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FORCES SHAPING THE HUMANITIES IN PUBLIC TWO-YEAR COLLEGES

The University of Arizona PH.D. 1980

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FORCES SHAPING THE HUMANITIES IN PUBLIC TWO-YEAR COLLEGES

by

Joseph Lappin Marks

A Dissertation Submitted to the Faculty of the

CENTER FOR THE STUDY OF HIGHER EDUCATION

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

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THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

As members of the Final Examination Committee, we certify that we have read the dissertation prepared by Joseph Lappin Marks entitled Forces Shaping the Humanities in Public Two-Year Colleges and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

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Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to the Graduate College.

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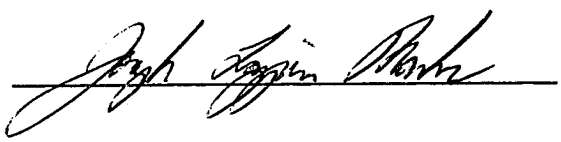
SIGNED: 

This dissertation is dedicated to the memory of Raymond E. Schultz: a man who always sought the challenge of responding to students' and educators' needs, who always exceeded the challenge, who was always an inspiration, and whose influence and works are a pervasive, diffused, and eternal monument to the vision of what the community college can contribute to the development of individual human potential.

ACKNOWLEDGMENTS

This study was made possible by the availability of financial, enrollment, staffing, and humanities condition data on public two-year colleges. These data were available from a variety of sources. Higher Education General Information Survey (HEGIS) institutional enrollment data were made available by the Center for the Study of Higher Education (CSHE) at the University of Arizona. HEGIS institutional financial data were made available by CSHE and the National Center for Higher Education Management Systems (NCHEMS). Humanities condition data collected by the Los Angeles based Center for the Study of Community Colleges (CSCC) were made available by the CSHE. Finally, the sample institutions made available certain institutional and humanities condition data.

Many individuals aided in the collection of the data for this study. Kenneth G. Brown, Senior Analyst CSHE, and Marilyn McCoy, Senior Staff Associate NCHEMS, drew relevant HEGIS finance data from computer tapes. Robert L. Friend, Systems Analyst II CSHE, drew relevant CSCC humanities condition data from computer tapes. In addition, Arthur M. Cohen, President CSCC, and Randy Beckwith and Nancy J. Mattice, Staff Associates CSCC, provided assistance

with the CSCC data tapes. Finally, there was the assistance of many administrators and staff members in the sample institutions, who provided vital mail survey data.

Several University of Arizona agencies provided assistance. The College of Education made available funds for the computer analyses. This financial support was a vital and necessary contribution. The University Computing Center was the site of the computer analysis. The availability of appropriate packaged programs and consulting expertise was an important contribution to this study. In particular, Sue Ciolek-Torello, Computing Center Consultant specializing in the Statistical Package for the Social Sciences (SPSS), provided vital assistance. The Committee on Statistics conducts a consulting service (Consulting Lab). Gregory T. Schwemer, Assistant Professor, provided valuable assistance.

Two individuals assisted in the preparation of the manuscript. Meredith Snap of the Arizona Commission for Postsecondary Education and Arizona State University System and Procedures Office provided necessary editorial advice. Jolene Unruh of Typing Unlimited provided necessary format advice.

This study is the culmination of an intense advanced degree program. As such the contribution of the Dissertation Director and Dissertation Committee was

substantial. Larry L. Leslie, Professor of Higher Education and dissertation Director, contributed his keen sense of research design coherence and analytical proficiency. Raymond E. Schultz, Professor of Higher Education and Major Advisor, contributed inspirationally to the quest to understand and thereby promote enhancement of the humanities in public two-year colleges. Arthur T. Grant, Professor of Higher Education, contributed his thorough attention to detail and substance. All provided valuable research design and editorial advice as well as necessary personal support and inspiration.

In conclusion, it must be acknowledged that whatever shortcomings or mistakes remain in the study are the sole responsibility of the author.

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ABSTRACT

In the steady-state 1970's institutional reactions to downturns in enrollment and financial growth were theoretically expected to have damaged the humanities in public two-year colleges. But, at the same time, the humanities were expected to respond, counteracting detrimental consequences.

A nationwide sample of public two-year colleges, comprising about fourteen percent of the total was selected for study. Three sets of variables were used. Institutional conditions were measured by four financial and enrollment change variables. Humanities conditions were measured by six financial, enrollment, and staffing variables. Humanities responsiveness was measured by constructing an indicator from seventeen variables representing adaptive responses. Descriptive statistics and canonical correlation analysis results were produced to test the research questions.

Institutional conditions changed substantially, revealing markedly reduced instructional and per student expenditures while overall enrollments and expenditures increased dramatically. Three circumstances appeared to explain these discrepant changes. Institutions probably

realized economies of scale through enrollment growth. While expenditures did increase dramatically over inflation, inflation contributed to widening the gap between proportional enrollment and income growth. Increased costs may have resulted from the support service demands of the greatly expanded number of students, and from cost increases due to increased organizational complexity. Probably, as a result of these three influences, per student expenditures declined so markedly. Possibly the impact of inflation, increased support service costs, and complexity costs, reduced severely the potential for cost savings through economies of scale and as a result the growth of the 1970's brought financial strain, which would be expected to heighten pressures on the humanities.

Humanities conditions, however, appeared surprisingly strong. Enrollments and FTE faculty increases were observed. The enrollment share declined while the FTE faculty proportion remained stable. On institutional comparative measures the humanities full-time to part-time faculty ratio increased while the humanities student to faculty ratio decreased. Thus, compared to changes in conditions outside the humanities, the humanities had enrollment growth coupled with increased full-time faculty that resulted in favorable, from the standpoint of quality, instructional conditions.

However, from the standpoint of relative costs, humanities conditions may be unfavorable. The humanities FTE faculty share was stable while they served proportionally fewer students. Also, the relatively increasing proportion of full-time faculty is relatively more costly to support than the relatively decreasing proportion outside the humanities. Finally, the relatively decreasing class size is relatively more costly than the relatively increasing class size outside the humanities.

Paradoxically the humanities appeared strong at the same time unfavorable cost comparisons and possibly strained institutional conditions were emerging. This paradox may be explained by the principle that incrementally earned support shares are maintained by strong inertial forces and that humanities courses are an integral, and historically central, part of the two-year college curriculum. Possibly the degree of humanities responsiveness, which appeared low, was partially responsible for the strong showing of the humanities.

The hypothesis that institutional reactions to changing financial and enrollment conditions would be clearly damaging to the humanities was not supported. However, given the eroding enrollment share base in the humanities and the relatively increasing costs in the humanities, detrimental consequences may not be too far over the

horizon. With the apparently strong inertial forces promoting the maintenance of the humanities and rededicated efforts to respond to the threatening forces, the humanities in public two-year colleges can probably be maintained and enhanced.

CHAPTER 1

FRAMEWORK FOR THE STUDY

Introduction

There exists a crisis mentality on the part of college and university educators in the United States regarding the condition of humanities education. Titles such as "Much Ado About Little? The Crisis in the Humanities" (Carter 1978), and "Saving the Humanities" (Cohen 1977b) indicate something of the perceived depth of the crisis.[1]

The essence of the current mood is captured by Lawrence in a recent analysis of the status of the humanities. "The foremost fact about the humanities is that they are in a state of disarray. Indeed, there are signs of panic. . . . This has been going on for several years, and the level of alarm and lamentation has steadily risen" (Lawrence 1978, p. 254). Another recent observer declares: "The humanities . . . are in trouble. They are plagued. . . . Dire predictions are made as to their future . . ." (Carter

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1. Other striking titles include: "The Discomfited Humanities" (Bonham 1978), "The Faculty and the Humanities: Two Endangered Species" (Cohen 1976a),"The Survival of the Humanities" (Poznar 1977), "The Demoralized Humanist" (Marcus 1975), "Are the Humanities Really Out of Style?" (DeMott 1975), and "Is There Still Room for the Humanities?" (Turesky 1975).

1978, p. 35). These recent observations are not without their predecessors. After completing preliminary studies of the humanities in two-year colleges in the mid-1970's, Cohen warned: "Educators do not yet realize the dire situation of the humanities . . ." (Cohen 1976a, p. 1).

Underlying the perception of crisis are analyses of changing forces in society and higher education that are believed to have detrimental consequences for the humanities. Social malaise and fragmentation are said to have reoriented people away from values inherent in humanities education (Poznar 1977; DeMott 1975; Murchland 1976; Bonham 1978; Lasch 1975; Thiroux 1975; McGrath 1975, 1976; Bell 1966; Boyer and Kaplan 1977). The view that higher education is to be evaluated in economic cost-benefit terms (Bird 1975; Freeman 1976) supports the observation that training for making a living is coming to have a greater value than education for living.[2] Humanities educators, through specialization, are accused of undermining the unity of the humanities (Anderson 1975, 1976; Bowen 1975; Birnbaum 1975; Marcus 1975; McGrath 1975, 1976; Bennett 1977; Epstein 1977). The most widely identified threatening force cited with responsibility for the crisis in humanities education is the

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2. There are those who respond by trying to show the limitations of the "economic" framework and in the process support a value framework more conducive to humanities education (Bowen and Associates 1977).

stabilization, or decline, in enrollment growth with its accompanying financial stringency.

Statement of the Problem

The central issue this study addresses is determining to what degree and in what way the condition of humanities education in public two-year colleges is affected by the changing financial and enrollment conditions of the institutions in which these programs operate.[3]

It is not claimed that financial and enrollment conditions are the only conditions that affect the condition of the humanities. Many other influences need to be taken into account in a totally comprehensive assessment of the condition of humanities education in public two-year colleges. However, the financial and enrollment influences chosen as the focus of this study are central to recent discussions of humanities education.

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3. The availability of a major nationwide set of data, collected by the Center for the Study of Community Colleges (CSCC) under the direction of Arthur M. Cohen, makes it possible to pursue this analytical study of the condition of humanities education in this sector. The CSCC research includes private two-year colleges which are omitted from the present study for reasons explained below. The CSCC research was funded by a grant from the National Endowment for the Humanities.

Analytical Framework

In Higher Education and the Steady State Leslie and Miller present the key theoretical principle used in the analytical framework of this study. The principle is "transverse progression": "overall, growth must continue to occur in essential social systems so long as the society itself continues to progress, as opposed to decay" (Leslie and Miller 1974, pp. 1-2). The authors maintain that higher education may be considered an essential social system.

In a period of slow growth or decline deviations from the upward trend of the line of transverse progression (i.e., deviations from uniform growth) bring about difficulties for those in the higher education system (Leslie and Miller 1974, p. 12). These difficulties in turn stimulate efforts to adjust the higher education system such that the deviations are reduced, i.e., growth is resumed.

Leslie and Miller identify five categories of adjustments; the introduction of new products, the introduction of new production methods, the opening of new markets, the employment of new supplies of productive factors, and the reorganization of the enterprise (Leslie and Miller 1974, p. 2).[4] It is, Leslie and Miller believe, through the effects

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4. The categories of adjustments are derived from the earlier work of Schumpeter.

of the implementation of these adjustments that higher education will "pull itself" out of the steady state and resume the long-term growth pattern. Or, as they state it, "as innovations occur, are adopted, and are consolidated, the total net effect is progress, or transverse progression" (Leslie and Miller 1974, p. 25).

Given the current pressures stimulating adjustments, different functions of higher education are affected in different ways. For the most part the forces today external to higher education see the higher education system as a provider of trained personnel for the economy. Leslie and Miller note that "a society evolving in technological and sociological complexity must be accompanied by a social institution able to keep pace with the demands for skilled and enlightened manpower" (Leslie and Miller 1974, p. 20). The higher education system is seen as such a system. But the higher education community (and elements of the general community) see the higher education system as having functions beyond that of meeting the labor force needs of the nation: "higher education responds not only by meeting perceived needs, but also by defining them, that is, by . . . balanc[ing] the fulfillment of [perceived] needs . . . with the responsible criticism of these perceptions" (Leslie and Miller 1974, p. 28). Further, higher education serves to educate an informed and responsible citizenry, encourages responsible social

criticism, acts as a center for the development of knowledge and the arts, and is a repository for the transmission of cultural heritage. These latter general-liberal education functions are functions primarily identified with the aims of humanities education.

The general-liberal education functions closely identified with the aims of humanities education, however, are presently of low priority in American higher education. The current readjustment pressures, brought on by lowered growth rates, are for job-related training.[5] Leslie and Miller forecast that "enrollment shifts will continue to occur internally, with direct job-related fields benefiting often at the expense of the liberal arts" (Leslie and Miller 1974, p. 26). This statement is borne out by statistics not available at the time Leslie and Miller completed their work. For example, during a period of overall enrollment growth, between 1971-1972 and 1975-1976, the total number of bachelor's degrees awarded rose 40,300. Yet, for the same period, the number of degrees awarded in the category of "letters" (which includes the "verbal" humanities) fell 21,300, representing a twenty-nine percent decrease. In contrast health professions, over the same period, showed an

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5. During the 1970's student enrollment behavior has become increasingly sensitive to labor-market fluctuations (Rusk 1980).

increase of thirty-eight percent (U.S, Department of Commerce 1978, p. 169).

Important declines have also been found in two-year colleges. Cohen discovered that over the two years between spring, 1975 and spring, 1977 that "enrollments in [their] sample of 178 colleges were up by 7.4 percent while humanities enrollments were down by three percent" (Cohen 1977b, p. 4). Garland Parker finds similar declines in two-year college humanities enrollments between 1973-1974 and 1974-1975 (Parker 1974, 1975).

