings with great frequency, and a large proportion of the faculty members are actively

engaged in research and writing. Its proximity to several good metropolitan libraries, and its good inter-library loan system have been noted. It apparently gives its students considerable opportunity to develop academic independence and responsibility, and social maturity and responsibility. And it has a program with many interesting and unique facets.

On the other hand, College B has a low educational expenditure per student, faculty salaries in general are not good, total faculty academic preparation is not strong, library book holdings are mediocre and the periodical supply is less than mediocre, the student-teacher ratio is high without very large lecture sections to explain it, and the academic qualifications of incoming students are poor in comparison to those of students at most of the other colleges in the study.

On the basis of the information used in this study, it would seem that College B, while it shows considerable promise in a number of ways, seems to deserve the below-the-median rating which it was given in the statistical part of the study.

### College C

Factor I - Size and Affluence	Rank
Size of student body.....	7
Size of faculty.....	4

Per cent from top 20 per cent of high school class.....	8
Median salary, instructor.....	5
Median salary, assistant professor.....	2
Median salary, associate professor.....	3
Median salary, full professor.....	3
Median salary, full-time faculty.....	2
Total number of volumes in library.....	4
Total number of periodicals in library.....	9
Educational expenditure per student (weighted).....	3
Mean Teaching load (negative).....(reversed).....	3

Factor I: total rank, 53; fourth quartile,  
4 above median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	3
Expenditure per student (unweighted).....	3
Per cent of budget for admin. and general expenses.....	9
Per cent of income from gifts.....	8
Number of volumes per student in library.....	2
Number of periodicals per student in library.....	7
Per cent of income from fees (negative)...(reversed)...	8
Number of major fields (negative)...(reversed).....	4

Factor II: total rank, 44; third quartile,  
3 above median.

#### Factor III - Academic Climate

Student-teacher ratio.....	12
Per cent of faculty with only M.A.....	12
Maximum teaching load.....	9
Per cent of faculty with Ph.D. (negative)..(reversed)..	12
Per cent of students dropped for academic reasons (negative)..(reversed).....	10

Factor III: total rank, 55; fourth quartile,  
6 above median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	9
Per cent of expenditure for maintenance and operation..	10
Per cent of income from endowment.....	10
Per cent of income from gifts.....	8
Surplus or deficit.....	10
Surplus or deficit per student (weighted).....	7
Median salary, assistant professor (negative).....	11

Factor IV: total rank, 65.5; first quartile,  
5 below median.

#### Factor V - Miscellaneous

Mean teaching load.....	10
Per cent of total expenditures for library (negative)..	5

Factor V: total rank, 18; fourth quartile,  
4 above median.

Final quartile rank for all factors (College C).....	2
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Final rank in relation to median for all factors..... 2

The income pattern of College C seems reasonably stable. It does not rely too much on income from gifts, ranking eighth in this category, and it gets a reasonably good proportion of its income from student fees, ranking a high fifth in this category. Even with the relatively decreasing importance of endowment income among liberal arts colleges, however, College C's 4.3 per cent of income from this source, ranking College C tenth, seems somewhat small. This would seem especially true in light of the fact that a perilous policy of deficit financing has been in effect at College C. College C had about a \$25,000 deficit in 1961, ranking the college third in size of deficits among the 12 colleges.

In examining the good salary schedule at College C in conjunction with the rather large institutional deficit, it seems possible that the deficit was deliberately planned in order that the faculty might be paid the kind of salaries the institution thought they should have. This is the type of situation described in the North Central Association's Guide as one that was a tremendous morale booster for the faculty.<sup>3</sup> In all ranks except instructor, College C was above the median mean salary of the Great Lakes and Plains region. Among the 12 colleges in the study, College C ranked second in regard to salary paid to full-time faculty. College C, in 1961,

paid 14 faculty members between \$7,000 and \$8,000. Three were paid between \$8,000 and \$9,000 and 3 were paid between \$9,000 and \$10,000.

Undoubtedly, partly because of the good salary schedule, College C has been able to assemble a well-qualified faculty. Sixty per cent of the full-time faculty have earned doctor's degrees, ranking College C first in regard to this item. At none of the other 11 colleges do even 50 per cent of the faculty hold doctorates. Only one faculty member has only a bachelor's degree. In addition to having excellent preparation, the faculty seems to be quite active intellectually. Ninety per cent attend professional meetings in their fields, with their expenses being paid by the college. Fifty per cent are engaged in research, and 20 per cent are doing writing.

In addition to spending liberally for faculty, College C apparently spends heavily in other respects in support of the academic program. It ranks third among the 12 colleges in educational expenditure per student. It ranks second in regard to volumes per student in the library, and it ranks fifth in per cent of total budget allocated for library acquisitions.

College C has a student body somewhat smaller than the student body of College B, but College C has 10 more faculty members than has College B. It is not surprising, then, to

note that College C has the smallest student-teacher ratio of any of the 12 colleges-- $12\frac{1}{2}$  to 1. College C has 55 classes enrolling ten or fewer students, and it has only four "large" classes. The largest class at College C enrolls only 46 students.

The calibre of students at College C is not good, judging from the high school records of incoming freshmen. High school records for only one class of freshmen were available, so no trends could be studied. Before a final evaluation of the academic ability of incoming College C students can be made, however, the scores of incoming students on the Scholastic Aptitude Test of the College Entrance Examination Board should be examined, in light of the fact that in its admissions procedures the college places first emphasis on College Board scores, second emphasis on high school rank. Twenty-five per cent of the 1961 freshman class were in the top fifth of their high school classes, ranking College C eighth in this category. Fifty-two per cent were in the top half of their high school classes, giving College C a ranking of 9.5 in relation to this item. Academic standards could be rigorous, as might be suggested by the 11.4 per cent of the freshman class in 1961 dropped for academic reasons and the relatively low percentage--34 per cent--of matriculating freshmen who eventually graduate.

Students at College C are apparently given considerable

opportunity to develop maturity and responsibility of judgment. Students are enabled to develop academic independence and maturity through participation in independent study and the honors program. Students are given similar opportunities in the student activities program. They control the allocation of student activity fees, and they supervise the publication of the college newspaper and the yearbook. There are dormitory councils responsible for supervision of conduct in the college residence halls. There is, however, no student court for the handling of all-campus rules violations, and students are permitted to contribute only a little to the structuring of campus regulations. College C is the only one of the 12 colleges that has an honor system in effect on the campus, although College I reports that it is considering the adoption of an honor system.

The academic program at College C presents numerous interesting and unique facets. Opportunity is provided for advanced placement, and English writing laboratories, a non-Western studies program, a partial Summer orientation program for freshmen and their parents, a Washington semester, a United Nations semester, and a European semester on an independent basis are some of College C's unique program aspects. A reading laboratory is also provided.

According to the information gathered for this study, is the college achieving its stated goals? The following are

the College C goals as stated in the college catalog:

There has long been a recognition of the need and value of a broad background in the fields of fundamental learning for those entering the professions or looking forward to the discharge of responsibility in the area of commerce and industry. In this day of specialization, of mechanical advance, of threats to the human values which underlie our civilization, there has been a growing realization that new and greater emphasis should be laid upon the training of the whole individual, mentally, morally, and spiritually to live a full life with an appreciation for the dignity of man as the creation of God. Liberal education implies an acquaintance with the past and the present which is extensively broad and intensively deep. It implies also the wholehearted interest and application of the student under the sympathetic guidance of teachers who remain actively engaged in the improvement of themselves as well as in the advancement of their students.

The aim of liberal education is the free mind--freed from the chains of ignorance, prejudice, and limited taste through information on a wide variety of subjects, through study of the lives and works of great men of all races and times, and through the consideration of the good and the beautiful in the arts. Consequently, such a liberal education, hindered by neither avowed nor subtle restraints upon the free pursuit of the truth, is a long established enterprise of the church.<sup>4</sup>

The goals are lofty and well-stated. Whether students at the college are able to achieve these goals can not be determined without careful exploration by at least one campus visit. The question can be raised, however, as to whether the majority of the students who enroll at College C have the capabilities to achieve the goals established by the college.

In summation, College C seems to have a stable source of income. It ranks third in educational expenditure per student. It has a good salary schedule, an excellently prepared faculty

which seems to be quite intellectually and professionally active. It seems to have a well-stocked library, and a good proportion of the budget is spent for library acquisitions. It has the smallest student-teacher ratio of any of the 12 colleges, and there are many small classes and apparently no very large ones. There seems to be considerable student autonomy, including the only honor system operating in any of the 12 colleges. The academic program seems to have many interesting and unique features.

On the other hand, the large deficit sustained in 1961, if repeated often, could endanger the ability of the college to support a quality program. The high school records of the incoming freshmen are, as a group, not impressive. If the college could enroll more students who had good success in their high school academic work, perhaps College C could graduate more than the one-third of matriculating students who now receive degrees.

In the statistical tabulations, College C was ranked second among the 12 colleges. It is quite possible that College C deserves to be so ranked. On the basis of the information gathered for this study, College C must be ranked among the top few of the 12 colleges.

#### College D

Factor I - Size and Affluence

Rank

Size of student body.....	12
Size of faculty.....	11
Per cent from top 20 per cent of high school class.....	12
Median salary, instructor.....	12
Median salary, assistant professor.....	11
Median salary, associate professor.....	12
Median salary, full professor.....	12
Median salary, full-time faculty.....	11
Total number of volumes in library.....	12
Total number of periodicals in library.....	12
Educational expenditure per student (weighted).....	8
Mean teaching load (negative)...(reversed).....	12

Factor I: total rank, 137; first quartile,

6 below median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	8
Expenditure per student (unweighted).....	4
Per cent of budget for admin. and general expenses.....	1
Per cent of income from gifts.....	2
Number of volumes per student in library.....	6
Number of periodicals per student in library.....	4
Per cent of income from fees (negative)..(reversed)....	4

Factor II: total rank, 36; fourth quartile,

4 above median.

#### Factor III - Academic Climate

Student-teacher ratio.....	5
Per cent of faculty with only M.A.....	6
Maximum teaching load.....	1
Per cent of faculty with Ph.D. (negative)..(reversed)..	8
Per cent of students dropped for academic reasons (negative)...(reversed)....	12

Factor III: total rank, 32; second quartile,  
2 below median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	12
Per cent of expenditure for maintenance and operation..	6
Per cent of income from endowment.....	9
Per cent of income from gifts.....	2
Surplus or deficit.....	7
Surplus or deficit per student (weighted).....	2
Median salary, assistant professor (negative).....	2

Factor IV: total rank, 40; third quartile,  
2 above median.

#### Factor V - Miscellaneous

Mean teaching load.....	1
Per cent of total expenditures for library (negative)..	1

Factor V: total rank, 2; first quartile,  
6 below median.

Final quartile rank for College D in all factors.....	9.5
Final rank in relation to median for all factors.....	9.5

College D is the smallest of the 12 colleges, having an enrollment of only 312 students. According to Ruml and Morrison, a college this small faces an almost superhuman task just to continue to exist, and its chances of being able to offer a quality program would seem to be slight. Bold, aggressive leadership is necessary at College D, and such leadership may now be on hand at the institution. An indication of this might be the fact that the college has launched into a trimester system of operation. This may help the college attract the kind of students it wants, and in greater numbers. It may enable the college to increase its income to the point that it can strengthen its program and improve its educational facilities and library holdings. The trimester program, it is claimed, has special appeal to the pre-professional student who has at least several years of graduate study ahead of him; since in the trimester system the undergraduate program can be completed in two and a half years, and the graduate program can be entered earlier. And year-round use of facilities in the trimester plan will bring in added income without commensurate increase in cost.

Because of the current small enrollment at College D, little more than half of the college income is derived from student fees. College D ranks ninth in this category. Only 4.41 per cent of the college income is derived from endowment, ranking the college ninth in this category also. In

regard to the proportion of the college income which comes from gifts, the college ranks second. This means that College D is dependent for a major proportion of its income on the least dependable of the three sources discussed. When one adds to this picture the fact that the college sustained a deficit of \$2,725 in 1961, the financial stability of the institution must be seriously questioned.

As would be suspected, the financial situation just described limits the amount that can be spent on the educational program. The college ranks eighth in regard to educational expenditure per student, and its median salary for full-time faculty is second lowest of the 12 colleges. The college ranks twelfth in regard to median salaries for instructors, associate, and full professors, and eleventh for salaries for assistant professors. Three faculty members receive salaries between \$3,000 and \$4,000; fifteen receive salaries between \$4,000 and \$5,000; and no one is paid more than \$7,000.

It seems almost remarkable that with such conditions existing, the college has been able to assemble a faculty with reasonably good qualifications. Forty-two and three-tenths per cent hold doctor's degrees, and only one has just a bachelor's degree. It is also surprising that the institution is able to retain its well-qualified faculty members in light of the financial limitations, and in light of the

lack of a maximum teaching load and a mean teaching load of 17 hours, highest of all the 12 colleges. A compensating factor must be the fact that about 80 per cent of the faculty members attend professional meetings at college expense. Only three faculty members are doing research, and two are doing some writing.