The current pressures have created a sort of "zero-sum game" in which the deck is stacked against the maintenance or enhancement of humanities education. Exogenous forces are applying pressure that forces enrollment and income growth for the higher education system in a downward direction. This generates counter forces within the institutions stimulating adaptations. The adaptations tend to enhance job-related studies and deemphasize humanities education. Humanities education, however, acts as an adjusting system itself. Forces within the humanities act to stimulate its recovery.

If this analytical framework is correct, the humanities in public two-year colleges in the United States should be characterized by evidence of decline in relation to the degree of financial and enrollment stringency characteristic

of the institutions and by internal evidence of adaptation to these negative forces.

Research Expectations

If the degree of financial stringency characteristic of an institution is a measure of the strength of the forces for adaptation stimulated, then it is expected that the condition of the humanities would be least adversely affected where the financial and enrollment conditions of institutions are strongest and most adversely affected where the financial and enrollment conditions of institutions are weakest. In other words, where institutional conditions are weakest humanities conditions are expected to be poorer because the adaptations stimulated will tend, for the most part, to stifle the humanities. Yet the humanities act as an adjusting system, so where institutional conditions are weaker humanities responsiveness is expected to be stimulated.

CHAPTER 2

METHODOLOGY

Definition of the Humanities

This study utilizes Center for the Study of Community Colleges (CSCC) 1977 Facilitator Survey and 1977 Instructor Survey data and the CSCC definition of the humanities. The humanities are defined as those disciplines

> . . . falling under the rubric of the National Endowment for the Humanities. These included cultural anthropology, art appreciation and history, foreign languages (including English as a second language), history, literature, interdisciplinary humanities, music appreciation and history, philosophy, political science, religious studies, and social studies (including cultural geography and ethnic and women's studies). According to NEH's definition . . . the performing arts were excluded as were English composition and physical anthropology and geography . . . (CSCC and ERIC 1978, pp. ii-iii).

Sampling Procedure

The sampling procedure employed in the CSCC studies is a type of stratified systematic sampling. The list of institutions asked to participate was chosen by starting at a random point and selecting every fifth public and every fifth private institution from the alphabetized array in the 1977 Community, Junior, and Technical College Directory (American Association of Community and Junior Colleges

[AACJC] 1978). Knowing that some institutions would choose not to participate, the CSCC categorized institutions by region, age, size, organization, and emphasis. When categories were overrepresented or underrepresented in the accumulating sample, additional random selections of institutions in an appropriate category were made.

Once the list of participating institutions was established, a campus humanities representative was selected, acting as an on-site facilitator for the CSCC studies. The facilitators responded to the Facilitator Survey. In addition, 860 respondents to the Instructor Survey were selected randomly from course schedules. Sampled were only those humanities sections that listed instructors by name (Cohen 1976b; CSCC and ERIC 1978).

The institutions that form the sample for the present study are the public institutions from the list of institutions participating in the CSCC studies. As a result of the CSCC methodology, the sample in this study is a systematic sample of public two-year colleges that were listed in the 1977 Community, Junior, and Technical College Directory (AACJC 1978). The sample contains 142 institutions constituting 13.88 percent of all the public institutions

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6. A list of the institutions that comprised the sample for this study is contained in Appendix A.

listed in the 1977 Community, Junior, and Technical College Directory (AACJC 1978).[6]

Sample Characteristics

The detailed statistics characterizing the sample are in the series of tables in Appendix B. The sample is fairly representative by region and age, but noticeably underrepresents small institutions. The Northeastern Region is underrepresented by 5.4 percent (Tabe B.1).[7] The Middle States Region is overrepresented by 4.8 percent (Table B.1). The Southern Region is underrepresented by 1.8 percent (Table B.1). The Midwestern Region is underrepresented by 2.6 percent (Table B.1). The Mountain Plains Region is overrepresented by 1.9 percent (Table B.1). The Western Region is overrepresented by 3.1 percent (Table B.1). The average sample institution is two years older than the average public two-year college (Table B.2). The average sample institution is 1,258 headcount students larger than the average public two-year college (Table B.3). Although no population comparisons are available, Table B.4 contains the institutional emphasis breakdown for the sample and Table B.5 contains the institutional organization breakdown of the sample institutions.

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7. Appendix G lists the states that comprised the regional classifications.

In order to assess the overall adequacy of the sample, further analysis is needed. Eighty data elements were collected for the study necessitating the use of numerous data sources. One result was that complete sets of data for each institution were not acquired. Sixty-six institutions in the sample have complete data sets; seventy-six do not. For some analyses the sample is the sixty-six; for some analyses the sample approaches the 142 figure.[8] The further question of the representativeness of the group that is not missing data is addressed because some results are based only on this group.

In order to address the question of the representativeness of the group without missing data, Chi-square and t-tests were conducted to determine whether significant differences exist between the two groups.[9] The group of institutions missing data and those not missing data are not significantly different in regional breakdown at the .05 level (Table B.6). The two groups are not significantly different in age breakdown at the .05 level (Table B.7). The two groups are significantly different in size breakdown at the .05 level (Table B.8). Institutions with

---

8. In the Findings chapter the exact number of institutions which form the sample for each particular analysis is indicated.

9. It must be remembered that these tests are comparisons, not to the population but comparisons within a slightly biased sample of institutions.

headcount enrollment over 7000 are underrepresented in the all-variables-present group. The two groups are significantly different in organizational breakdown at the .05 level (Table B.9). Multi-campus institutions (including branch campuses) are underrepresented in the all-variables-present group. The two groups are not significantly different in emphasis (comprehensive versus non-comprehensive) breakdown at the .05 level (Table B.10). The mean values of the independent and dependent variables for the two groups are not significantly different at the .05 level (Table B.11). This is, of course, the most important test because it shows that even though the institutions may differ significantly in some demographic traits, the variables under scrutiny do not vary significantly. The result of this analysis is that the sixty-six, all-variables-present institutions, which formed the major part of the group of institutions upon whose data the conclusions of the study rest, probably are not less representative of the population in vital ways than is the entire sample. Failure to find significant differences, of course, does not prove that the two groups are the same.

Data Sources

Institutional full-time equivalent (FTE) enrollment data are from National Center for Educational Statistics

(NCES) Fall Enrollment in Higher Education publications (NCES 1973, 1978). Institutional headcount and humanities class enrollment data are from the CSCC Facilitator Survey data set. Institutional financial data are from Higher Education General Information Survey (HEGIS) Financial Statistics data sets, and from Halstead's Higher Education Prices and Price Indexes publications (Halstead 1975, 1978). Institutional faculty data are from the 1977 Community, Junior, and Technical College Directory (AACJC 1978). Humanities financial and staffing data are from a mail survey described below. Humanities responsiveness data are from the CSCC Facilitator Survey and Instructor Survey data sets.[10]

As indicated, a short mail survey was conducted to provide needed data elements not available from other sources. The procedure used to maximize response rate is from Leslie (1970). Leslie's procedure is designed to maximize response rates to long questionnaires. Although the current survey questionnaire is in no manner long, the Leslie guidelines were adopted as the best means to maximize the response rate.

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10. Appendix C specifies all data elements and indicates the source of each data element. Appendix D contains facsimilies of the survey forms from which the data sets for this study were taken.

The first step in the process of collecting the data was the development of the questionnaire. A postcard format was chosen to emphasize the small amount of information requested and to facilitate completion of the questionnaire and the return of completed questionnaires. The postcard questionnaire provided the definition of the humanities employed in the study and requested three financial data elements, four staffing data elements, and one institutional organization data element. The postcard questionnaire was self-addressed and stamped. The postcard questionnaire and letter of transmittal were approved by The University of Arizona Human Subjects Committee.

On June 18, 1979, a letter of transmittal explaining the study and requesting participation in the study was mailed to the president of each of the institutions in the sample. Enclosed in this mailing was a copy of the postcard questionnaire. On July 6, 1979, a postcard reminder was mailed to presidents who had not responded. On July 26, 1979, the final follow-up procedures began. These procedures consisted of requesting from those who had responded clarifications of responses or the provision of data left blank on a questionnaire. Presidents who had not responded were telephoned. These follow-up procedures were completed by August 18, 1979, and the last response was received in September. Seventy-five percent of the questionnaires were

returned with full or partial information. A total of eighty-five percent were returned.

Definitions and Computations of the Variables

For manipulation and analysis, the framework concepts and research expectations were translated into more concrete entities. Three sets of these more concrete entities, or variables, were called for. First, to operationalize the concept of "institutional condition" (see Research Expectations), variables or measures of the financial and enrollment condition of the sample institutions were constructed. Second, to operationalize the concept of "humanities condition," variables, or measures of the financial and enrollment condition of the humanities within the sample institutions were required. Third, to operationalize the concept of "humanities responsiveness" variables, or measures of the responsiveness of the humanities within the sample institutions were constructed.

To specify appropriate financial and enrollment variables, the literature on the topic was examined. A number of authors developed sets of indicators of economic well-being of institutions of higher education. Lupton and Associates (1976) identify sixteen key indicators through discriminant analysis. For the most part the Lupton and Associates indicators consist of ratios emphasizing current

operating budget data. In addition they include two enrollment-trend variables and two expenditure-trend variables, plus an institutional sector variable (public-private). Sanjabi (1977) circulated an alternative indicator set that is much wider in scope: defining twenty-seven enrollment variables, twenty-financial variables, and thirty-two program variables. The striking differences between these two approaches is that Lupton and Associates choose variables for which there are comparable, nationwide data, while Sanjabi's "checklist" is more suitable for self-analysis by individual institutions. Minter (1979) and Dickmeyer and Hughes (1979a) also propose indicators for evaluating institutional financial condition. Both of these approaches emphasize changes in key variables over time. Dickmeyer and Hughes present five environmental measures, four financial flexibility measures, six financial response measures, and four program impact measures. Minter chooses seven indicators representing the "three components of the higher education enterprise, staff, students, and money" (Minter 1979, p. 19).

The approach taken in this study was to define a basic set of financial and enrollment variables that reasonably could be expected to have an impact on educational program activities. The variables were measured at two points in time so that the degree and direction of change

in these variables could be assessed. Since the CSCC collected vital data for this study in the fall and winter of 1977, institutional enrollment and financial data covering the previous five year period were used in order to insure as much as possible that sufficient reaction time to these conditions existed. Percentage change measures were used to standardize the variables across institutions of various types, as in the case of institional size.

Institutional Condition Variables

Sanjabi and Minter propose enrollment and change in enrollment as a key indicator. Thus the first of the institutional condition variables used in this study was percentage change in institutional FTE enrollment: 1971-1972 to 1976-1977.[11] The value of this variable was derived in the following manner: for fall of 1971, the FTE enrollment figure was taken from figures published by NCES (NCES 1973, pp. 236 ff.). For the academic year 1976-1977, an FTE figure was derived by taking one-third of the sum of the part-time students and adding the sum of

11. The period 1972-1973 to 1977-1978 was not used because 1977 fall enrollment data were not available at the time data were collected.

the full-time students (NCES 1978, p. 64 ff.).[12] From these values the percent of enrollment change was calculated.

Revenue and expenditure variables figure prominently in all of the proposed sets of indicators. The total current funds revenues variable is used in ratios by Lupton and Associates (1976) and by Dickmeyer and Hughes (1979a, 1979b). Change in current funds revenues is used by Sanjabi (1977) and by Minter (1979). Dickmeyer and Hughes (1979a, 1979b), Lupton and Associates (1976), and Minter (1979) emphasize total current funds expenditures also as a free standing indicator or as a ratio component.

Since the current study restricts attention to public two-year colleges, it was surmised that each institution's revenue and expenditure data are nearly the same, thus making unnecessary the use of both revenue and expenditure data for analysis. Indeed preliminary analysis of the data found this to be the case. Percent total current funds revenue change 1972-1977 and percent total current funds expenditure change 1972-1977 were found to be correlated at .94. Percent change in revenues per student 1972-1977 and percent change in expenditures per student 1972-1977 were found to be correlated at .97.

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12. Fall 1976 FTE values are not available from NCES. Appendix C specifies the computation formulae for all variables.

Another preliminary finding was that revenue variables and expenditure variables were about equally related to the other variables in the study. For example, revenue change and expenditure change were found to have correlations with humanities enrollment proportion change of .11 and .10 respectively. Another reason for limiting the joint employment of highly correlated data was that, in canonical correlation, results from analyses employing data with extreme colinearity among independent variables are not interpretable. A final reason was that the expenditure data were by convention disaggregated in more useful categories than were revenue data (e.g., instructional and total educational and general expenditures). Therefore, expenditure variables were chosen for use in the analysis.

The next question dealt with which expenditure data form to use. Since adjusting variables for inflation was recommended by Sanjabi (1977), Dickmeyer and Hughes (1979a), and was implicitly endorsed by Leslie and Miller (1974), the adjusted form was selected; and the second institutional condition variable was percentage change in institutional total current funds expenditures 1971-1972 to 1976-1977 over Higher Education Price Index (HEPI) change 1971-1972 to 1976-1977.[13] This variable was

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13. Fiscal year (FY) 1978 HEGIS data were not available at the time of data collection.

derived by subtracting the inflation factor (.39) from the percent change in institutional total current funds expenditures 1972 to 1977. The resulting value indicates the percent change in total current funds expenditures over inflation 1972 to 1977.

Since a key focus of the research is the impact of institutional financial conditions upon the instructional programs (specifically humanities) an additional institutional instructional program financial variable was used: percentage change in the ratio of institutional instructional expenditures to institutional education and general expenditures, 1971-1972 to 1976-1977. This variable was derived by subtracting the percentage instructional expenditures were of educational and general expenditures for the fiscal year (FY) 1972 from the percentage instructional expenditures were of educational and general expenditures for FY 1977. The resulting value expresses the change in the percent instructional expenditures were of educational and general expenditures from the FY 1972 to the FY 1977.

Another instruction related indicator (and the last institutional condition variable) was percentage change in institutional total current funds expenditures per FTE student 1971-1972 to 1976-1977 over HEPI change 1971-1972 to 1976-1977. This variable was derived by subtracting the inflation factor (.39) from the percent change in current funds expenditures per FTE student FY 1972 to FY 1977. The

resulting value of this variable expresses the percent of expenditure per student change over inflation index, or "constant dollar," change FY 1972 to FY 1977.

The data for these variables were obtained from HEGIS financial statistics data sets (forms shown in Appendix D). From the 1972 source, total educational and general expenditures were from line B1; expenditures for instruction and departmental research were from line B2; and total current funds expenditures were from line B18.[14] From the 1977 source, total educational and general expenditures were from line B12; expenditures for instruction were from line B1; and total current funds expenditure is from line B19.[15]

The percentage change in the rate of inflation from 1971-1972 to 1976-1977 was computed in the following manner: the HEPI was 135.8 for 1972, and 188.6 for 1977 (Halstead 1975, p. 9 and 1978, p. 19). The increase in HEPI over

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14. Appendix C shows that additional financial data were collected, but for reasons explained above these were not used in the final analysis.

15. The instructional expenditure figure for 1972 includes expenditures for departmental research whereas the figure for 1977 does not. Since public two-year colleges are rarely institutions that budget for instructional research, the figures are judged to be, for all practical purposes, comparable. Also, the instructional expenditure figure for 1972 includes expenditures for scholarships and fellowships whereas the figure for 1977 does not. This was not believed to render the two figures non-comparable.

this period was thirty-nine percent (rounded to the nearest percent).

Humanities Condition Variables

The first humanities condition variable is an indicator of the change in the enrollment condition of the humanities within each institution. "Class enrollment" refers to the number of students registered in all humanities sections, and is a component of the following humanities condition variable: change in humanities class enrollment as a percent of total institutional headcount enrollment, 1975-1976 to 1977-1978. The value of this variable is derived by calculating the percentage values for the two years and subtracting the former from the latter. The data were from Items 1 and 2 of the CSCC Facilitator Survey. The resulting value of this variable expresses the change in the proportion of institutional headcount enrollment realized by the humanities station enrollment from spring, 1975 to spring, 1977.

The second humanities condition variable is an indicator of the financial condition of the humanities within an institution: total humanities operating expenditures as a percent of total institutional instructional expenditures, 1977-1978. This financial data element was taken from responses to the mail survey. The resulting value of this

variable expresses the percent of institutional expenditures maintained by the humanities in 1977-1978.

The final set of humanities condition variables are indicators of the staffing condition of the humanities within the institutions. The third humanities condition variable was change in humanities FTE faculty as a percent of institutional FTE faculty, 1975-1976 to 1977-1978. The institutional FTE figures were obtained by adding one-third of the number of part-time faculty for the semester to the number of full-time faculty for the semester. The institutional full-time and part-time faculty figures were from the 1977 Community, Junior, and Technical College Directory (AACJC 1978).[16] The humanities figures were from the mail survey. The resulting value expresses the change of the humanities FTE faculty proportion of institutional FTE faculty from fall, 1975 to fall, 1977.

The fourth humanities condition variable is percent change in the ratio of full-time humanities faculty to part-time humanities faculty between 1975-1976 and 1977-1978 compared to the institutional change in the ratio of full-time to part-time faculty these same years. The value of this variable was derived by calculating the difference

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16. Many two-year college part-time faculty teach only one course, and since AACJC defines a full-time faculty member as one who teaches nine or more credit hours, the formula of taking one-third of part-time faculty was chosen.

between the humanities to institutional ratios for each of these academic years. This quantity was in turn divided by the 1975 ratio. For example, if the humanities full-time to part-time ratio in 1977 was 1.12 to one while the institutional full-time to part-time ratio was 1.19 to one, then the 1977 percentage was .94. If the humanities full-time to part-time ratio in the earlier year, 1975, was .88 and the institutional full-time to part-time ratio was 3.98, then the 1975 percentage was .22. The difference between the 1977 and 1975 percentages is .72. When this value is divided by the 1975 ratio, (.22) the result is 3.27. This value indicates that when compared to the institutional change the humanities increased their full-time to part-time faculty ratio by a factor of 327 percent between 1975 and 1977.

The fifth humanities condition variable was percent change in the ratio of humanities class enrollment to FTE faculty, 1975-1976 to 1977-1978, compared to the institutional ratio change. The value of this variable was derived by calculating the difference between the humanities and institutional ratios for each year. This quantity was in turn divided by the 1975 ratio. For example, if the humanities class enrollment to FTE faculty ratio in 1977 was eighteen to one while the institutional headcount enrollment to FTE faculty ratio was twenty-seven to one, then the 1977 ratio is a "favorable" .66. If the humanities class enrollment

to FTE faculty ratio was twenty to one while the institutional headcount to FTE faculty ratio was twenty-five to one, then the 1975 ratio was a less favorable .80. The difference between the 1977 and 1975 ratios is .14. When this value is divided by the 1975 ratio the result is .18. This value indicates that when compared to the institutional change the humanities increased their student to faculty ratio by a factor of eighteen percent between 1975 and 1977.

Humanities Responsiveness Variables

The humanities responsiveness variables are intended to measure the degree of adaptiveness, or extent of adaptation, characteristic of the humanities. An indicator was constructed from CSCC data following the categories of adaptations analyzed by Leslie and Miller (1974). The score for the indicator was derived by summing points assigned to the variables describing adaptations in the various categories. Two principles guided the assignment of points. An adaptive action was, arbitrarily, weighted three times more than a reported desire to take an adaptive action. Second, adaptations vary in strength and were assigned points accordingly: very highly adaptive (four points), highly adaptive (three points), moderately adaptive (two points), and somewhat adaptive (one point). Certain

maladaptive responses were assigned negative points according to the same scheme.

Introduction of New Products. The first responsiveness variable is an adaptive action: the introduction of new humanities courses or programs. This element was from Item 7a of the CSCC Facilitator Survey. The item is an action item and was rated as highly adaptive because the introduction of new courses or programs, while requiring resources, does broaden, on a continuing basis, the range of humanities products available to the student constituency. If an institution was characterized by the introduction of new courses or programs in the humanities, nine points were assigned (3 x 3 = 9).[17] If an institution was not characterized in this manner, no points were assigned.

The second action element in the new-products category was college sponsorship of conferences dealing with some aspect of the humanities. This element was from Item 7f of the CSCC Facilitator Survey. The item is an action item and was rated as moderately adaptive because sponsoring and holding a conference, while making a new product available, does so for a limited time for what normally would be a limited constituency. If an institution was

17. The first numeral in the multiplication is the strength weighting. The second numeral is the action weighting.

characterized by the sponsorship of humanities conferences, six points were assigned (2 x 3 = 6). If an institution was not characterized in this manner no points were assigned.[18]

The third element in this category was extracurricular humanities activities. This element was from Item 4 of the CSCC Facilitator Survey. The element is an action element and was rated as somewhat adaptive because, while making a variety of products available on a relatively continuing basis, it does so for a limited constituency. If an institution had the total possible activities score, three points were assigned (1 x 3 = 3). If an institution had less than the total activities score, proportionately fewer points were assigned.

Introduction of New Production Methods. Adaptations in this category are efforts to improve instructional productivity per unit of input. The following action element was defined: increase in the proportion of part-time humanities faculty. This element was from the mail survey data set. The element was rated as somewhat adaptive because, while it should decrease the cost of instruction, it may do so in a way that diminishes effectiveness or quality. If

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18. It is noted that in this case, and in others to follow, an adaptation may relate to more than one category of adaptation. In this case the adaptation relates to the "opening new markets" category.

an institution was characterized by an increase in the proportion of part-time humanities faculty three points were assigned (1 x 3 = 3). If an institution was not characterized in this way, no points were assigned.

The second element in this category was humanities faculty reporting the desire for larger or smaller classes. This element was from Items 14d and 14e of the CSCC Instructor Survey data set. The element is a desire element and was rated as highly adaptive because an increase in class size should have a major impact on program cost efficiency. If an institution was characterized by humanities faculty reporting a desire for larger classes three points were assigned. If an institution was characterized by humanities faculty reporting a desire for smaller classes three points were subtracted.

The next variable was humanities faculty reporting the desire for fewer or no prerequisites for entry into humanities classes. This element was from Items 14e and 14j of the CSCC Instructor Survey data set. The element is a desire element and was rated as highly adaptive because a reduction in course prerequisites should have a considerable impact on the number of available entrants for a class. If an institution was characterized by humanities faculty reporting a desire for fewer or no prerequisites for entry into humanities classes, three points were assigned. If an institution was characterized by humanities faculty who

report a desire for stricter prerequisites for entry into humanities classes, the points were subtracted.

Opening of New Markets. Three action elements were defined in this category. The first was increase or decrease in humanities graduation requirements. This element was from Item 7b of the CSCC Facilitator Survey data set. The element was rated as very highly adaptive because increasing the amount of humanities credits individual students are required to earn in order to graduate should have a substantial impact upon the enrollment demand for humanities courses. If an institution was characterized by an increase in its humanities graduation requirements, thirty-two points were assigned (4 x 8 = 32).[19] If an institution was characterized by a decrease in its humanities graduation requirements, thirty-two points were subtracted. If there was no change in humanities graduation requirements, no points were assigned.

The second action element was special efforts to attract new groups of students to humanities courses. This element was from Item 7c of the CSCC Facilitator Survey data set. The element was rated as highly adaptive because special campus "recruiting" efforts can be expected to

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19. An exception to the weighting guidelines was made in this case. This adaptation would so substantially affect humanities enrollments and would be so difficult to bring about that the exception was judged to be warranted.

considerably impact humanities enrollments. If an institution was characterized by special efforts to attract new groups of students to its humanities classes, nine points were assigned (3 x 3 = 9). If an institution was not characterized in this manner, no points were assigned.

The final action element in this category was special humanities classes or units instituted for occupational students. This element was from Item 7d of the CSCC Facilitator Survey data set. The element was rated as very adaptive because the institution of such special efforts can be expected to impact considerably on enrollments in the humanities. If an institution was characterized by such efforts, nine points were assigned (3 x 3 = 9). If an institution was not so characterized, no points were assigned.

Employment of New Supplies of Productive Factors. Productive factors are all the inputs needed to produce outputs. Two variables measuring this category of adaptation were defined. The first was reception of grants to further the humanities. This element was from Item 7g of the CSCC Facilitator Survey data set and was rated as very highly adaptive because it brings in noninstitutional resources. If an institution was characterized by the receipt of grants to further the humanities, twelve points were assigned (4 x 3 = 12). If an institution was not so characterized, no points were assigned.

The second element in this category was employment of new media in humanities courses. This element was from Item 7e of the CSCC Facilitator Survey data set. The element was rated as somewhat adaptive because, while it does bring new factors of production to bear on the production problem, it does so in a way that cannot be expected to impact course efficiency substantially. If an institution was characterized by the employment of new media in humanities classes, three points were assigned. If an institution was not so characterized, no points were assigned.

Reorganization of the Enterprise. The variable in this category was the reorganization of the humanities disciplines within the institutional structure. This element was from the mail survey data set. The element is an action element and was rated as highly adaptive because administrative rearrangement can be expected to have a noticeable impact on program management activities. If an institution was characterized by such a reorganization, nine points were assigned (3 x 3 = 9). If not, no points were assigned.

Summary. The humanities responsiveness indicator is the summation of the points assigned. A total score of 101 points was possible.

Conclusion

In terms of traditional research design language, the institutional condition variables are independent variables because the interest is in examining how humanities conditions are affected by institutional conditions. Consequently, the humanities condition variables are dependent variables in relation to institutional condition variables. The humanities responsiveness indicator is a dependent variable. Appendix E summarizes the variables that were employed.

Definitions of the Sub-Samples

Many experimental studies employ "control variables." Such variables are characteristics of the subjects under study suspected of influencing outcomes but are not part of the theoretical focus of the research. In this non-experimental study control variables were planned, but, after considerable variable manipulation and preliminary analysis, were found to interfere with the interpretation of the results.

To solve this problem the sample was divided instead into sub-samples according to categories of region, size, age, emphasis, and organization. Analysis was performed testing the research questions in the national sample and in the sub-samples. The result was that the nationwide sample was used to directly address the research expectations

and sub-sample differences were addressed by examining the research expectations on a sub-sample basis. Appendix F specifies the sub-samples that were employed.

Techniques of Analysis

The statistical analyses of this study utilized procedures contained in Version 7.0 of the Statistical Package for the Social Sciences (SPSS) distributed by the Vogelback Computing Center of Northwestern University. All of the analyses were conducted at the University Computing Center of the University of Arizona.

The following SPSS procedures were employed in the study. The data modification procedures (Recode, Compute, etc.) were used in the computation of the variables. The Condescriptive procedure was used to arrive at statistical summaries of the sample data on the conditions and responsiveness variables. The Frequencies procedure was used to arrive at statistical summaries of the sub-sample membership of the sample instructions. The T-Test procedure was used to determine the differences between the institutions with missing data and those institutions without missing data. The Crosstabs procedure was used to determine the differences between these data groups on the sub-sample categories. The Pearson Correlation procedure was used to determine the degree of colinearity among independent variables. The Canonical Correlation procedure was used to determine the

relations among the institutional condition variables, the humanities condition variables, and humanities responsiveness.