Budget limitations and size of institution probably have much to do with the fact that College D rates twelfth in number of volumes in the library and in number of periodicals received. The volumes per student rating of sixth, and the periodicals per student rating of fourth are not too bad. However, there does not seem to be justification for the twelfth place rating of College D in the category of proportion of educational expenditures allocated to the library.

The 16 to 1 student-teacher ratio places College D in eighth position in this category. However, there are 40 classes with ten or fewer students, and one class in which 138 students are enrolled. Two other classes have 78 and 77 students respectively, indicating that the large-lecture small-discussion system is probably used by College D.

In regard to the area of quality of students, it is doubtful that College D measures up to the standards suggested by the North Central Association Guide or the standards presented in "The Church and Higher Education," the publication of the denomination of this study. In both publications

it is stated that institutions should seek to enroll those students whose capabilities will enable them to benefit most from the educational programs of the colleges.<sup>5</sup> Only 5.5 per cent of College D's incoming freshmen were in the top fifth of their high school classes, and 29 per cent were in the top half of their high school classes. This earned the college twelfth rank in both categories. Of those students who were accepted for admission to the college, a third did not matriculate at College D.

A clientele with such an unimpressive record of academic achievement before college could hardly be expected to meet successfully the demands of a rigorous college academic program. This raises a serious question about how high the academic standards are at college D. This question can only be answered after a careful investigation by a qualified visitor to the campus. It should be pointed out that in 1961 19.2 per cent of the freshmen were dropped for academic reasons, high for all 12 colleges. And only 28 per cent of incoming freshmen are being graduated. This might indicate that, while the program may not be rigorous, it still might be too difficult for a great many students admitted to College D.

In some areas students are given opportunities to develop maturity and responsible judgment. Provisions for independent study and an honors program are provided to help the student develop academic maturity. In student activities, students

do not have the opportunity to allocate student activity fees, or to supervise publication of the student newspaper, yearbook or magazine. Students do have dormitory councils and a student court for the handling of some campus rule infractions. Students are also given some opportunity to help make rules governing student conduct.

It seems unfortunate, as in the case of College B, that some of the unique program features mentioned on the questionnaire are not presented in the college catalog. Reference is made to the advanced placement program and the honors program, both of which were mentioned on the questionnaire as being in effect at College D. Mention of neither can be found in the catalog, which would seem to be squandering good public relations opportunity. Good students would likely be attracted to the college by features such as these. College D claims no other unique program features except the trimester system, but this is unique and promising.

Is College D achieving its stated goals? The goals are presented in the college catalog as follows:

The aim of \_\_\_\_\_ College is to provide for men and women a Christian, liberal arts education. This aim is based on the conviction that this type of education best develops individual persons, democratic citizens, leaders and laborers in the vocational sphere, and enlightened, dedicated, religious spirits.

\_\_\_\_\_ College expects progressive improvements in its students academic performance, spiritual growth, and social consciousness and responsibilities. The entire program of the college is directed toward

assisting the student to achieve this progress, accompanied by a sense of direction, which will cause him to use his full potential in a positive contribution to the community, his profession, his fellow man, and to God.

The college purposes to offer a strong academic program led by a dedicated, well-trained faculty; to remain flexible in order to meet the new and complex challenges of a changing world; and to utilize its assets for most efficient operation and service to its students, its personnel, the church, and the community.<sup>6</sup>

It is not possible to judge whether a college is achieving its stated goals without a thorough examination of the institution through a visit to the campus. In light of the information gathered for this study, however, some question might be raised in regard to whether the college has the strong academic program it proposes to offer.

In summation, College D is instituting the use of the trimester calendar, which may help solve some of the college's problems. A fairly well qualified faculty has been assembled, and independent study and honors programs are provided to help students develop academic initiative and responsibility. Some student autonomy is also provided in the areas of student activities.

On the other hand, the college has the smallest enrollment of the 12 institutions, and its structure of financial income appears shaky. The educational expenditure per student is low, and the salary schedule is extremely low. The mean teaching load is the highest of the 12 colleges, and

there is no maximum teaching load. In student-teacher ratio, College D ranks eighth. The proportion of the educational budget allocated to the library is very low, and the library holdings are only fair, from the standpoint of quantity. And, based on high school records, the incoming freshmen are ill-equipped to do college work--the least equipped of the freshmen classes at the 12 colleges.

Judging, then, on the basis of the information gathered for this study, it would seem that the 9.5 ranking College D received in the statistical part of the study is a fair evaluation of the college in relation to the other 11 colleges. However, several factors seem to indicate that College D has promise, and may well improve its status.

#### College E

Factor I - Size and Affluence	Rank
Size of student body.....	4
Size of faculty.....	5
Per cent from top 20 per cent of high school class.....	10
Median salary, instructor.....	4
Median salary, assistant professor.....	7
Median salary, associate professor.....	9
Median salary, full professor.....	8
Median salary, full-time faculty.....	9
Total number of volumes in library.....	9

Total number of periodicals in library.....	8
Educational expenditure per student (weighted).....	10
Mean teaching load (negative)...(reversed).....	7

Factor I: total rank, 90; second quartile,  
2 below median.

Factor II- Proportional Income and Allocation

Expenditure per student (weighted).....	10
Expenditure per student (unweighted).....	11
Per cent of budget for admin. and general expense.....	4
Per cent of income from gifts.....	9
Number of volumes per student in library.....	10.5
Number of periodicals per student in library.....	8
Per cent of income from fees (negative)...(reversed)...	12
Number of major fields (negative)...(reversed).....	3

Factor II: total rank, 67.5; first quartile,  
4 below median.

Factor III - Academic Climate

Student-teacher ratio.....	2
Per cent of faculty with only M.A.....	4
Maximum teaching load.....	2
Per cent of faculty with Ph.D. (negative)...(reversed)..	2
Per cent of students dropped for academic reasons (nega- tive)...(reversed).....	4.5

Factor III: total rank, 15; first quartile,  
5 below median.

Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	6
Per cent of expenditure for maintenance and operation..	12
Per cent of income from endowment.....	12
Per cent of income from gifts.....	9
Surplus or deficit.....	5
Surplus or deficit per student (weighted).....	6
Median salary, assistant professor (negative).....	6

Factor IV: total rank, 55; first quartile,  
4 below median.

Factor V - Miscellaneous

Mean teaching load.....	6
Per cent of total expenditures for library (negative)..	7

Factor V: total rank, 13; second quartile,  
2 below median.

Final quartile rank for all factors.....	11.5
Final rank in relation to median for all factors..	11

In relation to the other colleges of the study, College E ranks number one in regard to proportion of income coming from student fees, ninth in regard to the proportion coming from gifts, and twelfth in regard to income from endowment. The large dependence on fees and the minimal dependence on

gifts is sound. But, even though it has been pointed out that endowment is a factor of decreasing importance in regard to private college income, it is probably the most stable source of income, and it would seem that it would be well for a college to receive more than 3 per cent of its income from this stable source. It must be pointed out, however, that the college has been in no recent financial difficulty. As a matter of fact, in 1961 the college showed about a \$42,000 surplus, good enough for fifth ranking among the 12 colleges.

Can a surplus of such proportions be defended in light of the comparatively small educational expenditure per student at College E? Probably not, when a close look is taken at the size of the educational expenditure. College E ranked tenth among the 12 colleges in size of educational expenditure per student; the educational expenditure per student at College A more than doubles that at E, and the expenditure at Colleges J, C, and L almost double E's expenditure for education per student. Can the surplus be defended in light of the ninth place ranking of the college in regard to salaries paid to full-time faculty? Possibly not.

The relatively low salary scale undoubtedly has a bearing on the amount of academic preparation of the faculty members. Only 17.9 per cent of the faculty have doctor's degrees, placing College E second to last among the 12 colleges

in this category. College E has the largest proportion of faculty members holding only the bachelor's degree. A number of the faculty members--65 per cent--attend professional meetings in their fields, and College E pays their expenses. Only three of the faculty members are doing research, and three are doing some writing.

Faculty morale, important to the creation of a dynamic academic climate, may well suffer because of the low salary schedule, the large student-teacher ratio, the absence of a maximum faculty work load, and the amount of teaching actually required of some faculty members. The student-teacher ratio is the second largest of the 12 colleges. There is no maximum faculty work load, and work loads have been as high as 18 hours a term in the last two years; and the trend of work load size has been upward. College E has the fewest number of classes enrolling ten or less, and there are eight classes with enrollments ranging from 55 to 76. The mean teaching load is 13.05, giving College E the seventh smallest mean teaching load.

The library is further cause for concern. The college rank in regard to volumes per student in the library is 10.5, and in regard to periodicals per student College E ranks eighth. In the category of the per cent of the educational budget allocated to library acquisitions, the college ranks sixth.

In regard to academic ability of the student body, there can be a question raised, also. Only 21 per cent of incoming freshmen in 1961 had ranked in the top fifth of their high school classes, ranking College E tenth in this category. Sixty-nine per cent ranked in the top half of their high school classes, placing College E in sixth position regarding this item. If the student body as a group is not strong in academic ability, then the rigorousness of the program can be questioned. Fifty-nine per cent of the students who matriculate at College E graduate, ranking the college second in this category.

Students apparently are given some but not a great deal of opportunity to develop maturity and responsibility. There is no independent study program and there is no honors program to help the student develop academic self-reliance. The students do not supervise the publication of the college newspaper and the student yearbook. There is no student court to which discipline cases could be brought. However, students do participate in the allocation of the student activity fees to various student activities. There are dormitory councils with some authority over dormitory discipline. Students are given some opportunity to participate in the structuring of rules governing student conduct.

An English laboratory and a non-Western studies program are the only unique program features claimed by College E.

It should be noted that the college does have remedial English and remedial mathematics programs, but no reading laboratory or remedial reading program. It would seem that a remedial reading program should probably be considered.

Is College E achieving its stated goals? The goals of the college as stated in the college catalog are as follows:

The purpose of the college is to provide the means for the development of the student's understanding of the relationships of man to his God, to his fellow man, to himself, and to the physical and biological world.

The college believes that this kind of education in a distinctively Christian setting best equips people with the knowledge and attitudes that make for effective and responsible living.<sup>7</sup>

It is not possible to judge the extent to which a college is successful in meeting its stated goals without a careful on-the-scene evaluation of the college. As nothing is said in the College E goals about the challenge of the academic program or the standards of achievement expected, there are no questions which can be raised concerning the stated goals in relation to the material gathered for this study.

In summation, it would seem that in spite of a surplus shown in 1961, College E has an inadequate income which comes from sources of questionable balance. The educational expenditure per student is small, and the faculty salary schedule is low. The academic preparation of the total faculty is not strong, and only a few faculty members are doing research and writing. The student-teacher ratio is large, there is no

maximum faculty work load, and some instructors have been asked to teach 18-hour loads. The library is low in quantity of both books and periodicals. There is not much student autonomy, and there seems to be little unique in the college program.

On the other hand, 65 per cent of the faculty attend professional meetings in their fields. The mean teaching load is just below the median for the 12 colleges, and College E ranks at about the median in regard to proportion of the educational budget allocated to the library for acquisitions.

In the statistical part of the study, College E was ranked at 11.5 in relation to quartile rank for all factors, and eleventh in relation to the median for all factors. On the basis of the information gathered for this study, it would seem that a proper ranking for College E would be among the lowest few colleges.

#### College F

Factor I - Size and Affluence	Rank
Size of student body.....	9
Size of faculty.....	9.5
Per cent from the top 20 per cent of high school class.	4
Median salary, instructor.....	11
Median salary, assistant professor.....	12

Median salary, associate professor.....	11
Median salary, full professor.....	11
Median salary, full-time faculty.....	12
Total number of volumes in library.....	7
Total number of periodicals in library.....	5
Educational expenditure per student (weighted).....	11
Mean teaching load (negative)...(reversed).....	5

Factor I: total rank, 105.5; first quartile,  
4 below median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	11
Expenditure per student (unweighted).....	9
Per cent of budget for admin. and general expense.....	11
Per cent of income from gifts.....	4
Number of volumes per student in library.....	4
Number of periodicals per student in library.....	3
Per cent of income from fees (negative)...(reversed)...	3
Number of major fields (negative)...(reversed).....	7

Factor II: total rank, 52; third quartile,  
1 above median.

#### Factor III: Academic Climate

Student-teacher ratio.....	9
Per cent of faculty with only M.A.....	8
Maximum teaching load.....	5.5
Per cent of faculty with Ph.D. (negative)...(reversed).	7

Per cent of students dropped for academic reasons (negative)..(reversed)..... 4.5

Factor III: total rank, 34; second quartile,  
1 below median.