Statistical Expectations

The central research interest was translated into two research expectations (see Research Expectations). First, where institutional conditions are strongest, humanities conditions are expected to be strongest. Conversely, humanities conditions are expected to show the most evidence of decline where institutional conditions are the weakest. Since higher values of the institutional condition and humanities condition variables indicate higher rates of growth (strength), these expectations amount to the expectation that higher institutional condition values are associated with higher humanities condition values and that lower institutional condition values are associated with lower humanities condition values. The final expectation is that humanities responsiveness is expected to be greatest where institutional conditions are the weakest. Since lower values of the institutional condition variables indicate lower growth (weakness), this final expectation is that low institutional condition values are associated with high humanities responsiveness values and, conversely, high institutional conditions values are associated with low humanities responsiveness values.

Canonical correlation is a statistical technique that tests the degree, and direction of linear association between a group of independent variables and a group of dependent variables. Since there are multiple independent and dependent variables in this study, canonical correlation was selected as the most appropriate multivariate technique. Other widely used multivariate techniques, for example multiple regression, are applicable only in analyses with a single dependent variable.

Canonical analysis creates an artificial variable for each variable set. This artificial variable is called a canonical variate. In this study one canonical variate for institutional conditions was created and one canonical variate for humanities conditions-responsiveness was created. The analysis then proceeded to measure the correlation between the two artificial variables. In addition, coefficients (loadings) for each original variable were produced that indicate the degree and the direction of that variable's contribution to the variate of which it is a part.

The research expectations expressed as specific statistical expectations are (1) the canonical correlation between the independent and dependent variables is expected to be positive; that is, high values of the canonical variate representing institutional conditions are expected to be associated with high values of the canonical variate

representing the set humanities conditions-responsiveness, and conversely, low values associated with low values.[20] The larger the positive correlation, the better the confirmation of this expectation because higher correlations indicate stronger associations and, thus, a higher proportion of explained variance. (2) Within the dependent variable set analysis of the coefficients (loadings) for the individual variables is expected to reveal that humanities responsiveness is a negative function of the institutional conditions set of variables; that is, low humanities responsiveness values are expected to be associated with high values of the institutional conditions variate.

Limitations

The statistical techniques of analysis employed in this study assume random sampling. However, the procedure by which the sample was selected is not strictly speaking a random selection method. It is, rather, a systematic selection procedure. Institutions selected were either one of every fifth public institution in the alphabetical array of institutions contained in the 1977 Community, Junior, and Technical College Directory (AACJC 1978), or were a randomly selected institution representing a particular category that was desired: e.g., Northeastern Region. The possibility

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20. Humanities conditions and humanities responsiveness as dependent variables are combined into one variate.

of bias cannot entirely be ruled out because of the sample selection procedures.

The validity of the variables can be questioned. That the set of institutional conditions measures in fact represents "institutional condition" is debatable. Certainly they do to some degree, and "the degree" is believed to be a reasonable one. The set of measures do not measure institutional condition as comprehensively as the sets of variables employed by Sanjabi (1977), Lupton and Associates (1976), Dickmeyer and Hughes (1979a, 1979b), and Minter (1979). But neither are the variables chosen as redundant and overlapping as those specified by others. The variables chosen accord with those proposed by these experts but are more appropriate to the analyses performed.

The validity of the humanities condition variables is likewise debatable. On the whole it is believed that the elements that make up the set of humanities condition variables are at least key items to be taken into account. One particular problem warrants mention. The humanities enrollment percent measure is derived by using institutional headcount enrollment data and humanities class enrollment data. Class enrollment is a more fine-grained measure than headcount enrollment. There is little reason to believe that the proportional number of duplicate counts differs among institutions but the difference between the component

enrollment measures has the effect of being more sensitive to humanities enrollment changes.

The humanities responsiveness indicator is an unvalidated measure. If the Leslie and Miller categories of adaptations adequately capture the meaning of "responsiveness," and, if the variables do measure adaptations in those categories, then a prima facie case for the validity of the indicator is made. No further claims for the validity of this measure are asserted.

HEGIS enrollment data are known to have inaccuracies. In fact, the Center for the Study of Higher Education at the University of Arizona is in the third year of a project aimed at "cleaning up" the HEGIS enrollment data. Unfortunately this project had not proceeded to the stage of cleaning and analyzing community college data at the time the data for this study were collected. The extent of inaccuracies in the enrollment data set is not known. Hopefully, it is not so extensive as to affect the results of the analysis using aggregated data. Further, there is no reason to believe that error is systematic.

HEGIS financial files are also known to contain inaccuracies. Minter and Conger (1979) analyze the degree to which FY 1975 and FY 1977 HEGIS financial data accord with data they collected and verified according to American Institute of Certified Public Accountants and National Association of College and University Business Officers

(AICPA-NACUBO) standards. Minter and Conger conclude regarding the data from 125 independent institutions whose data they compared ". . . analysts whose work depends on the reporting of dollars at the institutional level should use HEGIS financial data with extreme caution" (Minter and Conger 1979, p. 21). Patrick and Collier used Minter Associates data to conduct their own comparisons. They conclude that "overall . . . HEGIS data (at least when considered in the aggregate) compare very favorably to data obtained independently using procedures known to be very reliable. . . . [A]t least for private institutions . . . any of the variables reported on . . . (and probably most other financial variables) can be used in the aggregate with confidence that the results are reliable and valid" [emphasis added] (Patrick and Collier 1978, p. 79). Neither the Minter and Conger or the Patrick and Collier positions bear directly on the data used in this study, since these authors analyze data from non-public institutions only. Nonetheless they are the most thorough and current examinations of the validity of HEGIS financial data. The guidelines these examinations present are taken to be the best estimate of the validity of the HEGIS financial data employed in this study.

No reason is found to question the reliability or validity of the change in inflation index figure derived from the work of Halstead. The use of Halstead's Higher Education Price Index (HEPI), rather than a more general

index like the Consumer Price Index (CPI), was based on the judgment that the higher education index is more appropriate to the subject of study.

Several points need to be noted regarding the reliability of the mail survey data. The question concerning the reorganization of the humanities disciplines within the institutional structure was not clear to some respondents. When identified, these cases were clarified by correspondence. The identification of some misunderstandings, however, raises the possibility of others. In an effort to make response to the survey as effortless as possible the only term defined for the respondents was the term "humanities." From contact with several respondents, it was clear that further clarifications would have been helpful. The items regarding 1977-1978 institutional instructional and educational and general expenditures were to be based upon HEGIS definitions, but this was not always understood. The humanities operating budget figure requested was to include salaries, but again uncertainties existed. Similarly, the "raw number" of part-time humanities faculty was desired, not the FTE of part-time humanities faculty. Every case of confusion that came to light during analysis of the responses was clarified through phone conference or correspondence. The possibility of misunderstandings cannot be ruled out, however.

CHAPTER 3

FINDINGS

The purpose of this chapter is to present findings that are reasonably warranted on the basis of the investigation of the sample and sub-samples. Two sets of findings are reported. Reported first, are descriptive results regarding institutional and humanities conditions and humanities responsiveness. Ninety-five percent confidence intervals for the mean values of the variables are calculated and are an aid to judgment.[21] Second are the more substantive findings, those about the associations between institutional conditions, humanities conditions, and humanities responsiveness. The explained variance (R^2) of the canonical correlation results is the aid to judgment in this second component.

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21. The following formula was employed (Dinham 1976, p. 152):

$$\bar{X} \pm (t)\ (S.D. / \sqrt{N - 1})$$

where "$\bar{X}$" represents the sample mean, "S.D." represents the standard deviation of the sample mean, "N" represents the number of cases in the sample, and "t" represents the t-value for the ninety-five percent confidence interval (two-tailed probability) with N - 1 degrees of freedom. Appendix H contains the confidence interval results.

Descriptive Results

Institutional Conditions

Four, five-year trend variables make up the institutional condition construct. One variable measures the change in FTE enrollment over the five-year period from fall, 1971 to fall, 1976. One variable measures the change in total current funds expenditures over inflation for the five-year period from FY 1972 to FY 1977. Another variable measures the change in the proportion instructional expenditures are of educational and general expenditures over the latter five-year period, and yet another variable measures the change in total current funds expenditures per FTE student over inflation for the latter five-year period.

Nationwide Changes. The sample is characterized by an average FTE enrollment growth, over the five years of almost 190 percent (Table 1). Average FTE enrollments reached the level of about 3,302 students in 1976-1977 (Table 1). At the ninety-five percent confidence level, the increase is between 114 percent and 266 percent (Figure H.1). The range is broad but reflects that over the five-year period between 1971-1972 and 1976-1977 FTE enrollments grew substantially in public two-year colleges.

There is an average total current funds expenditure growth of 73.1 percent over the five-year period for the

Table 1. National Sample Descriptive Statistics for Institutional Condition Variables:[a] 1971-1972 to 1976-1977. -- Change Values in Percentages

Variable	$\overline{X}$ 1976-1977	$\overline{X}$ Percent Change[b]	S.D.	N
FTE Enrollment	3,301.8	189.8	442.0	134
Total Expenditures Over Inflation	$7,892,339.7	73.1	82.2	116
Instructional Expenditure Proportion	51.2%	- 7.5	12.1	116
Total Expenditures per Student Over Inflation	$2,415.2	-28.5	45.7	115

[a] See Chapter 2 for variable descriptions.
[b] Values express the percentage change from the earlier period. See Appendix C for the computational formulae.

sample institutions (Table 1). This expenditure average reached almost eight million dollars in 1976-1977 (Table 1). The increase is between fifty-eight and eighty-eight percent as per the confidence interval results (Figure H.2). This interval is realtively narrow and warrants the conclusion that expenditure growth over inflation in public two-year colleges between 1971-1972 and 1976-1977 is substantial, though less substantial than FTE enrollment growth.

The sample is further characterized by a 7.5 percent mean decrease in the proportion of the educational and general budget expended for instruction between 1971-1972 and 1976-1977 (Table 1). This proportion is down to just over fifty-one percent (Table 1). At the ninety-five percent confidence level the decrease is between ten percent and five percent (Figure H.3). This confidence interval is quite narrow. Thus, the observation that public two-year colleges had an important decrease in the proportion of the educational and general budget expended on instruction over the five-year period is reasonably warranted.[22]

An average 28.5 percent decrease in total current funds expenditures per FTE student, adjusted for inflation, between 1971-1972 and 1976-1977 is found (Table 1). The average expenditure per student fell to just over $2,415 in

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22. Changes in HEGIS definitions over the five years may be partially responsible for this decrease. See Note 15.

1976-1977 (Table 1). The mean decrease is between thirty-seven percent and twenty percent (Figure H.4). This confidence interval too is relatively narrow. It does appear that public two-year colleges considerably diminished their total current funds expenditures per FTE student over the five-year period. Economies of scale, gained through enrollment growth, probably explain part of this per student resource decline. Because economies of scale possibly cannot account for all of a per student resource decline of this magnitude, on a per student basis, financial pressures probably are intensified.

Overall, institutional conditions in public two-year colleges changed in major ways over the five-year period. It is not surprising that expenditures increased greatly given the very substantial enrollment increase since virtually all public two-year colleges are funded on some per student basis (Wattenbarger and Stepp 1979). The size of the expenditure increase, even when inflation is taken into account, is striking. However, total expenditure growth did not keep up with FTE enrollment growth. It is not surprising that expenditures per student decreased, given the relative size of the expenditure versus enrollment increases when inflation has taken its toll, and the efficiencies gained through economies of scale. The funding system for public two-year colleges permitted substantial

total current funds expenditure growth over inflation. But given the size of the decrease in expenditures per student the efficiencies gained through economies of scale possibly were inadequate to maintain a constant, net resource level. If so, the funding systems were not adequate to meet the instructional demands brought on by the substantial enrollment growth in a period of relatively high inflation.

Regarding the proportion of instructional expenditures, it is not clear why these decreased in a period of substantial enrollment and overall expenditure growth. Several factors could have played a role.[23] During the growth period, public two-year colleges realized economies of scale and improved the efficiency (output per unit of input) of the instructional programs. A corollary is that public two-year colleges may have become less effective in achieving instructional objectives (Leslie 1972a). The diversion of resources into other (non-instructional) categories may indicate increased costs brought on by greater organizational complexity (McLaughlin and Associates 1979). Another factor (possibly more potent) is that institutions may have realized savings through the increased use of part-time faculty (Table 6). In addition, increased public service activities,

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23. See Notes 22 and 15.

student support services, and administrative costs such as computer hardware may have contributed to the changing balance between expenditure categories.

Sub-Sample Differences. FTE enrollment growth in all regions is substantial, but variant (Table 2). The West and Mountain Plains Regions appear to have formed a very-high growth cluster, the South and Midwest a high growth cluster, and the Middle States and Northeastern Regions a low growth cluster. These results confirm that enrollments go up or down in relation to the general demographic trends in a region. Broad and overlapping ninety-five percent confidence intervals for the regional sub-sample point estimates of this variable are found (Figure H.1). As a result it cannot be assured that these important regional differences in fact existed for all two-year institutions in the various regions.[24]

Current funds expenditures over inflation followed the regional pattern of enrollment growth (Table 2). The Western Region stands out alone in the highest growth

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24. In each of these sub-sample comparisons the hypothesis tested with the confidence intervals is whether the sub-groups differ (significantly) from each other. The conventional hypothesis (untested in the sub-sample results) is whether the sub-sample mean differs (significantly) from zero. The low number of cases in the regional sub-sample analyses reduces the statistical power of the confidence interval results. The sub-sample mean values remain the best point estimates, from the data examined, of sub-sample differences.