Factor IV - Financial Stability

Per cent from top 50 per cent of high school class..... 4  
 Per cent of expenditure for maintenance and operation.. 3.5  
 Per cent of income from endowment..... 6  
 Per cent of income from gifts..... 4  
 Surplus or deficit..... 9  
 Surplus or deficit per student (weighted)..... 4  
 Median salary, assistant professor (negative)..... 1

Factor IV: total rank, 31; fourth quartile,  
4 above median.

Factor V - Miscellaneous

Mean teaching load..... 8  
 Per cent of total expenditures for library (negative)..  
 (reversed).... 12

Factor V: total rank, 20; fourth quartile,  
5 above median.

Final quartile rank for all factors College F..... 5  
 Final rank in relation to median for all factors.. 5

College F is ninth among the 12 colleges in size. This would be a critical size, according to the judgments of Ruml

and Morrison who would question whether College F could long continue to exist and to offer a strong academic program. As would be expected because of its small enrollment, College F ranks low--tenth--among the 12 colleges in per cent of income received from student fees. Correspondingly, it ranks high--fourth--in per cent of income from gifts. Thirty per cent of the college income comes from the relatively unstable source--gifts. The college ranks sixth in income from endowment.

The financial predicament looks serious when one adds to the relatively unstable income picture the information that College F has a large deficit, a very low educational expenditure per student, and a very low faculty salary schedule. College F has the fourth largest deficit--\$11,011--of the 12 colleges. It ranks eleventh in educational expenditure per student; one of the other colleges has an educational expenditure per student more than twice as large, and three others have an educational expenditure almost twice as large. In median salary for full-time faculty members, College F ranks twelfth, with a figure that is \$2,025 below the full-time faculty median figure at College I. College F pays three faculty members between \$3,000 and \$4,000 per year, 15 are paid between \$4,000 and \$5,000, 7 are paid between \$5,000 and \$6,000, and only one is paid between \$6,000 and \$7,000 a year. The only bright spots on the faculty financial picture

are that the college provides leaves with pay, and the college pays expenses for attendance at professional meetings.

In spite of the poor faculty financial situation, the academic qualifications of the faculty are fair. Forty per cent of the faculty hold doctor's degrees, while three have only bachelor's degrees. The amount of intellectual activity of the faculty also seems to warrant a fair rating. Ninety per cent attend professional meetings, five are doing research, and 12 are doing some writing. Working conditions for the faculty, judged on a quantitative basis, seem fairly good. The maximum teaching load is 15 hours, but the mean was only 12.5 hours, ranking college F fifth in this category. The college ranks fourth in student-teacher ratio. There is a good number of small classes--80 sections with 10 or fewer students. The largest class enrolls 59 students, and there are about 13 similarly large classes, indicating that the college probably does not use the large-lecture small-discussion system.

Again from a quantitative standpoint, the library seems to be good. The college is first among the 12 colleges in percentage of total educational expenditure for the library, and the library ranks fourth in the number of volumes per student and third in the number of periodicals per student.

The educational calibre of the students is good, although the relative importance assigned to various selection criteria

is unusual. College F ignores the fact that selection research points to high school record as the best existing predictor of college success. Instead, College F uses references as the first criteria for judgment in regard to admission. College F places second importance in its admission procedures on college ability test scores, third importance on interviews with applicants, and fourth importance on high school rank. Using this order of criteria, College F has apparently assembled a student body with good high school records. Thirty-seven per cent of incoming freshmen were in the top fifth of their high school classes, giving College F a fourth place ranking in this category. Eighty per cent were in the top half of their high school classes, ranking College F fourth in regard to this item also. Six per cent of the freshmen were dropped for academic reasons in 1961. Forty per cent of incoming freshmen graduate, and 25 per cent go to graduate school, ranking College F first in regard to this item.

Apparently there is considerable student autonomy at College F. Students allocate student activity fees, and supervise publication of the student newspaper and yearbook. There are dormitory councils with responsibility for conduct in dormitories. Students are given some opportunity to participate in the making of rules governing student conduct. There is no honor system on campus. Students are given the

opportunity to develop academic independence in independent study and honors programs.

The college program shows a number of unique aspects. There is an advanced placement program, an independent study program, an honors program, a non-Western studies program, and a Mexico Summer program. The college makes use of comprehensive examinations in the second semester of the senior year. College F has remedial programs in English and mathematics, but no remedial reading program. In light of the research in regard to reading deficiencies, this might be a worthy addition to the college program.

Is College F achieving its stated goals? The goals are stated in the college catalog as follows:

The aim of the College is to provide a liberal arts and general education program enlightened by Christian truth and practice which will offer students a fourfold development: intellectual, physical, spiritual, and social.

The scholastic program endeavors to help students understand the past in order to interpret the present; to understand the various cultures of the world in order to broaden their insight into human affairs today; to develop the ability of thinking creatively and analytically; to acquire a knowledge of how to use the tools and techniques of the scholar; to cultivate a thirst for knowledge; to teach the ability to discriminate and evaluate; and to discover the inter-relations of truth and its meaning for all of life.

The physical development goals are to maintain and improve the physical health of the individual; to develop understandings and attitudes which will contribute to healthful living; to develop attitudes and skills favorable to the wide use of leisure time; to

teach sportsmanship, which includes self-control, honesty, and fair play; and to develop leadership, loyalty, initiative, and dependability.

The religious program endeavors to aid each student to make a personal commitment to Jesus Christ which shall increase his spiritual discernment, deepen his sympathy for others, develop his moral stamina, lead him to the attainment of inner spiritual resources, and encourage the daily application of Christian principles to life.<sup>8</sup>

These are ambitious goals, and whether or not the college is having success in achieving its goals can be determined only after a thorough on-campus evaluation. Even a visit to the campus might not enable one to determine whether or not students were achieving some of the intangible goals established by the institution.

In summation, College F has the handicaps and limitations that accompany a small enrollment. It has a somewhat unstable pattern of income sources, and a sizeable deficit. The educational expenditure per student at College F is very small, and the faculty salary schedule is comparatively very low. The college does not have a remedial reading laboratory.

On the other hand, in spite of the financial predicament, the college provides leaves with pay for faculty, and it pays expenses of faculty members who attend professional meetings in their fields. Academically the faculty is fairly well prepared, and the faculty engages in a fair amount of intellectual activity. Working conditions of the faculty, from a quantitative standpoint, appear to be good. There is a

large number of small classes. The library, from a quantitative standpoint, seems to be good. The academic records of incoming students seem to be good, and a very large per cent of the students who matriculate at College F eventually graduate. There seems to be considerable student autonomy, and the college program has a number of unique and interesting aspects.

College F, in the statistical part of the study, was ranked number 5 in regard to quartile rank for all factors and final rank in relation to the median for all factors. In spite of the bleak financial picture, a rating right behind the few outstanding colleges in the study seems appropriate for College F on the basis of the information gathered for this study.

### College G

Factor I - Size and Affluence	Rank
Size of student body.....	3
Size of faculty.....	3
Per cent from the top 20 per cent of high school class.	2
Median salary, instructor.....	3
Median salary, assistant professor.....	8
Median salary, associate professor.....	8
Median salary, full professor.....	6
Median salary, full-time faculty.....	8

Total number of volumes in library.....	5
Total number of periodicals in library.....	3
Educational expenditure per student (weighted).....	7
Mean teaching load (negative)...(reversed).....	11

Factor I: total rank, 68; third quartile,  
3 above median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	7
Expenditure per student (unweighted).....	8
Per cent of budget for admin. and general expense.....	5
Per cent of income from gifts.....	7
Number of volumes per student in library.....	8
Number of periodicals per student in library.....	6
Per cent of income from fees (negative)..(reversed)....	5
Number of major fields (negative)...(reversed).....	11.5

Factor II: total rank, 57.5; second quartile,  
1 below median.

#### Factor III - Academic Climate

Student-teacher ratio.....	7
Per cent of faculty with only M.A.....	9
Maximum teaching load.....	3
Per cent of faculty with Ph.D. (negative)..(reversed)..	10
Per cent of students dropped for academic reasons (negative)...(reversed)....	7

Factor III: total rank, 36; third quartile,  
2 above median.

Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	2
Per cent of expenditure for maintenance and operation..	3.5
Per cent of income from endowment.....	7
Per cent of income from gifts.....	7
Surplus or deficit.....	6
Surplus or deficit per student (weighted).....	9
Median salary, assistant professor (negative)..(reversed)	5

Factor IV: total rank, 39.5; third quartile,  
3 above median.

Factor V - Miscellaneous

Mean teaching load.....	2
Per cent of total expenditures for library (negative)..	
(reversed).....	2

Factor V: total rank, 4; first quartile,  
5 below median.

Final quartile rank for all factors.....	8
Final rank in relation to median for all factors..	6.5

College G is third among the 12 colleges in size with 750 students. Ruml and Morrison would say that it is not large enough to be out of the danger zone, but that its

chances of survival and for having a strong academic program are fair. College G ranks seventh among the 12 colleges in per cent of income from gifts with 28 per cent, and seventh in income from endowment with nine per cent. It ranks eighth in income from fees. The college would probably be in a stronger position if the proportion of income from both student fees and endowment were higher, but the income structure seems to be fairly stable. In 1961 a surplus of \$30,788 gave the college sixth ranking in this category. The surplus might be a little too large, in light of the fact that the college ranked seventh in regard to educational expenditure per student and eighth in regard to median salary for full-time faculty. In regard to salaries, it would seem that the college might be following a policy of expediency. The college ranks third in the category of instructor's median salary, eighth in regard to assistant and associate professor's salaries, and sixth in regard to median salary for full professors. As enrollment increases, it becomes necessary to add new instructors; competition for a limited supply of well-qualified new instructors is great, so the instructor level is raised in order that well-qualified new instructors can be added to the staff. At the other end of the scale, the best prepared and the most proficient teachers, and the campus leaders, are often found in the full professor rank. The rank itself is reward for the qualifications just described.

In order that the college will not lose the outstanding professor-leaders, these persons are given very good salaries, thus raising the salary level for the full professor rank. This could be a description of the salary pattern at College G.

In addition to the mediocre salary schedule, another handicap in the building of a strong faculty at College G is the lack of a system of sabbatical leaves with pay, or even a system of leaves. In view of these facts, it is surprising that the college has been able to assemble a faculty with the strong academic preparation that the College G faculty has. Forty-eight and nine tenths of the faculty have doctor's degrees, and just one has only a bachelor's degree. About 10 of the faculty members have completed all requirements for the doctor's degree except the dissertation, and some will complete this requirement shortly. Intellectually, the faculty seems quite active, judged on a quantitative basis. About 95 per cent attend professional meetings in their fields, and the college pays the costs for attendance at the meetings. Twenty-five of the faculty members are engaged in research, and 16 in writing. One recently published a significant book in the field of banking.

Working conditions for the faculty from a quantitative standpoint are not too good. The maximum teaching load was 16 hours in 1961; it has since been reduced. The mean

teaching load was 15.2 hours; this also has been reduced. The college ranked sixth in student-teacher ratio with a 15 to 1 proportion. But this proportion may be deceptive, as there are 54 classes enrolling 10 or fewer students at College G, and the large-lecture small-discussion section system is used. This is indicated by the fact that the largest class enrolls 245 students. The English writing laboratories for all freshmen enroll a maximum of 15 students per section. Some classes, not a part of the large-lecture small discussion pattern, enroll between 50 and 70 students.

Quantitatively, library holdings are not impressive. College G ranks eighth in volumes per student, and sixth in periodicals per student. In total volumes College G ranks fifth, having 50,000 books in its library. In per cent of educational budget allocated for library acquisitions, College G ranks a poor eleventh.

In prior academic success of freshmen, College G ranks very well. It ranks second in per cent of students who were in the top fifth of their high school classes with 50 per cent, and second in per cent of students who were in the top half of their high school classes with 86 per cent. Nine per cent of the freshmen in 1961 were dropped for academic reasons. That would seem to be a reasonable proportion of academic failures, because with the apparent high academic calibre of students attending College G, a large proportion

of academic failures would seem to fault the faculty. On the other hand, a very small proportion of students dropped for academic reasons could indicate lack of rigor in the academic program. Forty-five per cent of the students who matriculate at College G eventually graduate. This compares well with the other 11 colleges, but it could be improved upon, considering the calibre of students attending College G. A very high per cent--about 24 per cent--go on to graduate school, many of them winning fellowships, scholarships, assistantships, and other awards.

The college apparently gives its students a great deal of opportunity to develop maturity and responsibility. Independent study and honors programs enable students to develop academic independence. And students allocate student activity fees; supervise the publication of the student newspaper, the yearbook, and the magazine; there are dormitory councils charged with government and discipline in the dormitories, and there is a student judiciary court which deals with all-college rules violations in most areas. Students played a major role in developing the student judiciary system and in revising the total college rules structure. A student union board, composed primarily of students, governs activities in the student union. The college does not have an honor system in effect.

The College G program apparently has many unique phases.