Table 2. Regional Descriptive Statistics for Institutional Condition Variables:[a] 1971-1972 to 1976-1977. -- Change Values in Percentages

	Northeast			Middle States			South			Mid West			Mountain Plains			West		
Variable	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
FTE Enrollment	62.8	57.5	6	65.1	86.3	14	152.8	335.4	39	126.3	166.2	32	252.3	414.4	11	355.3	753.6	32
Total Expenditures Over Inflation	50.4	11.4	3	38.0	33.5	14	68.8	60.2	32	67.1	74.3	28	67.1	82.3	9	103.7	117.2	30
Instructional Expenditure Proportion	- 9.7	6.1	3	- 3.7	5.1	14	- 5.8	9.3	32	- 8.0	10.3	28	- 2.4	6.6	9	-11.9	18.0	30
Total Expenditures Per Student Over Inflation	-17.6	52.5	3	- 7.3	33.5	13	-23.9	42.1	32	-22.4	49.1	28	-43.6	42.2	9	-44.7	48.1	30

[a] See Chapter 2 for variable description.
[b] Values express the percentage change from the earlier period.

category. The Mountain Plains, Midwest, and South form an intermediate growth category. The Middle States and the Northeast form the lowest growth category. The most extreme best point estimate differences are confirmed because the confidence intervals for the Middle States and the West do not overlap (Figure H.2). As a result, it appears that public two-year colleges may have had important mean differences by region in terms of total current funds expenditure growth.

Further examination of Table 2 reveals that the Western Region is characterized by the steepest decline (11.9 percent) in instructional expenditure proportion while the Mountain Plains has the least decline (2.4 percent). The rank ordering of these differences does not follow the clustering patterns observed above. The Northeast here more closely resembles the West while the Mountain Plains Region more closely resembles the Middle States. The confidence intervals confirm the differences between the most extreme values because the invervals overlap by only two percentage points (Figure H.3). Thus it appears that the highest enrollment and expenditure growth region (the West) and the lowest enrollment and expenditure growth region (the Northeast) show the steepest decline in instructional expenditure proportion. At the same time a high enrollment and expenditure growth region (Mountain Plains) and a low enrollment and expenditure region (Middle States) have the least

declines in instructional expenditure proportion. The South and the Midwest retain their intermediate position.

Regionally, total expenditures per student over inflation decreased in general reverse order of enrollment growth (Table 2). That is, expenditures per student decreased the most in higher growth regions. Simply put, economies of scale may have been realized but income growth may not have matched enrollment growth. The difference between the most extreme values is confirmed because the confidence intervals do not overlap (Figure H.4).

Overall, the regional sub-sample results suggest that important regional differences in institutional conditions existed. The pattern of regional differences in FTE enrollment and current funds expenditure growth tends to follow national demographic patterns. That is, high population growth regions show high enrollment and expenditure growth, while low population growth regions show low enrollment and expenditure growth. Reductions in expenditures per student tend to follow the same pattern, but in reverse, thus possibly indicating economies of scale. High enrollment and expenditure growth regions show the greatest reductions in expenditures per student while low enrollment and total expenditure growth regions show the least reductions. The severity of the decline suggests that, unlike the 1960's, when enrollment growth was matched by expenditure growth,

during the inflationary 1970's enrollment growth was not an unqualified desirable circumstance.

The regional sub-sample instructional-expenditure-proportion results are anomalous in terms of the patterns discovered for the other regional sub-sample results. The institutions that have the greatest and lest enrollment growth are alike in the severity of the reductions in instructional expenditure proportion. It may be that enrollment and expenditure change extremes alike bring about financial stress that is dealt with through a common strategy: viz. decrease expenditures in the largest budget category (i.e., instruction). In the one case because of diseconomies of scale, in the other case because of fixed costs. Since probably eighty percent or more of this category is salaries, some radical changes, such as increases in class size, heavier faculty loads, or more part-time faculty, probably occurred.

The size category data in Table 3 show that the two classes of large institutions have noticeably higher FTE enrollment growth rates than the two classes of small institutions. This finding is not surprising and may be considered tautological since size is measured at the end of the enrollment change period.

The largest institutions are characterized by the greatest total expenditure growth over inflation. A

Table 3. Size Grouping Descriptive Statistics for Institutional Condition Variables:[a] 1971-1972 to 1976-1977. -- Change Values in Percentages

	1-999[b]			1000-2499			2500-6999			Over 7000		
Variable	$\bar{X}$ Percent Change[c]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
FTE Enrollment	100.5	159.4	18	83.7	91.7	40	294.2	678.1	44	229.3	373.8	32
Total Expenditure Over Inflation	82.7	86.3	11	43.8	45.5	36	83.7	92.0	39	91.0	95.2	30
Instructional Expenditure Proportion	- 14.9	7.8	11	- 6.5	9.4	36	- 3.6	14.0	39	- 11.1	11.8	30
Total Expenditures Per Student Over Inflation	- 9.7	50.7	11	-25.6	36.8	36	- 30.3	57.1	38	- 36.6	36.3	30

[a] See Chapter 2 for variable descriptions.
[b] Student headcount range.
[c] Values express the percentage change from the earlier period.

category of smaller institutions is characterized by the least expenditure growth over inflation. These extreme differences are quite likely to in fact exist because the confidence intervals overlap only slightly (Figure H.2). These differences are to be expected. This, however, is not a tautological finding, it conforms to the "natural law" of public two-year colleges, since funding is commonly based in some manner on enrollments.

The smallest public two-year colleges probably have the greatest decreases in instructional expenditure proportion by category (Table 3). Institutions over 7000 FTE students have decreases much like those with the smallest enrollments. The most extreme differences in mean values are confirmed, because the confidence intervals are separated (Figure H.3). Again, the high growth and low growth institutions appear as if they were using the same fiscal strategy of reducing instructional expenditures. This suggests that these institutions are under the most severe financial strain since they have the greatest decreases in the proportion of instructional expenditures, and reducing instructional expenditures can be a key strategy for dealing with financial strain when services are being expanded and support and administrative costs are rising.

Further examination of Table 3 reveals that the smallest and largest institutions appear to represent the

extremes in terms of decreases in expenditures per student. The largest institutions declined, on the average, the most, the smallest declined the least. The confidence intervals do not clearly confirm these differences (Figure H.4). Nonetheless, on the basis of the best point estimates, it appears that the more severe financial pressures were upon the high growth, large institutions. The reason for ascribing severe financial pressure in this case is based on the earlier speculation that economies of scale probably cannot explain the depth of this decrease. Thus, this decrease lends support to the view that income growth did not keep pace with the instructional demands of higher enrollments in an inflationary period, i.e., financial strain.

Overall, the size category sub-sample results reveal that both large (highest growth) and small (lowest growth) institutions may be under financial pressure, as reflected in reduction in expenditures per student and reductions in instructional expenditure proportion. The reader is reminded that the largest institutions are underrepresented in the analysis.

Degree of FTE enrollment growth appears to be a function of the age of the institution, with the youngest institutions showing the greatest growth and the oldest institutions showing the least average growth (Table 4). The confidence intervals suggest but do not assure this finding

Table 4. Age Grouping Descriptive Statistics for Institutional Condition Variables:[a] 1971-1972 to 1976-1977. -- Change Values in Percentages

Variable	Founded Before 1959			Founded Between 1960-1969			Founded After 1970		
	$\bar{X}$ Percent Change[b]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
FTE Enrollment	100.1	205.9	44	133.3	191.3	68	543.9	935.6	22
Total Expenditures Over Inflation	49.6	53.3	43	69.4	74.8	60	168.3	124.4	13
Instructional Expenditure Proportion	- 8.4	12.8	43	- 8.0	10.6	60	- 2.0	15.6	13
Total Expenditures Per Student Over Inflation	-15.9	48.2	42	-29.6	42.6	60	-63.8	32.7	13

[a]See Chapter 2 for variable descriptions.
[b]Values express the percentage change from the earlier period.

(Figure H.1). It would be surprising if younger institutions were not growing faster proportionally than older institutions since it is easier to double (for example) a small enrollment than a large enrollment and young institutions begin relatively small.

Expenditure growth over inflation, appears also to be a function of youth (Table 4). The youngest institutions have the highest growth in mean total expenditures over inflation and the oldest have the least growth. The confidence intervals confirm this finding because the intervals are separated by a twenty-four percent gap (Figure H.2). This finding conforms to expectation given the previously mentioned "natural law" of public two-year colleges.

The youngest institutions appear to have decreased their instructional expenditure proportion noticeably less than older institutions (Table 4). The confidence intervals displayed overlap but do suggest that the youngest institutions may have decreased less in this regard (Figure H.3). Thus it appears that young, high enrollment and high expenditure growth institutions are under less financial pressure than older, lower enrollment and slower expenditure growth institutions. This result is contrary to the previous findings.

The amount of decrease in expenditures per student appears to be a function of youth also (Table 4). The

youngest institutions are characterized by the largest average decrease in expenditures per student while the oldest showed the smallest decline. The confidence intervals confirm these mean differences (Figure H.4). Thus, it appears that, on a per student basis, younger institutions showed more evidence of economies of scale and possible financial pressure through inflation and cost burdens from increased complexity than older institutions. This result conforms to the previous findings.

Overall, the age category sub-sample results reveal that enrollment and expenditure growth is "enjoyed" more by younger institutions, but, possibly, the most severe financial strain also falls on these as well.

Multi-campus institutions appear to have greater FTE enrollment growth than single campus institutions (Table 5). The confidence intervals do confirm this (Figure H.1). This result is not surprising, for it is a well established fact about public two-year colleges that the number of students attracted is a general function of the number of locations at which instruction is offered. Though it is not necessarily the case that multi-campus institutions offer instruction in more locations than single campus institutions this tends to be the case.

Mean total expenditure over inflation growth appears about the same for single and multi-campus institutions

(Table 5). This finding indicates the greater enrollment growth of multi-campus institutions is apparently proportionally matched with resources. However, it must be remembered, multi-campus institutions are underrepresented in the analysis.

Further results from Table 5 reveal that single campus institutions have smaller decreases in instructional expenditure proportion than do multi-campus institutions. The confidence intervals overlap by only two percentage points (Figure H.3). Thus, it appears that the instructional budgets of single campus institutions (lower enrollment growth) show little evidence of economies of scale and may be under less financial pressure from inflation and complexity cost burdens. This is understandable, because the increased complexity of multi-campus operations and the curricular duplications inherent to multi-campus operations naturally bring cost burdens that may be only partially offset by economies of scale.

Table 5 reveals that there are no noticeable differences in mean expenditures per student reduction between single campus and multi-campus institutions. The results in Figure H.4 also confirm this finding.

Overall, the organizational category sub-sample results support modestly the assertion that multi-campus institutions have greater growth and (possibly as a result)

Table 5. Organizational Grouping Descriptive Statistics for Institutional Condition Variables:[a] 1971-1972 to 1976-1977. -- Change Values in Percentages

	Single Campus			Multi-Campus		
Variable	$\bar{X}$ Percent Change[b]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
FTE Enrollment	169.6	442.7	101	251.7	440.7	33
Total Expenditures Over Inflation	73.7	82.7	94	70.4	81.9	22
Instructional Expenditure Proportion	- 6.3	12.0	94	-12.6	11.5	22
Total Expenditures Per Student Over Inflation	-28.4	44.3	93	-28.7	52.3	22

[a]See Chapter 2 for variable description.
[b]Values express the percentage change from the earlier period.

probably gain savings through economies of scale and may be under somewhat greater financial pressure to serve the instructional needs of the growing number of students.

It appears that comprehensive institutions have greater enrollment growth than non-comprehensive institutions (Table 6). The confidence intervals confirm this finding (Figure H.1). The result accords with the belief about public two-year colleges that enrollment is in part a function of the breadth of instructional offerings. However Table 5 and the associated tables in Appendix H reveal that comprehensive and non-comprehensive institutions probably do not differ importantly on the other institutional condition variables. Thus, institutions with different emphases appear not to be differentially affected in major ways by financial and enrollment pressures.

Humanities Conditions

Four two-year trend variables and two cross-sectional variables make up the humanities condition construct. One variable measures the change in the proportion of institutional headcount enrollment represented by humanities class enrollment over the two-year period, fall, 1975 to fall, 1977. Another measures the change in the proportion of institutional FTE faculty assigned within the humanities. One variable measures the change in the

Table 6. Emphasis Grouping Descriptive Statistics for Institutional Condition Variables:[a] 1971-1972 to 1976-1977. -- Change Values in Percentages

Variable	Comprehensive			Non-Comprehensive		
	$\bar{X}$ Percent Change[b]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
FTE Enrollment	198.6	463.5	120	114.5	159.7	14
Total Expenditures Over Inflation	71.9	82.8	106	85.8	78.2	10
Instructional Expenditure Proportion	- 7.4	11.8	106	- 9.0	15.2	10
Total Expenditures Per Student Over Inflation	-29.2	44.3	105	-21.0	61.2	10

[a] See Chapter 2 for variable descriptions.
[b] Values express the percentage change from the earlier period.

difference between the humanities and the institutional full-time to part-time faculty ratios. The final humanities condition variable measures the change in the difference between the humanities and the institutional student to faculty ratios over the two year period. One cross-sectional variable measures the proportion of the institutional instructional budget devoted to the humanities in FY 1978. The humanities responsiveness indicator is here included as the second cross-sectional variable.

Nationwide Changes. Over the two-year period, the proportion humanities class enrollment is of institutional headcount enrollment declined by an average of 3.3 percent (Table 7). The confidence interval for this humanities condition variable is quite narrow (Figure H.5) so that the average decrease for the population is between two and five percent. This finding confirms that the humanities have declining proportional enrollments in an era of overall enrollment growth.[25]

For 1977-1978, the humanities received an average of fourteen percent of institutional instructional budgets (Table 7). The true percentage is between twelve and sixteen percent (Figure H.6). This variable is not a change variable but is nonetheless useful for analytical purposes

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25. Total humanities class enrollment increased about five percent over the two years.

Table 7. Descriptive Statistics for Humanities Condition-Responsiveness Variables:[a] 1975-1976 to 1977-1978. -- Change Values in Percentages

Variable	$\bar{X}$ 1977-1978	$\bar{X}$ Percent Change[b]	S.D.	N
Class Enrollment Proportion	35.9%	- 3.3	8.4	141
Budget Proportion	14.0%	---[c]	10.9	94
FTE Faculty Proportion	16.8%	.6	6.1	88
FT/PT Faculty Ratio Comparison[d]	1:2.3	52.4	144.7	88
Student/ Faculty Ratio Comparison[d]	3.9:1	- 5.7	36.8	87
Humanities Responsiveness	35.6	---[c]	19.0	93

[a]See Chapter 2 for variable descriptions.
[b]Values express the percentage change from the earlier period. See Appendix C for the computational formulae.
[c]This is not a change variable.
[d]The mean value is the 1977-1978 humanities to institutional ratio.

because high or low budget proportions may be differentially related to institutional conditions. However, because there are no baseline data, it is not known whether the humanities are doing better or worse than previously in this regard.

The proportion humanities FTE faculty are of total FTE faculty increased .6 percent to 16.8 percent over the two-year period (Table 7).[26] The confidence intervals indicate that the actual population change is between a decrease of one percent and an increase of two percent (Figure H.7). Thus, while the humanities enrollment share declined the proportion of humanities full-time faculty changed very little.

A more dramatic finding is in the change in the number of humanities full-time faculty relative to part-time faculty compared to the institutional ratios over the two-year period: an average 52.4 percent increase in this comparative measure is found (Table 7). This is to say, that relative to the institutional pattern the humanities increased their number of full-time faculty relative to part-time faculty members. The increase is between thirty-one and seventy-four percent (Figure H.8). Two occurrences seem to account for this finding. On the one hand, given the humanities enrollment share decrease, the use or growth of

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26. Total humanities FTE faculty increased about thirteen percent over the two years.

humanities part-time faculty was possibly reduced.[27] On the other hand, given the burgeoning institutional enrollments, overall a good part of the increased institution-wide demand may have been met through the employment of part-time rather than full-time faculty in areas outside the humanities.

A less dramatic, but important, change is revealed in the comparison of humanities with institutional student to faculty ratios over the two-year period. An average 5.7 percent decrease in this ratio is found (Table 7). The confidence interval for this value is between a fourteen percent decrease and a two percent increase (Figure H.8). This is to say that relative to the institutional ratios the humanities decreased their number of class enrollment students per FTE faculty member. This change is a consequence, on the one hand, of the declining humanities enrollment share with a stable number of humanities FTE faculty and, on the other, of growing institutional enrollments with an increasing number of FTE faculty. This result implies that humanities unit costs are increasing relative to non-humanities unit costs.[28]

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27. Though historically the use of part-time faculty in the humanities has been relatively low (CSCC and ERIC 1978).

28. This condition needs to be viewed from the historical fact that unit costs in the humanities have been low compared to non-humanities unit costs due to the extent of the lecture mode of instruction in the humanities.

The humanities responsiveness indicator is a construct of elements describing adaptive actions and desires. Three elements describe the introduction of new products, three elements describe the introduction of new production methods, three describe the opening of new markets, two describe the introduction of new supplies of productive factors, and one element describes the reorganization of the enterprise. Humanities responsiveness, the final cross-sectional variable, averaged 35.6 in 1977-1978 (Table 7). This value is between thirty-one and thirty-nine according to the ninety-five percent confidence intervals (Figure H.10). While it is not known whether the humanities are more or less responsive than previously, the indicator is valuable as an analytical aid since responsiveness may vary differentially with institutional conditions.

Overall, humanities conditions-responsiveness in public two-year colleges changed in important ways over the two-year period. The enrollment share declined while the proportion of FTE faculty remained about the same. The humanities student to faculty ratio decreased relative to institutional ratios and the full-time to part-time faculty ratio increased relative to institutional ratios. Clearly, humanities unit costs are increasing relative to those for non-humanities programs.

Sub-Sample Differences. By region, the pattern of humanities class enrollment proportion changes, for the most part, follows the pattern of institutional enrollment change (Table 8). That is, the humanities (as a portion of total enrollments) showed the least enrollment declines in the fastest growing regions and the greatest declines in lower growth regions. The confidence intervals are too broad to confirm this observation, but the differences in the mean values (best point estimates) support the pattern suggested (Figure H.5).

No clear pattern of differences in humanities budget proportions emerges (Table 8). The Northeast, a slow growth region, stands out as the region with the greatest average budget proportion devoted to the humanities. The South (moderate growth) and Mountain Plains (high to moderate growth) form a group with the next highest budget proportions devoted to the humanities. The Middle States (low growth), Midwest (moderate growth), and West (high growth) form a group with the lowest budget proportion devoted to the humanities.

There is some indication that the humanities FTE faculty proportion of total FTE faculty is a function of general institutional growth (Table 8). The regions with the greatest enrollment and expenditure growth (West and Mountain Plains) show increases in FTE humanities faculty

Table 8. Regional Descriptive Statistics for Humanities Condition-Responsiveness Variables:[a] 1975-1976 to 1977-1978. -- Values in Percentages[b]

	Northeast			Middle States			South			Mid West			Mountain Plains			West		
Variable	$\bar{X}$ Percent Change[c]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
Class Enrollment Proportion	.4	13.7	6	- 6.6	6.9	16	- 3.3	10.1	40	- 3.7	8.3	34	- 1.9	9.7	13	- 2.5	4.3	32
Budget Proportion	18.5	13.2	4	13.2	8.5	11	16.0	11.5	29	11.8	11.5	25	14.7	10.1	10	12.9	11.0	15
FTE Faculty Proportion	.4	10.0	4	- .2	4.4	12	.7	7.1	27	- .7	4.4	20	1.5	4.1	8	1.9	7.1	17
FT/PT Faculty Ratio Comparison	271.2	490.5	4	74.9	188.7	12	33.6	82.0	27	49.7	92.5	20	19.9	80.3	8	33.5	81.1	17
Student/ Faculty Ratio Comparison	- 2.5	51.7	4	-14.4	19.3	12	- 5.6	30.2	26	6.6	43.2	20	- 2.6	48.2	8	-16.2	38.4	17
Humanities Responsiveness	34.6	15.1	4	42.0	20.0	12	34.8	21.1	26	40.9	25.6	23	40.1	12.9	10	35.7	15.4	18

[a] See Chapter 2 for variable descriptions.
[b] With the exception of responsiveness.
[c] Values express the percentage change from the earlier period with the exception of Budget and Responsiveness which are not change variables.

while lower growth regions show little increase or a decrease. Since humanities enrollment share decreases are least where institutional growth is greatest, this finding may indicate simply that the need for, or opportunity for staffing increases are less in lower growth institutions.

The three high growth regions have lower humanities to institutional full-time to part-time faculty ratio changes while the three lower growth regions have the greatest increases (Table 8). This finding, when joined with the facts about humanities enrollments, indicates that institutions in the lowest growth regions are increasing their use of part-time faculty at the highest rates.

Student to faculty ratio comparison changes do not follow a consistent pattern (Table 8). The region with the steepest humanities to institutional student to faculty ratio decline is the highest growth region (West), while the lowest growth region (Northeast) has the least ratio decline.

No clear pattern of regional difference in humanities responsiveness is found (Table 8). Two low growth regions (Middle States and Midwest) have relatively high responsiveness scores. While the third low growth region (Northeast) has a relatively low responsiveness score. One high growth region (Mountain Plains) has a relatively high responsiveness score, while the highest growth region (West)

and a moderate growth region (South) have relatively low responsiveness scores.

Overall, regional differences in humanities conditions-responsiveness do not have patterns as consistent as for institutional conditions. Humanities enrollment shares apparently do hold up better in higher growth regions, but no pattern in humanities budget proportion emerges. Staffing parameters seem to indicate that more pressure to use part-time humanities faculty is on the humanities in low growth regions. Responsiveness among regions did vary but apparently not in relation to general growth patterns.

The humanities enrollment proportion results by size category do not show a clear pattern (Table 9). The smallest institutions have the only humanities enrollment proportion increase while the largest have a relatively high decrease. However, the next to smallest institutions have the highest decrease. The confidence intervals support the difference between the largest and smallest institutions (Figure H.5). Thus, there is some reason to believe that the humanities in the largest institutions are under more pressure from humanities enrollment proportion declines than are the smallest institutions. In general the large institutions are the highest growth institutions. Thus, this finding may be a result of the fact that the largest

Table 9. Size Grouping Descriptive Statistics for Humanities Condition-Responsiveness Variables:[a] 1975-1976 to 1977-1978. -- Values in Percentages[b]

	1-999[c]			1000-2499			2500-6999			Over 7000		
Variable	$\bar{X}$ Percent Change[d]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
Class Enrollment Proportion	.4	10.0	20	- 5.2	11.1	43	- 2.5	6.1	46	- 4.4	4.4	32
Budget Proportion	18.5	15.4	17	14.2	10.6	30	13.6	8.4	32	9.4	9.4	15
FTE Faculty Proportion	1.2	10.0	17	.9	6.5	28	.6	3.6	30	- 1.0	2.5	13
FT/PT Faculty Ratio Comparison	54.1	128.6	17	30.1	80.9	28	67.8	208.5	30	62.8	90.4	13
Student/ Faculty Ratio Comparison	-5.3	53.8	16	-12.8	29.2	28	- 4.8	33.3	30	7.3	34.1	13

Table 9. Continued

Variable	1-999[c]			1000-2499			2500-6999			Over 7000		
	$\bar{X}$ Percent Change[d]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
Humanities Responsiveness	32.2	23.9	17	34.8	21.0	29	39.8	17.1	31	46.2	17.7	16

[a]See Chapter 2 for variable descriptions.
[b]With the exception of Responsiveness.
[c]Student headcount range.
[d]Values express the percentage change from the earlier period with the exception of Budget and Responsiveness which are not change variables.

institutions are in metropolitan areas where the student clientele may be more sensitive to labor market conditions in selecting coursework thus proportionately fewer select humanities courses.

Humanities budget proportion appears to be an inverse function of size: smaller institutions devote a larger budget proportion to the humanities (Table 9). This finding is consistent with the humanities enrollment pattern for the size categories because humanities enrollment shares are apparently holding up better in smaller institutions. Also smaller institutions tend to have less breadth in their curricular offerings and thus the humanities have fewer resource competitors in smaller institutions.

The humanities FTE faculty proportion appears to be holding up best in smaller institutions (Table 9). This finding follows the above pattern since the smaller institutions are assumed to be under less enrollment and budgetary pressure.

The larger institutions have higher humanities to institutional full-time to part-time faculty ratio increases than smaller institutions (Table 9). This finding tends to indicate that the higher growth institutions (the larger) are increasing their overall use of part-time faculty

faster than their use in the humanities or, conversely, the humanities are decreasing their part-time faculty use faster.

Student to faculty ratio comparisons seem to reveal that smaller institutions have the greatest decreases in this measure (Table 9). That is, the humanities, when compared to the institutional changes in smaller institutions, decrease the number of students per FTE faculty member the most or do not increase as much. This finding runs contrary to the general patterns observed above since the humanities are assumed to be under less enrollment and financial pressure in smaller institutions. However, this finding is consistent with the institutional condition pattern that showed the smaller institutions under the most general financial and enrollment pressure.

Humanities responsiveness appears to be a function of size: that is, the larger institutions have higher responsiveness scores. Since the larger institutions are assumed to have the most humanities enrollment and financial pressure this result appears to support the theoretical expectation that as humanities conditions worsen greater humanities responsiveness is stimulated.

Overall, humanities conditions appear to have varied inversely with size. Humanities enrollment shares may decrease most in larger institutions. Consistent with this

are the findings that humanities budget proportions are largest in smaller institutions, and that the humanities FTE faculty proportions hold up best in smaller institutions. The humanities full-time to part-time faculty ratios show the greatest relative increases in larger institutions where humanities enrollment growth is least, while humanities student to faculty ratio comparison decreases the most in smaller institutions where proportional humanities enrollment growth is greatest. Responsiveness appears to be a general function of size. Apparently with size (high enrollment and expenditure growth) comes heightened pressure on the humanities and heightened humanities responsiveness.

Humanities enrollment-share decline appears a function of age (Table 10); that is, share declines are greatest in the oldest institutions. Since the oldest institutions have the lowest overall enrollment growth, this result tends to indicate a worsening relative position of the humanities in the older institutions.

No clear age pattern of humanities budget proportion emerges (Table 10). The oldest and the youngest institutions have noticeably higher humanities budget proportions than institutions of intermediate ages.