College G participates in the advanced placement program of the College Entrance Examination Board. The college provides independent study, honors, and non-Western studies programs. The honors program is both departmental and interdepartmental. The college provides tutoring in writing for all freshmen in the writing laboratory program. A number of sections of a reading laboratory program are held each semester. A Summer orientation program is offered for both incoming freshmen and their parents, and freshmen are also registered for the Fall term during the Summer orientation week. Comprehensive examinations have just been introduced to the campus.

How does College G's performance measure up to its stated goals? The objectives of the college as stated in the college catalog are as follows:

The objectives of \_\_\_\_\_ College are to enable its students to read, listen, speak, and write effectively; to understand and to use the scientific method of investigation; to think logically and to render valid judgment; to see their present in the light of the relationship to the past; to become acquainted with the physical, biological, sociological, and psychological behavior of people; to develop good taste and appreciation of the arts through a sound critical approach; to meet certain specific vocational and pre-professional requirements; to relate the academic disciplines to each other and to life; to understand the nature of the Christian faith and to accept its teachings; to recognize high ethical standards in economic, social, and political life and to feel a sense of responsibility for making constructive contributions to community life; to approach modern social problems with intelligent concern.<sup>9</sup>

The College G goals are seemingly all-encompassing. Whether students achieve these objectives can be determined only by a thorough examination during a visit to the College G campus. However, it is noted that several of the stated objectives are identified with the fields of biology, sociology, and psychology. There are no core requirements in these areas at College G, although courses in these areas can satisfy general core requirements. The student, then, may elect to take course work in areas which could satisfy the biological, sociological, and psychological objectives, but he may also elect not to take course work in these areas, thereby failing to meet these objectives in the formal college program.

In summation, College G seems to have reasonably stable sources of income, and a good-sized surplus. Its educational expenditure per student is just below the median, and its salary schedule is also below the median, but still not bad. Faculty academic preparation is very good, and there seems to be considerable faculty intellectual activity. Library holdings are at about the median. The students seem to have excellent qualifications; many graduate, and many go on to graduate school. There is considerable opportunity for the development of student independence of thought and responsibility. The program seems unique in many respects.

On the other hand, the proportion of the income which

comes from endowment is somewhat small, and the surplus may be large in view of the mediocre faculty salary schedule. There is no system of paid sabbatical leaves, and no system of leaves. The maximum teaching load and the mean teaching load are both much too high. The proportion of the budget allocated for library acquisitions is very small, and library holdings are mediocre, from a quantitative standpoint.

In the statistical part of the study the college was rated as follows: final quartile rank for all factors... 8; final rank in relation to the median for all factors.... 6.5. This is the first of the colleges discussed up to this point whose quartile and median relation ratings were not identical. Since there is a difference, the rating in relation to the median will be used, since this is likely to be a more precise measurement than the quartile rating. On the basis of the information gathered for this study, College G should probably be rated among the middle group of colleges. However, with improvements in a few areas, College G would probably be challenging the better-rated colleges for a top ranking.

#### College H

Factor I - Size and Affluence	Rank
Size of student body.....	8
Size of faculty.....	12
Per cent from the top 20 per cent of high school class	7

Median salary, instructor.....	2
Median salary, assistant professor.....	10
Median salary, associate professor.....	10
Median salary, full professor.....	10
Median salary, full-time faculty.....	10
Total number of volumes in library.....	11
Total number of periodicals in library.....	11
Educational expenditure per student (weighted).....	12
Mean teaching load (negative)....(reversed).....	9

Factor I: total rank, 112; first quartile,  
5 below median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	12
Expenditure per student (unweighted).....	12
Per cent of budget for admin. and general expense.....	8
Per cent of income from gifts.....	10
Number of volumes per student in library.....	9
Number of periodicals per student in library.....	11
Per cent of income from fees (negative)...(reversed)..	6
Number of major fields (negative)....(reversed).....	5

Factor II: total rank, 73; first quartile,  
5 below median.

#### Factor III - Academic Climate

Student-teacher ratio.....	7
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Per cent of faculty with only M.A.....	1
Maximum teaching load.....	5.5
Per cent of faculty with Ph.D. (negative)...(reversed).	1
Per cent of students dropped for academic reasons (negative)...(reversed)....	1

Factor III: total rank, 16; first quartile,  
4 below median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	7
Per cent of expenditure for maintenance and operation..	8
Per cent of income from endowment.....	5
Per cent of income from gifts.....	10
Surplus or deficit.....	11
Surplus or deficit per student (weighted).....	6
Median salary, assistant professor (negative)..(reversed)	3

Factor IV: total rank, 50; third quartile,  
on median.

#### Factor V - Miscellaneous

Mean teaching load.....	4
Per cent of total expenditures for library (negative).. (reversed).....	3

Factor V: total rank, 7; first quartile,  
4 below median.

Final quartile rank for all factors..... 11.5

Final rank in relation to median for all factors..... 12

College H ranks eighth in size among the 12 colleges of the study. Ruml and Morrison would not give it much chance for survival or for giving students a strong academic program. The income pattern seems reasonably stable, with the college ranking tenth in per cent of income received from gifts, seventh in per cent of income derived from fees, and fifth in income from endowment. While the pattern seems sound, apparently the amounts brought in are too small. College H had the second largest deficit--\$27,466--of the 12 colleges, and in educational expenditure per student it ranked twelfth. The educational expenditure per student at College A, when weighted, was nearly 3 times the size of the expenditure at College H. Faculty salaries are comparatively very poor, with College H ranking tenth in the category of median salary figure for full-time faculty. Six faculty members were paid between \$4,000 and \$5,000 a year, and the other 16 full-time faculty members were paid between \$5,000 and \$6,000 per year. Apparently, College H has a salary schedule of expediency. Since competition for new instructors is keen, College H ranks second in median salary for instructors, while in regard to median salary for the assistant, associate, and full professor ranks, College H ranks tenth. Adding to the poor financial picture for faculty is the fact

that no provisions are made for sabbatical leaves either with or without pay.

The faculty academic qualifications seem to reflect the poor financial situation. Only 16 per cent of the faculty hold doctor's degrees, ranking the college twelfth in this category. Two teachers have only an A.B. degree. Only 15 per cent attend professional meetings in their fields, not at college expense. According to questionnaire replies, "very few" are doing research, and "little" writing is being done. The College H questionnaire was not completed in the area of faculty working conditions, so it is difficult to give an evaluation of this area. The student-teacher ratio is 15 to 1, ranking College H sixth in this category. The maximum work load is "generally" 15, and the mean work load is 14 hours, ranking the college ninth in regard to this item.

Quantitatively, the library situation looks poor, also probably reflecting the limited financial resources of the institution. There are 34,000 volumes in the library, placing the college in eleventh position in regard to this item. College H ranks ninth in volumes per student in the library, eleventh in periodicals per student, and tenth in per cent of budget allocated for library acquisitions.

In the area of academic success prior to college attendance, College H students rank just below the median. Twenty

six per cent were in the top fifth of their high school classes, giving College H seventh ranking here; and 66 per cent were in the top half of their high school classes, again ranking College H seventh. Apparently the student body at College H represents fair academic success prior to college, but this was not the major reason they were admitted to College H. College H does not make primary use of what research has shown to be the best known method of predicting college success--examination of the prospective student's high school record--and makes its first criteria for selection references, the second criteria college ability test results, and the third rank of student in high school.

College H incoming students are below the median in regard to prior academic success, yet College H drops no freshmen or upperclassmen for academic reasons. And, 45 per cent of the students who matriculate at College H eventually graduate, ranking College H fifth in this category. Only 12 per cent of College H graduates go on to graduate school, the second lowest percentage reported in this study. It would seem that serious questions could be raised about the quality and the rigorousness of the academic program at College H, and probably a further investigation of this matter should be made at College H.

There is some opportunity given to students at College H to develop mature judgment and responsibility. Students

do allocate student activity fees to various activities, and students supervise the publication of the college newspaper and yearbook. There are dormitory councils with some responsibility for government and student conduct in the college living facilities. There is no all-campus student court, no student participation in rule making, and no honor system.

College H has an honors program, and a remedial program in English, although not in mathematics or reading. However, some attention to reading skill is apparently given in the freshman English course. College H claims no other unique program aspects.

Is College H achieving its stated goals? The institution's goals are stated in the college catalog as follows:

\_\_\_\_\_ College, church affiliated and dedicated to Christian higher education, maintains a positive Christian emphasis in its policies and programs.

\_\_\_\_\_ College, with a long history of success in combined liberal arts-vocational training, maintains a program of teaching the liberal arts necessary for leadership and a full life together with the teaching of skills.

\_\_\_\_\_ College, with a continuous record of full accreditation, is dedicated to academic quality on an ever increasing level.<sup>10</sup>

It is not possible to evaluate fairly whether or not a college is achieving its stated goals unless the evaluator spends considerable time on the college campus. It is possible, however, to raise a question about what the college

means by academic quality, and how this statement can be reconciled with the information gathered for this study.

In summation, the pattern and the proportion of college income sources seems sound. Some opportunity is given to students to develop mature judgment and responsibility in student activities, and the college has an honors program for juniors and seniors.

On the other hand, while the pattern of income is good, the amount would seem to be inadequate. The college has a large deficit, the educational expenditure per student is very small, faculty salaries are very poor, and the library is poorly stocked and supported. Faculty qualifications seem to be very low, and there would seem to be a dearth of professional activity on the part of the faculty. In academic ability, the students would seem to rank just below the median for the 12 colleges. The academic program does not appear to be rigorous or unique.

In the statistical part of the study, College H was ranked last among the 12 colleges. Based on the information gathered for this study, it would appear that a fair ranking for College H would be among a small group of colleges at the bottom of the rank order.

### College I

Factor I - Size and Affluence

Rank

Size of student body.....	1
Size of faculty.....	1
Per cent from top 20 per cent of high school class.....	1
Median salary, instructor.....	1
Median salary, assistant professor.....	4
Median salary, associate professor.....	1.5
Median salary, full professor.....	1
Median salary, full-time faculty.....	1
Total number of volumes in library.....	1
Total number of periodicals in library.....	1
Educational expenditure per student (weighted).....	6
Mean teaching load (negative)....(reversed).....	1

Factor I: total rank, 20.5; fourth quartile,  
6 above median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	6
Expenditure per student (unweighted).....	7
Per cent of budget for admin. and general expense.....	6
Per cent of income from gifts.....	12
Number of volumes per student in library.....	12
Number of periodicals per student in library.....	10
Per cent of income from fees (negative)....(reversed)...	10
Number of major fields (negative)....(reversed).....	11.5

Factor II: total rank, 74.5; first quartile,  
6 below median.

## Factor III - Academic Climate

Student-teacher ratio.....	4
Per cent of faculty with only M.A.....	10
Maximum teaching load.....	9
Per cent of faculty with Ph.D. (negative)..(reversed)..	9
Per cent of students dropped for academic reasons (negative)....(reversed)...	6

Factor III: total rank, 38, third quartile,

3 above median.

## Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	1
Per cent of expenditures for maintenance and operation.	9
Per cent of income from endowment.....	2
Per cent of income from gifts.....	12
Surplus or deficit.....	4
Surplus or deficit per student (weighted).....	11
Median salary, assistant professor (negative)..(reversed).....	9

Factor IV: total rank, 50; third quartile,

on median.

## Factor V - Miscellaneous

Mean teaching load.....	12
Per cent of total expenditures for library (negative).. (reversed).....	11

Factor V: total rank, 23; fourth quartile,  
6 above median.

Final quartile rank for all factors.....	4
Final rank in relation to median for all factors.....	4

College I is the largest of the 12 colleges included in this study. It enrolls 2,180 students, more than twice as many as College L, the second largest institution studied. Partly because it receives so many student fees, it ranks high--third--among the colleges in regard to the proportion of its income received from fees. It ranks second in regard to the per cent of its income derived from endowment, and it ranks twelfth in income derived from gifts, generally regarded as the least stable of major sources of private college income. In 1961 it showed a surplus of about \$44,000, to rank fourth in this category. All of this would seem to present an excellent income picture.

In regard to the item educational expenditure per student, College I ranked sixth, but it is in the area of faculty salaries that the college strongly demonstrates its financial soundness. College I ranks first in regard to median salary for full-time faculty, and its full-time median salary is \$1,175 higher than the median salary at College L, the second ranked institution in this category. For each of the four academic ranks, the median salary at College I is

higher than the median mean figure for the Great Lakes and Plains region, and the College I full-professor median salary is \$1,300 higher than the median-mean figure for the Great Lakes and Plains region. College I pays 9 teachers from \$7,000 to \$8,000 per year, it pays 25 between \$8,000 and \$9,000, it pays 1 between \$10,000 and \$11,000, and it pays 1 teacher over \$12,000 a year. No other college in the study pays a teacher more than \$10,000 a year. To add to the bright salary picture, College I provides its teachers opportunities for sabbatical leaves with pay, and the college pays up to \$250 per teacher toward expenses for attendance at professional meetings.

As would be expected in light of the good salary schedule, College I faculty members have good academic preparation and they are seemingly intellectually active. Forty-six per cent of the faculty have doctor's degrees, ranking the college in fourth position in regard to this item. Six have only B.A. degrees. Forty-nine per cent of the College I faculty members attend professional meetings in their fields, 63 are doing research, and 47 are doing writing.

Working conditions, from a quantitative standpoint, seem to be very good. The college ranks ninth in student-teacher ratio, but class sizes give a more encouraging picture of the teaching situation. There are 117 classes which enroll 10 or fewer students, and since the largest class enrolls 220

students, the large-lecture small-discussion system is probably used. The maximum teaching load is 12 hours, which shares the low rating with the teaching load at 3 of the other colleges in the study. The median teaching load is 10.6 hours, lowest among the 12 colleges.

In total volumes in the library, College I ranks first among the colleges with 97,872. Because of its large enrollment, however, College I ranks last in volumes per student and periodicals per student. There probably should be some weighting here for enrollment size; it seems quite possible that a library of nearly 100,000 volumes, if well selected, could be quite adequate for a student body of 1,000, or of more than 2,000. College I does, however, offer work in 24 major fields, largest number of fields at any of the colleges, so the library should be well stocked in these fields as well as in general areas. For that reason College I probably needs more library holdings than those institutions with fewer major fields. College I ranks second in per cent of total educational expenditures allocated for library acquisitions.

According to indications of prior academic records of incoming freshmen, College I is far ahead of the other 11 colleges in regard to the academic ability of its students. Seventy-two per cent ranked in the top fifth of their high school classes; this figure is 12 per cent higher than the

figure in this category for the second ranked college and 64.5 per cent above the last ranked college in this category. The per cent of students at College I who were in the top 40 per cent of their high school classes is 4 per cent higher than the figure submitted for this category by any of the other colleges for those who were in the top half of their high school classes. College I dropped 7.4 per cent of the freshman class for academic reasons. Forty-two per cent of the students who matriculate at College I eventually graduate.

Students at College I are apparently given considerable opportunity to develop independence, mature judgment, and responsibility. Independent study and honors programs are provided; and students allocate student activity fees, supervise publication of the student newspaper, yearbook, and magazine; participate in the formation of student regulations; and have responsibility through dormitory councils and a student court for student discipline. An honor system is not yet in operation, but is being considered.

The college program seems unique and varied. A non-Western studies program, a European semester, an honors program, a program of independent study, Summer projects, a fellowship program, an advanced placement program, and a Summer orientation program for freshmen would seem to add up to a varied and interesting program. And, even though the

college has the best prepared students of the 12 colleges, College I has a remedial reading program.

Is College I having success in achieving its stated goals? The goals of the institution are stated in the college catalog as follows:

\_\_\_\_\_ College is a Christian liberal arts college that endeavors to unite excellence in academic achievement with dedication in service. Its purpose is to help able young persons to develop, through serious study in the liberal arts and wholesome participation in the life of the College, significant capacities for full and selfless leadership grounded in free inquiry, justice, and compassionate concern for all human beings.

Believing that worthwhile life and a free society hinge upon enlightened intelligence, the College takes its primary task to be the sharing of great ideas among growing minds. The College leads the student so to discern, ponder, discuss, and apply the best that men have thought, felt, and done in the arts, humanities, and sciences that he may grow to be wise in judgment, reasonable in discourse, and resolute in action. The College leads the student in time to bring his studies to focus in a scholarly discipline to the end that he may gain respect for all such disciplines, skill in methods of responsible inquiry, and solid foundations for further study and expanding personal and vocational experience.

Taking good will rooted in faith to be basic, the College seeks to constitute a community exemplifying the spirit of brotherhood. Christian in spirit and \_\_\_\_\_ in background, but not sectarian in outlook, \_\_\_\_\_ endeavors in its instruction, activity and worship to enable the student to develop a philosophy and way of life rooted not only in knowledge and useful capacity, but also in character, sensitivity and reverence. \_\_\_\_\_ seeks to cultivate in all its students constructive citizenship and aspires to bring out in many fearless zeal for justice, freedom and human well-being.<sup>11</sup>

The extent to which a college is meeting its stated

goals can not be determined without an on-campus investigation of the college as it goes about the business of educating its students. However, it would seem that College I has the ingredients--strong financial position, well-qualified faculty and students, and a good library--to make it possible for the realization of "excellence in academic achievement" to which it aspires.

In summation, College I has a strong financial structure, a well-qualified faculty that seems to be intellectually active, a well-stocked library, from a quantitative standpoint, an exceptionally promising student body, considerable student autonomy, a varied and interesting program, and rigorous standards of achievement.

On the other hand, with the high degree of ability which is apparently represented in the student body, it would seem that College I might graduate a larger proportion of matriculating students than the current 42 per cent.

On the basis of the information gathered for this study, it is difficult to find serious fault with College I. In the statistical part of the study, College I was ranked fourth among the 12 colleges. After the examination of the collected information in more detail, it would seem that College I would have to be ranked at or near the top of the group of 12 colleges studied.

College J

Factor I - Size and Affluence	Rank
Size of student body.....	10.5
Size of faculty.....	8
Per cent from top 20 per cent of high school class.....	11
Median salary, instructor.....	9
Median salary, assistant professor.....	1
Median salary, associate professor.....	7
Median salary, full professor.....	4
Median salary, full-time faculty.....	6
Total number of volumes in library.....	8
Total number of periodicals in library.....	6
Educational expenditure per student (weighted).....	2
Mean teaching load (negative).....(reversed).....	9

Factor I: total rank, 76.5; second quartile,  
1 below median.

## Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	2
Expenditure per student (unweighted).....	2
Per cent of budget for admin. and general expense.....	3
Per cent of income from gifts.....	5
Number of volumes per student in library.....	3
Number of periodicals per student in library.....	2
Per cent of income from fees (negative)...(reversed)...	1

Number of major fields (negative)...(reversed)..... 1.5

Factor II: total rank, 19.5; fourth quartile,  
5 above median.

#### Factor III - Academic Climate

Student-teacher ratio..... 1  
 Per cent of faculty with only M.A..... 1.5  
 Maximum teaching load..... 5.5  
 Per cent of faculty with Ph.D. (negative)...(reversed). 3  
 Per cent of students dropped for academic reasons (nega-  
 tive)...(reversed).... 2

Factor III: total rank, 13; first quartile,  
6 below median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class..... 11  
 Per cent of expenditures for maintenance and operation. 11  
 Per cent of income from endowment..... 11  
 Per cent of income from gifts..... 5  
 Surplus or deficit..... 12  
 Surplus or deficit per student (weighted)..... 12  
 Median salary, assistant professor (negative).....  
 (reversed)..... 12

Factor IV: total rank, 12; first quartile,  
6 below median.



\$1,088, second highest among the 12 institutions. And the median salary for full-time faculty members is \$6,000, giving College J sixth ranking in this category. College J has a rather peculiar salary structure from the standpoint of rank. Its assistant professor median is \$450 higher than its associate professor median. In the assistant professor category, College J ranks first among the 12 colleges, while in instructor's salaries it ranks ninth, in the associate professor category it ranks seventh, and in the full professor category it ranks fourth. College J ranks above the median mean for the Great Lakes and Plains region in the assistant professor rank, but it is well below the median mean in each of the other 3 ranks. College J has a range of nearly \$6,000 between its lowest and its highest salaries, the lowest being between \$3,000 and \$4,000, and the highest being between \$8,000 and \$9,000. College J provides faculty leaves, but without pay. It does pay expenses for teachers attending professional meetings in their fields.

In spite of the above-median level of salaries at College J, the college has been relatively unsuccessful in assembling a faculty with good academic preparation. Only 18 per cent--third lowest of the 12 colleges--have doctor's degrees. Two have only B.A. degrees. Beyond teaching, the faculty output is relatively small. Only 2 faculty members are doing writing. Eighty per cent, however, attend programs

of professional meetings in their fields. The student-teacher ratio--19 to 1--at College J is the highest reported at any of the 12 colleges. In spite of the high ratio, the maximum teaching load of 15 hours per semester ranks College J not too far below the median with a 7.5 ranking. In the mean teaching load College J ranks ninth with a 14 hour load. College J has 46 classes enrolling 10 or less, and it has 2 large classes, each enrolling 99 students. Apparently the large-lecture small-discussion system is used.

There are 42,000 volumes in the library, ranking the college eighth in regard to this item; it ranks sixth in the periodicals category. Largely because of the small enrollment, College J ranks third in volumes per student and second in periodicals per student. In the category of per cent of total educational expense allocated to the library, College J earned a 3.5 ranking.

In regard to academic success prior to college attendance, College J students rank very low. College J has 20 per cent of its incoming freshmen from the top fifth of their high school classes, to rank eleventh in this category. Thirty-two per cent were in the top half of their high school classes, giving College J another eleventh place ranking. Only 3.6 per cent of the 1961 freshman class were dropped for academic reasons, ranking the college second lowest in

regard to this item. Since the calibre of incoming students seems comparatively low, and the number dropped for academic reasons is comparatively low also, this raises a question about the rigorousness of the academic program at College J. Only 31 per cent of the students who matriculate at College J graduate, ranking the college eleventh in this category.

Some opportunity is given students to develop responsibility. Students do allocate student activity fees, and they supervise the publication of the yearbook. There are dormitory councils with some authority for control of conduct in college housing. "A little" opportunity is given students to participate in rule making. There is a program of independent study.

Students do not supervise the publishing of the student newspaper. There is no student judiciary council to handle cases of all-campus rules violations. There is no honor system. There is no honors program.

The college claims no unique features in its program except the opportunity given students for independent study. There are remedial programs in English and mathematics at College J, but no remedial reading program. Considering the prior academic records of its entering students, it would seem reasonable to expect College J to consider establishing a reading program.

Is College J achieving its stated goals? The following

is quoted from the college catalog.

As a church-related liberal arts college, the College \_\_\_\_\_ tries to offer the means to the highest intellectual development in a Christian environment, so that the student will be encouraged to accept and to practice Christian living and to think in terms of Christian principles and standards.

A liberal arts college works to prepare those who attend it for a successful rewarding life. It works to motivate and to lead the students to develop their whole personality through a knowledge of, and appreciation of, the cultural heritage of the human race, assuming that such an education provides the best foundation for later professional training, or executive careers in business and industry, or government service, or leadership in community and national and international affairs, and for an acceptable family life.<sup>12</sup>

Without an intense on-the-campus examination of an institution, no firm judgment can be made about the extent to which the college is achieving its goal.

In summation, College J has a very small enrollment, seemingly endangering its ability to survive and to offer a strong academic program. The income structure of College J does not appear to be sound, and the very large deficit raises serious questions about the future of the institution. The faculty is comparatively poorly prepared, and not very productive in scholarship. College J has the largest student-teacher ratio of any of the 12 colleges. The students, judged on their high school records, generally have not been successful academically--at least, not as successful as the students at 10 of the other 12 colleges. The program, as it

is presented on paper, seems not to reflect vitality and creativity.

On the other hand, salaries are comparatively not too bad, since College J ranks just above the median for the 12 colleges in regard to median salary for full-time faculty. The library holdings, from a quantitative standpoint, are fairly good for the size of the institution, but any sudden enrollment growth would likely render the library inadequate. There is some opportunity for students to develop mature judgment and responsibility.

In the statistical part of the study, College J was ranked 9.5 in relation to the other 11 colleges. On the basis of the information gathered for this study, it would seem that College J would have to be placed with the few colleges ranked at the bottom of the total group.

#### College K

Factor I - Size and Affluence	Rank
Size of student body.....	5
Size of faculty.....	6
Per cent from top 20 per cent of high school class.....	5
Median salary, instructor.....	6
Median salary, assistant professor.....	5
Median salary, associate professor.....	5
Median salary, full professor.....	5

Median salary, full-time faculty.....	4
Total number of volumes in library.....	10
Total number of periodicals in library.....	7
Educational expenditure per student (weighted).....	5
Mean teaching load (negative)...(reversed).....	6

Factor I: total rank, 69; third quartile,  
1 above median.

#### Factor II - Proportional Income and Allocation

Expenditure per student (weighted).....	5
Expenditure per student (unweighted).....	5
Per cent of budget for administration and general ex- pense.....	10
Per cent of income from gifts.....	6
Number of volumes per student in library.....	5
Number of periodicals per student in library.....	5
Per cent of income from fees (negative)..(reversed)....	6
Number of major fields (negative).....(reversed).....	7

Factor II: total rank, 38; third quartile,  
2 above median.

#### Factor III - Academic Climate

Student-teacher ratio.....	7
Per cent of faculty with only M.A.....	5
Maximum teaching load.....	5.5
Per cent of faculty with Ph.D. (negative).....	6

Per cent of students dropped for academic reasons (negative)...(reversed).... 11

Factor III: total rank, 34.5; third quartile,  
1 above median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class..... 8  
 Per cent of expenditures for maintenance and operation. 5  
 Per cent of income from endowment..... 8  
 Per cent of income from gifts..... 6  
 Surplus or deficit..... 8  
 Surplus or deficit per student (weighted)..... 8  
 Median salary, assistant professor(negative).(reversed) 8

Factor IV: total rank, 51; second quartile,  
3 below median.