Humanities FTE faculty proportion has no clear age pattern (Table 10). Intermediate aged institutions have the

Table 10. Age Grouping Descriptive Statistics for Humanities Condition-Responsiveness Variables:[a] 1975-1976 to 1977-1978. -- Values in Percentages[b]

Variable	Founded Before 1959			Founded Between 1960-1969			Founded After 1970		
	$\bar{X}$ Percent Change[b]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
Class Enrollment Proportion	- 4.2	7.4	46	- 2.7	6.7	70	- 3.5	9.4	25
Budget Proportion	14.8	9.8	29	12.8	10.8	45	15.6	12.8	20
FTE FAculty Proportion	.1	4.1	26	1.2	6.7	41	- .2	7.0	21
FT/PT Faculty Ratio Comparison	57.3	137.0	26	32.6	97.4	41	85.0	216.2	21
Student/Faculty Ratio Comparison	-13.3	26.3	26	- 6.3	31.6	41	5.6	53.7	20
Humanities Responsiveness	38.0	17.6	27	34.1	22.7	46	46.6	13.7	20

[a]See Chapter 2 for variable descriptions.
[b]With the exception of Responsiveness.
[c]Values express the percentage change from the earlier period with the exception of Budget and Responsiveness which are not change variables.

greatest increase while the youngest have the smallest proportional increase. The oldest institutions have a proportional decrease.

The youngest institutions stand out, having the greatest increase in humanities to institutional full-time to part-time faculty ratio (Table 10). However, the oldest have the next highest increase. Thus, there is some reason to hold that young institutions have greater rates of increase in part-time faculty employment or conversely, greater rates of decrease in humanities part-time faculty employment.

Humanities student to faculty ratios relative to institutional ratios appear to decrease as a function of age (Table 10). That is, older institutions have the greatest declines in this ratio comparison. This result is consistent with the fact that humanities enrollment share declines are greatest in the oldest institutions.

The youngest institutions appeared the most responsive (Table 10); however the oldest have higher average responsiveness than institutions of intermediate ages. The confidence intervals confirm the most extreme differences (Figure H.10). Apparently, high growth institutions are the most responsive.

Humanities enrollment and budget proportions apparently are not a function of institutional organization

(Table 11). It may be the case that multi-campus institutions (which would tend to be larger and high growth) have greater increases in humanities full-time to part-time faculty ratios. This tends to indicate greater general (non humanities) use of part-time faculty in multi-campus institutions or less humanities use of part-time faculty. In line with this finding multi-campus institutions apparently have greater declines in humanities to institutional student/faculty ratio comparisons. Humanities responsiveness appears encouraged by organizational complexity.

Humanities enrollment share declines appear to occur most in comprehensive institutions which have the broadest curricular offerings (Table 12). They, however, have higher humanities budget proportions, indicating little more than the fact that public non-comprehensive institutions are by and large technical institutions.[29] The non-comprehensive (technical) institutions do apparently have a greater increase in humanities FTE faculty proportion. At the same time they have decreased their humanities student to faculty ratio, in relation to institutional ratios, the most. These last two findings are consistent and may represent an important increased commitment to the humanities in non-comprehensive institutions at a time when the forces do not

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29. Fifteen of the seventeen non-comprehensive institutions in the sample are technical institutions.

Table 11. Organizational Grouping Descriptive Statistics for Humanities Condition-Responsiveness Variables:[a] 1975-1976 to 1977-1978. -- Values in Percentages[b]

	Single Campus			Non-Single Campus		
Variable	$\bar{X}$ Percent Change[c]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
Class Enrollment Proportion	- 3.3	8.4	106	- 3.3	8.4	35
Budget Proportion	13.9	10.4	76	14.4	13.1	18
FTE Faculty Proportion	.7	6.4	74	- .2	4.0	14
FT/PT Faculty Ratio Comparison	50.6	150.2	74	61.8	115.8	14
Student/Faculty Ratio Comparison	- 4.8	37.0	73	- 10.3	135.1	14
Humanities Responsiveness	36.1	20.4	75	45.6	16.8	18

[a] See Chapter 2 for variable descriptions.
[b] With the exception of Responsiveness.
[c] Values express the percentage change from the earlier period with the exception of Budget and Responsiveness which are not change variables.

Table 12. Emphasis Grouping Descriptive Statistics for Humanities Condition-Responsiveness Variables: 1975-1976 to 1977-1978. -- Values in Percentages[a][b]

Variable	Comprehensive			Non-Comprehensive		
	$\bar{X}$ Percent Change[c]	S.D.	N	$\bar{X}$ Percent Change	S.D.	N
Class Enrollment Proportion	- 3.9	8.0	124	.8	9.9	17
Budget Proportion	14,7	10.5	82	9.3	13.2	12
FTE Faculty Proportion	.3	5.2	79	2.6	11.4	9
FT/PT Faculty Ratio Comparison	52.8	148.3	79	48.6	11.6	9
Student/Faculty Ratio Comparison	- 4.1	36.4	78	-19.5	39.1	9
Humanities Responsiveness	38.9	19.6	83	30.4	23.1	10

[a] See Chapter 2 for variable descriptions.
[b] With the exception of Responsiveness.
[c] Values express the percentage change from the earlier period with the exception of Budget and Responsiveness which are not change variables.

favor the humanities. Responsiveness, however, appears greatest in comprehensive institutions.

Limitations

An examination of Appendix I reveals that all of the variable distributions are non-normal. The statistical tests employed in this study are designed for normally distributed data. A widely accepted method for dealing with this problem is to perform log transformations of the data. The SPSS Compute procedure was used to produce the transformations. The transformed data were then used in the statistical tests. The results using log data were compared to results using non-log data. The results do not differ markedly. As a consequence, the more familiar, non-log (original data) results are reported below.

Analytical Results

Two statistical expectations are examined through canonical correlation analysis. The canonical analysis begins by constructing one artificial variate for the set of institutional condition variables and one for the humanities conditions-responsiveness variable set. The analysis then procedes to correlate the two artificial variates and to calculate the weighting of the (non-artificial) individual variables. The individual variable weights indicate the degree and direction of a variable's contribution to the

variate of which it is a part. Thus, a relatively high coefficient, negative or positive, indicates that the variable is an important contributor to the construct represented by the artificial variate.

The canonical correlation between institutional conditions and humanities conditions-responsiveness is expected to be positive; that is, a high value of the canonical variate for institutional conditions is expected to be associated with a high value of the canonical variate for humanities conditions-responsiveness and a low value for the one variate is expected to be associated with a low value for the other. Put another way, if institutional conditions such as FTE enrollment and total expenditure growth over inflation are favorable, then conditions in the humanities such as enrollment share and budget proportion are expected to be favorable too. Conversely, unfavorable humanities conditions are expected to be associated with unfavorable institutional conditions. Examination of the coefficients for the individual variables in the dependent variable set is expected to show that humanities responsiveness is a negative function of variation in the canonical variate for humanities conditions. In other words, humanities responsiveness is expected to be stimulated by unfavorable institutional and humanities conditions.

Institutional Conditions Association with Humanities Conditions-Responsiveness

The overall association between institutional conditions and humanities conditions-responsiveness is a moderate one.[30] The correlation between the canonical variate for institutional conditions and the canonical variate for humanities conditions-responsiveness is just over .53 (Table 13). In other words, just over twenty-eight percent (R^2) of the variation in humanities conditions-responsiveness is explained by variation in institutional conditions.

The coefficients of the individual variables tell their contribution to the variate of which they are a part. Because institutional FTE enrollment change, total institutional expenditure change over inflation, humanities budget proportion, humanities to institutional student to faculty ratio comparison, and humanities responsiveness have the highest absolute value weightings, these are the variables contributing the most to their respective variates (Table 13). These results indicate (1) that institutional FTE enrollment and total expenditures over inflation changes make the greatest contribution to the construct (artificial variate) of institutional conditions; (2) that humanities budget

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30. As the total set of dependent variables, humanities conditions and humanities responsiveness are collapsed into one variate.

Table 13. Canonical Correlation Results:[a] Institutional Conditions with Humanities Conditions-Responsiveness

	Variable	Coefficient	R	R^2	N
Institutional Variables	FTE Enrollment Change	1.00489			
	Total Expenditure Change Over Inflation	-1.51554			
	Instructional Expenditure Proportion Change	- .64012			
	Total Expenditures Per FTE Student Change Over Inflation	- .12075	,53121	.28218	66
Humanities Variables	Class Enrollment Proportion Change	.22117			
	Budget Proportion	.55030			
	FTE Faculty Proportion Change	- .16218			
	FT/PT Faculty Ratio Comparison Change	.05593			
	S/F Ratio Comparison Change	- .70542			
	Humanities Responsiveness	- ,66215			

[a]See Chapter 2 for variable descriptions.

proportion, humanities student to faculty ratio standing, and humanities responsiveness are the largest contributors to the humanities condition-responsiveness construct; and (3) institutional FTE enrollment and total expenditures over inflation account for most of the relationship to the humanities construct and humanities budget proportion, humanities student to faculty ratio standing, and humanities responsiveness account for the most of the relationship to the institutional construct.

Further examination of the coefficients reveals informative patterns of directional contribution to the variates (Table 13). The positive sign of the coefficient for institutional FTE enrollment change indicates that this variable is positively associated with "institutional condition." In other words, a positive enrollment change suggests a positive institutional condition. In contrast, the negative sign of the coefficient for institutional total expenditures change over inflation indicates that this variable is negatively associated with favorable institutional conditions. This apparent paradox appears to be explained by the fact that income shortfalls were the greatest in rapidly growing (enrollments) institutions.

Among the humanities variables, the student to faculty ratio standing and responsiveness are negatively associated with "humanities condition": a negative

humanities student to faculty ratio standing and relatively negative humanities responsiveness are associated with a positive "humanities condition." In regard to the first of these, again a paradox appears to exist. This paradox is explained by the fact that the humanities negative standing was found to be due primarily to changes in non-humanities ratios in this relative measure. The humanities were themselves stable. Regarding the second--humanities responsiveness--the relationship is as expected: poor condition yields high responsiveness. Finally, a high humanities budget proportion contributes to a healthy humanities condition.

Results for three of the six regional sub-samples also are presented (Table 14). The remaining three results are not reported because the data are insufficient. The correlation between the artificial variates was highest in the West, where just over ninety-two percent of humanities conditions variation is explained by institutional conditions (Table 14). Very strong correlations are also found in the Midwest and South (Table 14).

Results for two of the four size categories are reported (Table 14). Correlations stronger than found in the nationwide sample are found in moderately large and moderately small institutions.

Table 14. Sub-Sample Comparisons: Canonical Correlation Results.[a] -- Institutional Conditions with Humanities Conditions-Responsiveness

	Sub-Sample[b]	R	R^2	N
Region	Northeast			1
	Middle States			9
	South	.88234	.77852	20
	Midwest	.87851	.77177	19
	Mountain Plains			6
	West	.96046	.92248	11
Size	1- 999			9
	1000-2499	.69020	.47637	24
	2500-6999	.77444	.59975	25
	Over 7000			8
Age	Founded after 1970			8
	Founded between 1960-1969	.56589	.32023	35
	Founded before 1959	.72836	.53050	23
Organization	Single Campus	.55056	.30311	59
	Multi-Campus			7
Emphasis	Comprehensive	.51246	.26261	60
	Non-Comprehensive			6

[a]See Chapter 2 for variable description.
[b]An empty row indicates insufficient data.

In the oldest institutions, fifty-three percent of the humanities conditions-responsiveness variation is explained (Table 14). Institutional conditions explained thirty-two percent of the variation in humanities conditions in institutions founded during the 1960's. No comparisons were possible in the two remaining sub-sample categories due to insufficient data.

Overall the results confirm the statistical expectations that a postive correlation exists between the institutional condition and humanities condition-responsiveness variates. A moderate association exists, explaining a little less than a third of humanities conditions-responsiveness. This conclusion from the national sample results is validated when the sub-sample results are examined. Very strong confirmations in high growth regions support the expected positive association because in the descriptive results high growth regions show evidence of fiscal strain. In other words, the regional sub-sample data --where disparities in growth rates are most evident--demonstrate the highest explained variance: here, the condition of the institutions is most clearly seen to explain the state of the humanities. A relatively strong confirmation in a high growth size range also supports the expectation for the same reason. Relatively weak confirmations for older institutions support the expectation because the

youngest, as the fastest growing, are apparently under the most financial strain as discussed in the descriptive results.

To the extent correlation results show mutual influence, humanities responsiveness, the humanities student to faculty ratio standing, and the humanities budget proportion appear most affected by changes in institutional conditions: viz., changes in institutional FTE enrollment and total expenditures over inflation. Humanities responsiveness does appear stimulated by weaker institutional conditions.

CHAPTER 4

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this study was to determine the impact of changes in institutional financial and enrollment conditions upon the humanities in public two-year colleges. There was a widely publicized crisis in humanities education during the 1970's. External forces altered institutional enrollment and financial growth patterns. Many observers have attributed a deterioration of the humanities to these changes in institutional conditions plus changing social values. In an era when student enrollment behavior has been increasingly sensitive to labor-market conditions, institutional reactions to downturns in enrollment and financial growth would be expected to be damaging to the humanities. At the same time, the humanities would be expected to respond to counteract the detrimental pressures.

Institutional conditions changed substantially in the 142 sample institutions. Over the five year period between 1971-1972 and 1976-1977 institutional FTE enrollments almost tripled and total current funds expenditures over inflation almost doubled. At the same time, the proportion of educational and general budgets devoted to instruction

decreased about eight percent and total expenditures per FTE student adjusted for inflation decreased about thirty percent. In sum, real per student expenditures declined in a major way even though expenditures increased overall. The question is whether the total effect was a better or worsened condition for public two-year colleges.

Three circumstances are involved. On the one hand, many institutions probably realized economies of scale and reduced unit instructional costs. On the other hand, the savings may not have offset fully the increased tasks to be performed, that is, more students to be served. Furthermore, while expenditures did increase over inflation, inflation contributed to widening the gap between enrollment and income growth.