#### Factor V - Miscellaneous

Mean teaching load..... 7  
 Per cent of total expenditures for library (negative)..  
 ..(reversed)..... 4.5

Factor V: total rank, 11.5; second quartile,  
3 below median.

Final quartile rank for all factors..... 6.5  
 Final rank in relation to median for all factors..... 6.5

College K, with 600 students, ranks fifth among the 12

colleges in size. Its future survival and its ability to conduct a strong academic program would be doubted by Ruml and Morrison. However, based on the information gathered for this study, College K does not now appear to be in serious financial difficulty. Its proportion of income from the stable endowment source is not large, giving the college eighth ranking in this category. It ranks a not-too-bad sixth in regard to both income from gifts and income from fees. In 1961 it showed a \$3,864 deficit, ranking it eighth in this category.

In expenditures for educational purposes, College K does fairly well, comparatively speaking. It ranks a strong fifth in educational expenditure per student, and it ranks a good fourth in median salary for full-time faculty members. College K pays 2 teachers between \$4,000 and \$5,000 per year, 9 teachers between \$5,000 and \$6,000, 12 teachers between \$6,000 and \$7,000, and 6 teachers between \$7,000 and \$8,000. The College K assistant professor median is slightly above the median mean salary for the Great Lakes and Plains region. In addition to the fairly good salary schedule, another stimulant to faculty morale should be the sabbatical-with-pay plan in effect at College K. The college also pays \$50 toward the expenses of each teacher for attendance at professional meetings.

The faculty salary schedule ranks higher than the

qualifications of the faculty. Thirty-seven per cent have doctor's degrees, ranking the college seventh in this category. Only 30 per cent--second lowest among the 12 colleges--attend professional meetings in their fields. A good number--23 per cent--are engaged in research, and 19 are doing some writing. Teaching conditions, from a quantitative standpoint, seem to be average in relation to the other 11 colleges. A student-teacher ratio of 15 to 1 gives College K seventh ranking in this category. There are 39 small classes, and there are 4 classes which enroll in the vicinity of 104 students each. Probably the large-lecture small-discussion method is used in some courses. The maximum teaching load is 15 hours, and the mean teaching load is 13 hours, a figure placing College K just above the median in regard to this item.

There are over 37,000 total volumes in the College K library, giving the college tenth ranking in this category. It ranks seventh in total number of periodicals, with 207. In number of volumes per student, the picture is much the same, with the college earning a 10.5 ranking. In periodicals per student, the college ranked fifth. In regard to per cent of total educational budget allocated for library expenditures, College K received an 8.5 ranking. Judging solely on a quantitative basis, the library picture at College K does not look good, but there are extenuating

circumstances. The college has a well-stocked seminary library on the campus, and its students have access to 2 other college libraries located in the same town as College K.

Students at College K had fair academic success prior to matriculating at college. Thirty-three and four tenths per cent of incoming freshmen were in the top fifth of their high school classes, and 64.1 per cent were in the top half of their high school classes. Fifty-four per cent of incoming students at College K eventually graduate. Fourteen and three tenths per cent of the 1961 freshman class were dropped for academic reasons.

There seems to be considerable student autonomy on the college campus. Students allocate student activity fees, they supervise publication of the college newspaper and year-book, they have dormitory councils for regulating conduct in college housing, and students help in establishing rules to govern student conduct. There are opportunities for academic maturing through independent study. There is no honors program, no student judiciary court, and no honor system.

Good incoming students may secure advanced placement, and opportunity for independent study is provided. A unique phase of the program is the junior year abroad plan. There is a remedial English course, but no remedial reading.

Looking at the information gathered for this study, does

it seem that College K is achieving its stated goals? The goals, as presented in the college catalog, are as follows:

The College believes that its program should be distinguished by its genuinely liberal character, and by its ability to initiate a process of growth that will continue throughout the life of the student.

The immediate objective of the College is to direct the student toward the attainment of the skills, understandings, appreciations and attitudes which will develop:

1. Basic comprehension of the major fields of human thought
2. Ability to think reflectively and critically
3. Facility in communication
4. Effective citizenship
5. Physical and emotional health
6. Aesthetic sensitivity
7. Christian growth
8. Vocational competence or orientation<sup>13</sup>

The extent to which a college is achieving its goals must be determined by an on-the-scene evaluation.

In summation, College K seems to have a student body of fairly good ability. These students are given a good amount of autonomy in academic and social life. The junior year abroad program apparently gives students a unique opportunity to learn. Advanced placement and independent study opportunities are provided. The educational expenditure and the faculty salary schedule are both good. And a large number of faculty members are doing research and writing.

On the other hand, the enrollment is just a little above the median for the 12 colleges. The financial picture is not strong, including as it does a modest deficit. The

per cent of faculty members holding doctor's degrees is below the median, and a comparatively small per cent of the faculty attend professional meetings. The library holdings, judged on quantity, are not good, and the per cent of total budget allocated to the library is below the median for the 12 colleges.

In the statistical part of the study, College K was ranked 6.5 in relation to the other 11 colleges. On the basis of the information gathered for this study, it would seem that College K would have to be ranked with a small group of colleges near the median of the 12 colleges.

#### College L

Factor I - Size and Affluence	Rank
Size of student body.....	2
Size of faculty.....	2
Per cent from top 20 per cent of high school class....	3
Median salary, instructor.....	7
Median salary, assistant professor.....	3
Median salary, associate professor.....	1.5
Median salary, full professor.....	2
Median salary, full-time faculty.....	3
Total number of volumes in library.....	2
Educational expenditure per student (weighted).....	4
Total number of periodicals in library.....	4

Mean teaching load (negative)...(reversed)..... 3

Factor I: total rank, 36.5; fourth quartile,  
5 above median.

Factor II - Proportional Income and Allocation

Expenditure per student (weighted)..... 4

Expenditure per student (unweighted)..... 6

Per cent of budget for administration and general ex-  
penses..... 7

Per cent of income from gifts..... 11

Number of volumes per student in library..... 7

Number of periodicals per student in library..... 12

Per cent of income from fees (negative)..(reversed).... 11

Number of major fields (negative)...(reversed)..... 9

Factor II: total rank, 67; second quartile,  
3 below median.

Factor III - Academic Climate

Student-teacher ratio..... 11

Per cent of faculty with only M.A..... 11

Maximum teaching load..... 9

Per cent of faculty with Ph.D. (negative)..... 11

Per cent of students dropped for academic reasons (nega-  
tive)....(reversed).... 8.5

Factor III: total rank, 50.5; fourth quartile,  
5 above median.

#### Factor IV - Financial Stability

Per cent from top 50 per cent of high school class.....	5
Per cent of expenditures for maintenance and operation.	7
Per cent of income from endowment.....	4
Per cent of income from gifts.....	11
Surplus or deficit.....	3
Surplus or deficit per student (weighted).....	10
Median salary, assistant professor (negative).....	
.....(reversed).....	10

Factor IV: total rank, 50; third quartile,  
on the median.

#### Factor V - Miscellaneous

Mean teaching load.....	10
Per cent of total expenditures for library (negative)..	
.....(reversed).	6

Factor V: total rank, 16; third quartile,  
3 above median.

Final quartile rank for all factors.....	3
Final rank in relation to median for all factors.....	3

College L has a comparatively substantial enrollment of 1,009 students, ranking the college second in this category. It seems to have a strong pattern of sources of income, ranking fourth in per cent of income from endowment, and second in income from student fees. The less reliable source of

gifts finds College L ranking eleventh. College L, in 1961, had a surplus of \$45,512, for third place in this category. So, the student and income picture at College L seem bright.

In expenditures College L ranks high, also. It ranks a strong fourth among the 12 colleges in educational expenditure per student, and third in regard to median salary for full-time faculty members. College L seems to have a well-balanced salary pattern, having a range of from between \$4,000 and \$5,000 to from \$8,000 to \$9,000 for 9 months. The salaries seem well distributed over this range. Six teachers are paid between \$8,000 and \$9,000 per year. College L's median salaries for assistant professor, associate professor, and full professor are above the median mean figures for these ranks for the Great Lakes and Plains region. Adding to the bright salary picture, College L provides sabbatical leaves of 1 year with full pay for full-time faculty members who have been on the staff for a minimum of 7 years. The college also pays expenses of faculty members for attendance at professional meetings in their fields.

The strong salary structure seems reflected in the academic strength of the faculty, judged on a quantitative basis. Forty-nine per cent of the College L faculty members hold doctor's degrees. Three have only the bachelor's degree. Seventy-five per cent of the faculty members are doing research and writing. Fifty per cent attend professional

meetings. Working conditions for the faculty, judged quantitatively, seem good. The student teacher ratio is 13 to 1, second low among the 12 colleges. There are 125 classes in which 10 or fewer students are enrolled. The largest class enrolls 96, and there are 9 classes of similar size. The maximum teaching load is 8 courses per year, or about 12 hours, and the mean teaching load is 12 hours or less per semester.

Library holdings, judged quantitatively, look rather good. College L ranks second in total volumes, with 70,000. It ranks fourth in total number of periodicals. Because of its large enrollment, it does not rate very well in volumes per student--seventh rank--and periodicals per student--twelfth rank. In per cent of budget allocated for library acquisitions, it ranks seventh.

College L ranks high regarding the prior academic performance of its incoming freshmen. Forty-six per cent ranked in the top fifth of their high school classes, giving College L third position in this category, and 77 per cent were in the top half of their high school classes, giving College L a fifth place ranking in this category. A low 33.3 per cent of matriculating students eventually graduate. Ten and three tenths per cent of the 1961 freshman class were dropped for academic reasons.

College L provides its students with considerable

autonomy. Students allocate student activity fees; supervise publication of the student newspaper, yearbook, and magazine; have dormitory councils responsible for conduct in college housing, and have some involvement in the determination of student regulations. There is no all-campus student court and there is no honor system. There are an independent study program and an honors program to develop student academic initiative and responsibility.

The college program seems imaginative and unique. Advanced placement, independent study, and honors work are basic in the College L program. Also, there is a non-Western studies program, an Argonne semester, a senior seminar program, a reading program, and junior oral examinations. Senior comprehensive examinations will be instituted shortly. There is remedial English, remedial reading, and remedial mathematics.

Does this information about College L indicate that the college is achieving its stated goals? The institution's goals are presented in the college catalog as follows:

\_\_\_\_\_ College, a Christian institution of higher learning, is dedicated to the liberal arts and sciences, and to truth and moral excellence. Its faculty members, most of whom have the highest earned degrees awarded by leading universities, share in this dedication. They invite the students to participate with them, through classes, independent study, and discussion, in mutual intellectual advancement.

\_\_\_\_\_ has as its primary purpose the

preparation of young men and women to cope intellectually and intelligently, effectively and responsibly with the complex and changing conditions of life in modern society. The College leads the student into contact with the past and present cultures of western and other civilizations, and with the modern achievements and prospects in the arts and sciences. It thus offers the student an opportunity to develop a sensitivity to the creative achievements of man, an enduring desire for knowledge, an awareness of man's relative position in society and in the universe, an attitude of humble, diligent, and honest inquiry after truth for truth's sake, regardless of consequences, and the ability to apply logical thinking and clarity of expression to findings and problems.<sup>14</sup>

Only after a thorough on-campus examination can an evaluator make a judgment about how well a college is achieving its stated goals. A case could be made concerning the statement concerning faculty preparation: "Its faculty members, most of whom have the highest earned degrees awarded by leading universities..." The college reported only 49 per cent of its full-time faculty members hold doctor's degrees. However, concerning the college goals in general, it would seem that the college has the faculty, student, and library resources to make possible the attainment of the stated goals.

In summation, College L has a large enrollment and a strong pattern of income; it spends a relatively large amount on the education of each student, it has a comparatively good salary schedule, it provides sabbatical leaves with pay, it pays expenses of faculty to professional meetings, and still

it ends a fiscal year with a sizeable monetary surplus. It has a well-prepared, intellectually-active faculty working under seemingly good conditions with a well-selected student body in a program that is imaginative and varied and which provides students with considerable autonomy.

On the other hand, the proportion of the budget allocated for the library is below the median, and there is some question concerning the quantitative adequacy of the library holdings for an institution the size of College L. The percent of students entering College L who eventually graduate appears low, considering the calibre of the entering students.

In the statistical part of the study, College L was ranked third among the 12 colleges. On the basis of the information gathered for this study, it would seem that College L would have to be ranked with the top few of the 12 colleges.

#### Quartile and Median Rankings

The following are the tabulated quartile and median rankings for the 12 colleges in relation to each of the 5 factors. The tabulations are listed on the following page.

TABLE VIII

Quartile Rank  
(Fourth Quartile is highest rank)

	Factor I	Factor II	Factor III	Factor IV	Factor V	Total Rank figures	Final Rank
A	3	4	4	4	3	18	A- 18 1
B	2	2	2	4	3	13	C- 16 2
C	4	3	4	1	4	16	L- 16 3
D	1	4	2	3	1	11	I- 15 4
E	2	1	1	1	2	7	F- 14 5
F	1	3	2	4	4	14	B- 13 6.5
G	3	2	3	3	1	12	K- 13 6.5
H	1	1	1	3	1	7	G- 13 8
I	4	1	3	3	4	15	D- 11 9.5
J	2	4	1	1	3	11	J- 11 9.5
K	3	3	3	2	2	13	E- 7 11.5
L	4	2	4	3	3	16	H- 7 11.5

Number Above and Below Median

	Factor I	Factor II	Factor III	Factor IV	Factor V	Total Rank figures	Final Rank
A	2 above	6 above	4 above	6 above	2 above	+20	A +20 1
B	3 below	2 below	3 below	5 above	on med.	- 3	C +12 2
C	4 above	3 above	6 above	5 below	4 above	+12	L +10 3
D	6 below	4 above	2 below	2 above	6 below	- 8	I + 9 4
E	2 below	4 below	5 below	4 below	2 below	-17	F + 5 5
F	4 below	1 above	1 below	4 above	5 above	+ 5	G + 2 6.5
G	3 above	1 below	2 above	3 above	5 below	+ 2	K - 2 6.5
H	5 below	5 below	4 below	on med.	4 below	-18	B - 3 8
I	6 above	6 below	3 above	on med.	6 above	+ 9	D - 8 9.5
J	1 below	5 above	6 below	6 below	on med.	- 8	J - 8 9.5
K	1 above	2 above	1 above	3 below	3 below	- 2	E -17 11
L	5 above	3 below	5 above	on med.	3 above	+10	H -18 12

<sup>1</sup>College A catalog, \_\_\_\_\_ College, 1961-62.

<sup>2</sup>College B catalog, \_\_\_\_\_ College, 1961-62.

<sup>3</sup>Guide for the Evaluation of Institutions of Higher Education, p. 36.

<sup>4</sup>College C catalog, \_\_\_\_\_ College, 1961-62.

<sup>5</sup>The Church and Higher Education, p. 6.

<sup>6</sup>College D catalog, \_\_\_\_\_ College, 1961-62.

<sup>7</sup>College E catalog, \_\_\_\_\_ College, 1961-62.

<sup>8</sup>College F catalog, \_\_\_\_\_ College, 1961-62.

<sup>9</sup>College G catalog, \_\_\_\_\_ College, 1961-62.

<sup>10</sup>College H catalog, \_\_\_\_\_ College, 1961-62.

<sup>11</sup>College I catalog, \_\_\_\_\_ College, 1961-62.

<sup>12</sup>College J catalog, \_\_\_\_\_ College, 1961-62.

<sup>13</sup>College K catalog, \_\_\_\_\_ College, 1961-62.

<sup>14</sup>College L catalog, \_\_\_\_\_ College, 1961-62.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

This study was begun with the realization that there are numerous problems facing higher education and that these problems are being intensified and multiplied by conditions both within higher education and outside higher education in the society served by the colleges and universities. It seems reasonable to assume that if higher education is to meet successfully a large proportion of the problems it faces, it is going to have to marshal the resources of considerable and diverse research on colleges, universities, and their product--graduated students. It was hoped that this study might be helpful to the 12 colleges surveyed and to the Board of Christian Education of the denomination with which the colleges are affiliated; and it was hoped that the study might contribute, in some small measure, to higher education as it seeks to do a good job and evaluate the job it is doing.

The goal of the study was to get some indications of the comparative merit of the educational programs of 12 colleges through: (1) the gathering by questionnaire of objective information concerning the faculty, working conditions for the faculty, the students, degree of student autonomy, the

program, and the library; (2) an examination of the college goals as stated in the college catalog; and (3) the analysis of college income and expenditures as presented in the college financial records. The purposes of the study were threefold: (1) to demonstrate the type of objective information which could be gathered through use of a questionnaire, the college catalog, and the college financial records; (2) to illustrate how this information could be used in a preliminary step in evaluating colleges; and (3) to give each of the 12 responding institutions some evidence concerning the strength of its educational program in relation to the programs at the other 11 colleges.

A copy of the questionnaire appears in the appendix, and the tabulated questionnaire results and the information taken from the college financial records are presented in the tables on pages 44 through 48, fulfilling purpose one. Purpose two has already been accomplished in Chapter III, with the following results: On the basis of the information gathered for this study, Colleges A, C, L, and I would be the top-ranked group of colleges; Colleges F, G, K, and B would constitute a middle-ranked group; and Colleges D, J, E, and H would make up the bottom-ranked group of colleges. Purpose three will be fulfilled by the mailing of the tabulated results of the questionnaire responses to each of the responding colleges.

In the first chapter it was pointed out that this study was intended as a preliminary evaluation of 12 colleges. Any final ranking of the colleges must wait for on-the-campus follow-up studies, and for studies of alumni success and opinion of alumni concerning the institutions from which they were graduated. Such follow-up surveys would add qualitative information to the primarily quantitative information presented in this study. It is expected that the qualitative information would, to a large degree, support the findings based on this study's quantitative material. To be sure, further study may well reorganize slightly the rankings of colleges within one of the three groups presented in the preceding paragraph. And, a college may be moved up into the group above or down into the group below. But it is very unlikely that a college ranked in the top group in this study, would, after additional investigation of the college, be dropped into the bottom group; and the converse seems hardly more likely.

#### Conclusions About the Study

An examination was made of the effectiveness of each of the 5 major categories and each of the 34 items in determining the eventual ranking of the 12 colleges. Among the factor groupings, the rankings the colleges received in regard to items under Factor III far more nearly approximated the

final rankings the colleges received than did the rankings in any of the other 4 categories. Factor I was second in this regard, Factor IV was a distant third, Factor II was fourth, and Factor V was fifth. Rankings in regard to all items under Factor II showed a significant relationship to the final rankings given to the colleges. Of the rankings according to relationship of item rating to final ranking, Factor III showed item rankings of 1, 2, 3, 5, and 15.

Among the items, those in regard to which the rankings of the colleges most closely approximated the final college rankings, in the order of approximation, are as follows:

(1) per cent of doctor's degrees on the faculty, (2) student-teacher ratio, (3) per cent of persons on the faculty having a master's degree but no doctorate, (4) mean teaching load, (5) maximum teaching load, (6.5) total number of volumes in the library, (6.5) per cent of income from endowment, (8) weighted educational expenditure per student, (9) median salary for full professor, (10.5) total number of periodicals per student, (10.5) non-weighted educational expenditure per student, (12) median salary for assistant professor, (13) surplus or deficit, (14) number of full-time faculty members, and (15) the per cent of freshmen dropped for academic reasons.

In further analyzing the factors, it was learned that ranking in 2 factors produced definite patterns in regard to

institution size--enrollment. In Factor I, large schools tended to be ranked at the top, and small schools at the bottom. In Factor II, the situation was reversed; small colleges tended to be rated at the top, and large schools at the bottom. The colleges whose final ranking was first through fourth under Factor I ranked first, second, seventh, and third in regard to total enrollment. Under Factor II, the colleges whose final ranking was first through fourth ranked ten and five tenths, ten and five tenths, twelfth, and seventh in total enrollment. College C, with a just-under-the-median enrollment ranking of seventh, ranked among the top 4 under both Factor I and Factor II in regard to all items under each factor. Enrollment figures for the top-ranked 4 colleges under Factor I total 4,500; enrollment figures for the lowest 4 ranked colleges under Factor II total 1,651, and for the bottom 4 colleges the enrollment total is 4,366. It would appear that Factor I discriminated against the small college, and Factor II discriminated against the large college.

One final analytic look at the total study points up an area of weakness. Several institutions included in the study reported that they did not have complete information about number of graduates who went to graduate school, and response to the query about numbers of graduates who had received graduate assistantships, fellowships, awards, and

grants for graduate study was very poor. It was, therefore, not possible to have the outcome of the statistical part of the study influenced in any way by information about the product of the colleges--the graduate. The importance of gathering information about the graduate in any attempt to evaluate the education received at a particular institution is indicated by Freedman as follows:

In the long run the best evaluation of the meaning of a college education is likely to result from studies of alumni.<sup>1</sup>

Of course, Freedman is referring to much more than a counting of the number of graduates who attend graduate school and the number who receive assistantships and graduate awards of various kinds. He is referring to the long-term study of the graduates to determine what effect college had on them. Freedman later explains:

Ideally, college experience must be viewed from a developmental point of view that encompasses the whole life span.<sup>2</sup>

Here Freedman is suggesting that the college experience must be viewed as a part of the student's total life experience, and if the student's college experience is to be judged, it will be necessary to know something about the student before, during and after the college years. It would seem that only some such long-range study of the student could provide a really accurate picture of what the college did for the student, and therefore what the quality of the education

is that the student received in college.

### Recommendations

The Board of Christian Education of the denomination with which the colleges of this study are affiliated wants to know the comparative quality of the colleges of the denomination. A preliminary evaluation of the quality of 12 colleges is given in this study. However, since the beginning of the gathering of information for this study, there have undoubtedly been changes made at some or all of the colleges which, in some instances at least, would alter to some degree the outcome of the evaluations of this study if the colleges were evaluated again today. Therefore, an evaluation of the denomination's colleges today, no matter how accurate the evaluation might be, could be a completely inaccurate judgment of the colleges 1 year, 2 years, or 5 years from today. It would seem, therefore, that the Board might want to consider a program of periodic, possibly annual, evaluations of the denomination's colleges. This may seem like a prodigious undertaking, but it does not necessarily need to be so.

An annual evaluation program of the colleges could be established in the following way. First, factual and objective information, such as that gathered for this study, could be assembled for all the denomination's colleges. Second,

very thorough evaluations of the colleges could be made by teams of evaluators who would visit the campuses, as well as collect information about the alumni of the colleges. These campus visitors could use the previously gathered objective information as a basis for on-the-scene evaluations. Third, there should then be two evaluations made of each college--one based on the objective information such as that used in this study, and one based on the subjective evaluations of the teams who visited campuses and studied college alumni. Fourth, the results of the two types of studies should be compared. There would undoubtedly be extremely high correlations between the results of the two types of evaluations. And there would undoubtedly be a number of objective items which would show a very high correlation with the combined results of the two types of evaluative studies. These significant objective items, which would probably approximate the list of items in this study which ranked the 12 colleges in similar fashion to the final ranking, could be combined in a brief questionnaire form to be filled out annually by the colleges and submitted to the offices of the Board of Christian Education. Each college already submits an annual financial report to the offices of the Board, and the Division of Higher Education of the Board could then combine the significant financial information with the objective information from the

questionnaire, and thereby develop a continuing picture of the denomination's colleges. Occasionally, when the information in the Board offices would seem to warrant it, a particular college might be visited for the purpose of collecting supplementary information about the college.

Similarly, the dearth of information about the long-range effect of college on the student could be remedied. If one or more foundations could be interested in supporting studies involving a number of colleges; if the studies were of the long-term duration suggested by Freedman, involving the study of the student before he goes to college, during the college years, and after college; and if similar long-range studies were conducted concurrently among comparable young people who did not attend college, then colleges might get some real insight into what they are doing that is producing the lasting effects they want for their students. And, it would then probably be possible to isolate a number of objective items that were consistently present when the desired effects of higher education were occurring during the college years. The most prominently reoccurring of these factors might then be combined into a relatively brief yardstick by which the effectiveness of an institution might be judged without the necessity of going through the expensive and time-consuming long-range type of evaluative study.

<sup>1</sup>The American College, p. 847.

<sup>2</sup>Ibid., p. 883.

## BIBLIOGRAPHY

- Boroff, David. Campus USA. New York: Harper & Bros., 1961, pp. 190-204.
- Brumell, Kevin. Faculty Work Load. Washington: The American Council on Education, 1960, pp. 3-36.
- \_\_\_\_\_. College Survey. Philadelphia: Executive Committee Survey of \_\_\_\_\_ Denomination, 1952.
- Corson, John J. Governance of Colleges and Universities. New York: McGraw-Hill Book Company, Inc., 1960, pp. 177-182.
- \_\_\_\_\_. Guide for the Evaluation of Institutions of Higher Education. North Central Association of Colleges and Secondary Schools, 1960.
- Henderson, A. Policies and Practices in Higher Education. New York: Harper & Bros., 1960, pp. 29-49, 97-113, 279-321.
- Hungate, Thad L. and McGrath, Earl J. A New Trimester Three Year Degree Program. New York: Columbia University Press, 1963.
- McGrath, Earl J. The Quantity and Quality of College Teachers. New York: The Columbia University Press, 1961, p. 1-24.
- Murphy, Lois B. and Raushenbush, Esther. Achievement in The College Years. New York: Harper & Bros., 1960.
- \_\_\_\_\_. Phi Beta Kappa Pamphlet, "The Founding of New Chapters."
- \_\_\_\_\_. Revised Manual of Accrediting. North Central Association of Colleges and Secondary Schools, 1960.
- Reeves, Floyd E., et al. The Liberal Arts College. Chicago: 1932, p. 8.

Rosecrance, F. C. The American College and Its Teachers.  
New York: The McMillan Company, 1962, pp. 49-52,  
133-136.

Ruml, Beardsley and Morrison, Donald H. Memo to a College  
Trustee. New York: McGraw-Hill Book Company, Inc.,  
1959, pp. 1-94.

\_\_\_\_\_. The American College. ed. Nevitt Sanford,  
New York: John Wiley and Sons, Inc., 1962.

Selden, William K. Accreditation. New York: Harper & Bros.,  
1960.

\_\_\_\_\_. Salaries Paid and Salary Practices in  
Universities. Higher Education Series Research Report,  
Washington: Office of Higher Education, 1960.

Woodring, Paul and Scanlon, John. American Education Today.  
New York: McGraw-Hill Book Company, Inc., 1963, pp.  
6-17.

College A catalog, \_\_\_\_\_ College, 1961-62.

College B catalog, \_\_\_\_\_ College, 1961-62.

College C catalog, \_\_\_\_\_ College, 1961-62.

College D catalog, \_\_\_\_\_ College, 1961-62.

College E catalog, \_\_\_\_\_ College, 1961-62.

College F catalog, \_\_\_\_\_ College, 1961-62.

College G catalog, \_\_\_\_\_ College, 1961-62.

College H catalog, \_\_\_\_\_ College, 1961-62.

College I catalog, \_\_\_\_\_ College, 1961-62.

College J catalog, \_\_\_\_\_ College, 1961-62.

College K catalog, \_\_\_\_\_ College, 1961-62.

College L catalog, \_\_\_\_\_ College, 1961-62.

## QUESTIONNAIRE

1. Please number the following criteria in order of their importance in your admissions procedure: recommendations (\_\_\_\_), high school rank(\_\_\_\_), interviews with applicants(\_\_\_\_), college ability test scores(\_\_\_\_), other\_\_\_\_\_
- 

2. What per cent of each of your freshman classes in the last four years were in the top 20 per cent and the top 50 per cent of their high school graduating classes?

	top 20%	top 50%
1958 freshman class	( )	( )
1959 freshman class	( )	( )
1960 freshman class	( )	( )
1961 freshman class	( )	( )

3. For each of the last four years, indicate the number of applicants for admission to the freshman class, the number accepted, and the number who matriculated.

	applications received	freshmen admitted	freshmen matriculated
1958	( )	( )	( )
1959	( )	( )	( )
1960	( )	( )	( )
1961	( )	( )	( )

4. Of those students who entered your college as freshmen, what per cent graduated in each of the last 4 years?  
(Students who transferred to your college after the

freshman year should not be counted.)

1958(\_\_\_\_) 1959(\_\_\_\_) 1960(\_\_\_\_) 1961(\_\_\_\_)

5. Of those who drop out before receiving a degree at your college, approximately what per cent do so for each of the following reasons: to enter medical(\_\_\_\_), engineering(\_\_\_\_), dental(\_\_\_\_), or law(\_\_\_\_) school; receive nurses certificates(\_\_\_\_); because of marriage(\_\_\_\_), academic difficulties(\_\_\_\_), financial difficulties(\_\_\_\_), or lack of interest in college work(\_\_\_\_); other(\_\_\_\_)
6. Is an academic probation system used?(\_\_\_\_) Is a student placed on academic probation given a specific goal to achieve (such as a grade point average)?(\_\_\_\_)
7. How many students from each of the freshman, sophomore, junior and senior classes were dropped by the college for academic reasons at the conclusion of each of the last four semesters?

	Fr.	Soph.	Jr.	Sr.
Fall semester, 1960	(____)	(____)	(____)	(____)
Spring semester, 1961	(____)	(____)	(____)	(____)
Fall semester, 1961	(____)	(____)	(____)	(____)
Spring semester, 1962	(____)	(____)	(____)	(____)

8. Indicate in what areas of campus activity students take considerable responsibility.

Does the student government allocate student fees to various activities?(\_\_\_\_)

Does the student government supervise the publication of the college newspaper(\_\_\_\_), the college yearbook(\_\_\_\_),

and the college magazine?(\_\_\_\_)

Do dormitory councils govern conduct in the dorms?(\_\_\_\_)

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Is there a student court empowered to try cases of all campus rules violations?(\_\_\_\_)

Do students participate in the making of conduct rules?  
(\_\_\_\_)

Is there an honor system operating on the campus?(\_\_\_\_)

9. What per cent of each graduating class went to graduate school in each of the last four years?

1957(\_\_\_\_)      1958(\_\_\_\_)      1959(\_\_\_\_)      1960(\_\_\_\_)

10. In each of the last four years, what per cent of the graduating class received

	1959	1960	1961	1962
assistantships.....	(____)	(____)	(____)	(____)
fellowships.....	(____)	(____)	(____)	(____)
scholarships.....	(____)	(____)	(____)	(____)
grants.....	(____)	(____)	(____)	(____)
awards for graduate study?	(____)	(____)	(____)	(____)

11. How many full-time teachers are on your staff?(\_\_\_\_)
12. How many of your full-time teachers' highest earned degree is a doctor's degree(\_\_\_\_), a master's degree(\_\_\_\_), a bachelor's degree(\_\_\_\_)?
13. Among the full-time teachers, how many of the master's degree holders with no doctorate have 20 hours(\_\_\_\_), 40 hours(\_\_\_\_), or more than 40(\_\_\_\_) of graduate work

beyond the master's degree?

14. How many of your full-time teachers have done graduate study in the last 5 years(\_\_\_\_) or 10 years(\_\_\_\_)? How many who have not attended graduate school in the last 10 years have attended institutes or workshops in the last 5 years(\_\_\_\_) or 10(\_\_\_\_)?
15. What per cent of your full-time teachers regularly attend professional meetings in their fields?(\_\_\_\_) Do they attend local(\_\_\_\_), regional(\_\_\_\_), and national(\_\_\_\_) professional meetings?
16. Does the college pay all or the major part of the expenses of teachers attending professional meetings?(\_\_\_\_)
17. What was your student-teacher ratio during the last academic year?(\_\_\_\_\_)

In how many class sections during the 1961-62 year were there 10 or less students?(\_\_\_\_)

How many students were enrolled in your largest class section in 1961-62?(\_\_\_\_)

During 1961-62, how many sections were as large or nearly as large as the largest section?(\_\_\_\_)

18. How many of your full-time teachers have been engaged in research(\_\_\_\_) or writing(\_\_\_\_) in their fields during the last five years?(\_\_\_\_)
19. Does your institution have a faculty enrichment program? (\_\_\_\_) (For example: Are there meetings in which faculty

devote themselves to the study of good teaching and testing techniques, or learning more about academic areas other than their own)?

20. How many of your full-time teachers are teaching in areas other than the one in which they have had the major part of their preparation? (\_\_\_\_) Explain: \_\_\_\_\_

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21. Are teachers' loads computed on the basis of student credit hours? (\_\_\_\_) If not, what method is used? \_\_\_\_\_

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22. Do you have an established maximum teaching and other work load for faculty members? (\_\_\_\_) What has this maximum been in each of the last four years? 1959(\_\_\_\_), 1960(\_\_\_\_), 1961(\_\_\_\_), 1962(\_\_\_\_)

23. What has been the mean load for full-time teachers in each of the last four years? 1959(\_\_\_\_), 1960(\_\_\_\_), 1961(\_\_\_\_), 1962(\_\_\_\_)

24. Do you have provisions for granting a leave of absence? (\_\_\_\_) Do you provide income for a teacher during a leave of absence? (\_\_\_\_) Explain: \_\_\_\_\_

25. How many full-time teachers left your faculty in each of the last four years because of resignation or dismissal?

	Resignation	Dismissal
1959	( )	( )
1960	( )	( )
1961	( )	( )
1962	( )	( )

26. In your institutional sampling of student opinion in regard to individual faculty members during the last four years, how many different full-time teachers have received more than a very small amount of criticism of their teaching?(\_\_\_\_) What have you done about these teachers?\_\_\_\_\_
27. Does your college have a detailed long-range development plan?(\_\_\_\_) Does it involve curriculum(\_\_\_\_), staff(\_\_\_\_), salaries(\_\_\_\_), enrollment(\_\_\_\_), plant(\_\_\_\_), equipment(\_\_\_\_), finances needed(\_\_\_\_), sources of finance(\_\_\_\_), other\_\_\_\_\_
28. For superior students, do you have provisions for giving advanced placement(\_\_\_\_); do you have a program of independent study(\_\_\_\_); do you have an honors program(\_\_\_\_)?
29. Do you have remedial programs in English(\_\_\_\_), reading(\_\_\_\_), mathematics(\_\_\_\_), other\_\_\_\_\_?
30. The following are sometimes considered unique phases of college programs. Please indicate which are a part of your program, and list other unique phases of your program.

An English writing laboratory program for all freshmen  
(\_\_\_\_)

A program of non-Western studies(\_\_\_\_)

A Summer orientation program for freshmen and their parents(\_\_\_\_)

In the Fall, small orientation sections using group dynamics techniques(\_\_\_\_)

A reading laboratory(\_\_\_\_)

Weekly or bi-weekly reports to the Dean's office on grades and absences for freshmen and probation students(\_\_\_\_)

A Washington, D.C. semester(\_\_\_\_) or Summer(\_\_\_\_)  
 A European semester(\_\_\_\_) or Summer(\_\_\_\_)  
 Other \_\_\_\_\_

31. If you have an audio-visual center in which records are kept regarding the frequency of the use of audio-visual equipment, please supply the tabulations on use of the various types of equipment for the 1961-62 school year.
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If no such figures are kept, indicate which of the following instructional aids your teachers make frequent use of: language laboratory(\_\_\_\_), opaque projector(\_\_\_\_), overhead projector(\_\_\_\_), films(\_\_\_\_), slides(\_\_\_\_), tapes(\_\_\_\_), recording machines(\_\_\_\_), closed circuit TV(\_\_\_\_), teaching machines(\_\_\_\_), other \_\_\_\_\_

32. Are study groups continually working toward the improvement of the college program?(\_\_\_\_) What groups? \_\_\_\_\_
33. When was your most recent major revision of your curriculum done?(\_\_\_\_) Briefly describe the proportions of this revision. \_\_\_\_\_
34. Do you make use of comprehensive examinations over more than single course areas?(\_\_\_\_) At what point or points in a student's four years does he take these examinations?  
 \_\_\_\_\_
35. In how many fields can students earn majors?(\_\_\_\_)
36. Do students receive formal instruction in the use of the library?(\_\_\_\_) How? \_\_\_\_\_

37. What is the total number of volumes in your library?  
(\_\_\_\_\_)
38. How many periodicals are regularly received in the library?(\_\_\_\_\_)
39. What per cent of the college budget is annually set aside for library acquisitions?(\_\_\_\_\_)
40. In relation to the curriculum and the goals of the college, would you rate the library holdings poor(\_\_\_\_), fair(\_\_\_\_), adequate(\_\_\_\_), good(\_\_\_\_), excellent(\_\_\_\_)?
41. Do you have a good working relationship with other college and university libraries?(\_\_\_\_) Please explain
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## VITA

Melvin G. Scarlett

Candidate for the Degree of

Doctor of Education

**Thesis:** A PRELIMINARY COMPARATIVE EVALUATION OF THE  
EDUCATIONAL PROGRAMS OF TWELVE MIDWESTERN  
COLLEGES

**Major Field:** Higher Education

### Biographical:

**Personal Data:** Born in Reading, Pennsylvania,  
December 30, 1920, son of Clarence A. and  
Mossie Ritzman Scarlett.

**Education:** Attended grade school in Reading, Penn-  
sylvania; graduated from Mt. Penn High School in  
1938; received Bachelor of Arts degree from  
Catawba College (N.C.), with a major in English,  
in August, 1946; received the Master of Arts de-  
gree from University of Florida, with major in  
journalism, in June, 1951; completed requirements  
for the Doctor of Education degree in May, 1964.  
Selected for "Who's Who Among Students in American  
Colleges and Universities" in 1944-45 and 1945-46;  
president of junior and senior classes; member of  
student senate for 3 years; elected to Alpha Chi,  
Kappa Delta Pi, Phi Delta Kappa and Sigma Delta Chi.

**Professional experience:** Affiliated with American  
College Public Relations Association, National Edu-  
cation Association, Association for Education in  
Journalism, Kiwanis, Chamber of Commerce. For 16  
years has taught undergraduate and graduate stu-  
dents; has been an administrator at Marshall Univer-  
sity, Northwestern State College and Kent State  
University. He is currently Dean of the College  
at Hastings College, Hastings, Nebraska.