A reason one might be pessimistic about the answer to the question of improving or worsening institutional conditions has to do with the nature of and concomitant program demands of the new students. The enrollment growth of the 1970's was a growth in the enrollment of non-traditional students (Cohen 1975b, Davis 1974, Leslie 1977, Lombardi 1975), who may be defined as being more than twenty-four years of age, minorities, female, part-time, or underprepared. The point is that growing numbers of non-traditional students may very likely increase the <u>overall</u> cost burden for several reasons. First, non-traditional students do not

tend to enroll in the on-going, day-time program. Thus, instructional costs cannot simply be absorbed by the programs already existing. Rather, non-traditional students are served primarily in additional courses or sections--i.e., they represent marginal expenditures. Second, part-time student enrollment gains may not be adequately matched by income because subsidies are on an FTE basis and conventional part-time to FTE conversion formulae often underestimate the resource requirements. Formulae for converting part-time to full-time equivalents rarely recognize the true costs of providing various supporting services. For example, new programs for minority and women's adjustment, multi-site operations to accomodate student preferences, day-care for children, administering the pool of part-time faculty, and faculty development all incur new costs.

Given this possible increased cost burden and the impact of inflation, savings realized through economies of scale may not explain the size of the per FTE student total expenditure decrease adjusted for inflation. It may be that the funding systems for public two-year colleges did not provide sufficient income growth to meet the demands of enrollment growth during the inflationary 1970's. If this is so, financial strain resulted in public two-year colleges from the growth of the 1970's.

To further support this conclusion about possible financial strain, it is helpful to review studies of the impact of growth upon institutional costs. The studies focus primarily upon size and cost relationships in small, private four-year institutions (Leslie 1972a). However, such studies are taken to be the best estimate of the general relationships.

Overall, the cost studies show that efficiencies (lower unit costs) are gained through larger institutional size (Leslie 1972a, p. 9). However, when the size of an institution reaches a certain level, unit costs tend to increase (Leslie 1972a, p. 14). "The message is that institutions may have the potential for savings as enrollments increase but that they may not choose to capitalize in this manner. Instead, they seem to most often choose to harvest gains . . . [D]ollar savings are usually spent on new buildings . . . or as more often is the case, on an expanded curriculum" (Leslie 1972a, p. 15).

Moss and Gaither provide an explanation reinforcing the view that financial strain increased during the 1970's when they assert: "With the advent of steady-state conditions the greatest disadvantage of formulas is their linear approach to funding. As enrollments decline, formulas generate proportionately less funds" (Moss and Gaither 1976, p. 553). To a degree this observation applies to reductions

in the rate of enrollment growth because reduced growth yields relatively less income growth. Formula funding of some type is used in almost all states for public two-year colleges and is the source of problems like those mentioned by Moss and Gaither (Wattenbarger and Stepp 1979, pp. 24-25).

Organizational complexity also has a bearing on costs. In a recent study McLaughlin and Associates vindicated Blau's views about the relationships between size, complexity and costs: "Simple agencies exhibit an economy of scale, whereas complex ones do not. Whether the division of labor or professionalization is taken as the indication of structural complexity, larger organizations tend to operate at lower cost than smaller ones if their structure is simple, but not if it is complex" (Blau 1974, p. 238 in McLaughlin and Associates 1979). Recent comparative financial statistics for two-year colleges reported by Dickmeyer and Hughes provide some confirmation for this view in that median total educational and general expenditures per FTE credit student were about $800 more in the largest institutions (Dickmeyer and Hughes 1979b, p. 16), institutions reported herein to have experienced the most dramatic growth during the 1970's. The presumed link between the Dickmeyer and Hughes statistic and McLaughlin's conclusion is that the

largest, high growth, institutions are more complex and that complexity has increased with size.

In the case of public two-year colleges, curricular expansions, relatively diminishing formula funding as FTE enrollment growth declines, increases in organizational complexity through increased size and multi-site operations, and the increasing proportion of part-time non-traditional students, may have reduced severely the potential for cost savings through growth in the 1970's.

Humanities conditions in public two-year colleges also changed in important ways. Between 1975-1976 and 1977-1978 the humanities enrollment share in the 142 sample institutions declined over three percent.[31] Yet within the institutions, the proportion of FTE faculty assigned in the humanities was stable.[32]

Compared to institution wide ratio changes the humanities full-time to part-time faculty ratio increased over fifty percent. Either institutions were using non-humanities part-time faculty at higher rates or the use of humanities part-time faculty was declining. Since the use of part-time faculty in the humanities is relatively low

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31. The number of humanities registrants did increase about five percent.

32. The number of FTE humanities faculty increased about thirteen percent.

(CSCC and ERIC 1978), the increase is probably due to increasing general (non-humanities) use of part-time faculty.

The student to faculty ratio comparison between the humanities and the institution decreased about six percent. This result indicates that institutions were increasing non-humanities student to faculty ratios or decreasing humanities student to faculty ratios. Since humanities absolute enrollments increased while the proportion of humanities FTE faculty was stable, obviously the answer lies outside the humanities. In short, the size of institutional enrollment gains and the stability of the proportion of humanities FTE faculty makes it probable that the better part of the decrease is due to increasing average class size in non-humanities courses.

What emerges from this humanities condition profile is the conclusion that the humanities in public two-year colleges are surprisingly well off in relative terms. Humanities enrollments continued to increase (though the enrollment share dipped) and FTE faculty were added (though the FTE proportion was stable). Compared to non-humanities programs the humanities have an increased proportion of full-time faculty relative to part-time faculty and relatively decreasing average class size. In other words, compared to changes in non-humanities conditions, the humanities had

enrollment growth coupled with increased full-time faculty that has resulted in favorable (from the standpoint of traditional standards of quality) changes in full-time to part-time faculty and student to faculty ratios. This is hardly a picture of a family of disciplines on the verge of extinction.

However, the picture is not entirely rosy because, from the increasingly important standpoint of relative costs, humanities conditions in public two-year colleges may be unfavorable. The humanities enrollment share is decreasing while the FTE faculty proportion remains stable. In other words, the humanities continue to receive the same proportional level of support for FTE faculty while they serve proportionately fewer students. Relative to non-humanities trends the humanities full-time to part-time faculty ratio standing change is unfavorable in terms of cost because the relatively increasing proportion of full-time faculty in the humanities is more costly to support than the relatively decreasing proportion of full-time faculty outside the humanities. Finally, relative to non-humanities trends, the humanities student to faculty ratio standing change is unfavorable in terms of cost because the relatively decreasing average class size in the humanities is more costly to support than the relatively increasing average class size outside the humanities. The conclusion

is inescapable that, relative to non-humanities operations, humanities unit costs are increasing.

An explanation for the surprisingly strong showing on the part of the humanities in public two-year colleges in the face of increasingly unfavorable cost comparison trends is found in the principle of the budgetary process that incrementally earned support shares tend to maintain themselves (Wildavsky 1974, p. 3). There are strong inertial forces that tend to maintain established support levels. Humanities courses are an integral part of degree requirements, an institutional standard highly resistant to change.

However, the signs are worrisome. How long will Wildavsky's principle protect, so to speak, the humanities which have a declining enrollment share? How long will the humanities be protected when they are becoming relatively more expensive? The verisimilitude of Wildavsky's principle and the humanities (to 1977-1978) strong showing are no basis for complacency. The humanities in public two-year colleges are threatened; some have already suffered. Efforts to rebuild the enrollment share base of the humanities are clearly needed.

In light of the need to rebuild the enrollment share base of the humanities in public two-year colleges, the humanities responsiveness findings (while not surprising given

their strong showing) are not encouraging. Humanities responsiveness was measured by assigning points to the number of adaptive actions, or of desires to take adaptive actions that characterized the humanities in the sample institutions. Points were assigned for the introduction of new humanities products, the introduction of new production methods, the opening of new markets for the humanities, the employment of new supplies of productive factors, and for the reorganization of the humanities within the institutional structure.

The average humanities responsiveness score was just over one-third of the total possible. There are no norms for the responsiveness indicator nor is it known if the humanities now are more or less responsive than previously. But on the basis of the judgment of the author who has worked in the humanities in public two-year colleges, and the author's familiarity with the indicator and the data, it appears that the degree of humanities responsiveness is low. This conclusion may be understated since the list of adaptations measured by the indicator is admittedly limited. It may be the case, however, that the degree of humanities responsiveness thus far is partially responsible for the strong showing of the humanities. In either case, clearly, there is room for increasing efforts to adapt the humanities in public two-year colleges to changing institutional

conditions which threaten the maintenance of the levels of institutional support earned by the humanities in previous decades.

A central research interest concerned the relationship between institutional conditions, humanities conditions, and humanities responsiveness. In addition to the analysis on which the above conclusions are based, canonical correlation analysis was performed to test the degree and direction of the association between the independent variables (institutional conditions) and the dependent variables (humanities conditions and humanities responsiveness). Institutional reactions to worsening institutional conditions were expected to be detrimental to the humanities, while at the same time stimulating humanities responsiveness.

The correlation between the institutional conditions set of variables and the humanities conditions-responsiveness set was positive; indicating that a little less than one-third of the variation in humanities conditions-responsiveness was a function of changes in institutional conditions. It appears that humanities conditions are only modestly affected adversely by changing institutional conditions. Institutional conditions were not found to explain the majority of variation in humanities conditions-responsiveness. Presumably humanities conditions were supported by the inertia of the budgetary process

rather than damaged by institutional reactions to financial and enrollment growth downturns.

Among the institutional condition variables change in institutional FTE enrollment and total expenditures over inflation stand out as having the greatest impact upon the humanities. The shortfall in total expenditure growth compared to FTE enrollment growth coupled with these being key influences upon the humanities is a worrisome sign. As financial strain becomes more severe, due to the inflation impelled shortfall, cost consciousness can be expected to increase and the relatively unfavorable cost trends in the humanities will very likely be scrutinized. Among the humanities conditions variables, change in the humanities student to faculty ratio standing and the humanities budget proportion appear to be most affected by institutional conditions. Thus one might expect the declining relative average class size and humanities budget share to be the key objects of scrutiny as financial pressures become more severe. Humanities responsiveness was only moderately stimulated by adverse institutional conditions. Given the humanities strong showing this is not surprising. But given the worrisome signs, it is not encouraging.

Overall, this study found the humanities in public two-year colleges to be in a strong position relative to

conditions outside the humanities. Given the depth of the perception that a crisis in the humanities exists, the strong showing of the humanities was unexpected and surprising. The hypothesis that institutional reactions to changing financial and enrollment conditions would be clearly damaging to the humanities was not confirmed, though some evidence of influences detrimental to the humanities was found. Humanities responsiveness, while found to be stimulated by adversity, has not been stimulated to very high levels because humanities conditions remain strong compared to non-humanities conditions. The inertia of the budgetary process and the entrenched position and status of the humanities has thus far apparently protected the humanities from detrimental consequences of institutional reactions to financial strain. However, given the eroding enrollment share base in the humanities and relatively increasing humanities unit cost trends, detrimental consequences may not be too far over the horizon.

This study has shown that, while changing conditions in public two-year colleges can be expected to detrimentally impact the humanities, there are strong forces promoting the maintenance of the humanities in public two-year colleges. In addition, there is a wide range of adaptive actions available to the humanities that promote their enhancement.

Adaptations that were elements of the humanities responsiveness indicator such as the willingness to accept larger class sizes, more part-time faculty, or fewer prerequisites are examples. Further examples are such adaptive actions as securing grants to further the humanities, special humanities classes or units instituted for occupational students, and increasing humanities graduation requirements. Dedicated efforts to rebuild the eroding enrollment share base of the humanities when conjoined with the strong inertial forces supporting the humanities will insure the continued maintenance of the humanities in public two-year colleges and possibly enhance the humanities.

APPENDIX A

THE SAMPLE

American River College
Sacramento, California

Angelina College
Lufkin, Texas

Arapahoe Community College
Littleton, Colorado

Atlantic Community College
Mays Landing, New Jersey

Austin Community College
Austin, Minnesota

Bainbridge Junior College
Bainbridge, Georgia

Barstow Community College
Barstow, California

Barton County Community Junior College
Great Bend, Kansas

Bay De Noc Community College
Escanaba, Michigan

Beaufort Technical Education Center
Beaufort, South Carolina

Brevard Community College
Cocoa, Florida

Bunker Hill Community College
Charlestown, Massachusetts

Butte College
Oroville, California

Cayuga County Community College
Auburn, New York

Central Virginia Community College
Lynchburg, Virginia

Chemeketa Community College
Salem, Oregon

Citrus College
Azusa, California

City Colleges of Chicago--R. J. Daley College
Chicago, Illinois

Clark County Community College
North Las Vegas, Nevada

Clinton Community College
Clinton, Iowa

Coastal Carolina Community College
Jacksonville, North Carolina

Cochise College
Douglas, Arizona

Coffeyville Community Junior College
Coffeyville, Kansas

College of the Desert
Palm Desert, California

College of San Mateo
San Mateo, California

College of the Sequoias
Visalia, California

Columbia Basin College
Pasco, Washington

Community College of Allegheny County-Boyce Campus
Monroeville, Pennsylvania

Community College of Denver-Auraria Campus
Denver, Colorado

Connors State College
Warner, Oklahoma

Cooke County College
Gainesville, Texas

Danville Junior College
Danville, Illinois

Daytona Beach Community College
Daytona Beach, Florida

DeAnza College
Cupertino, California

Delaware County Community College
Media, Pennsylvania

Delaware Technical and Community College-Terry Campus
Dover, Delaware

Delta College
University Center, Michigan

District One Technical Institute
Eau Claire, Wisconsin

Edgecombe Technical Institute
Tarboro, North Carolina

Edison State General and Technical College
Pigua, Ohio

Floyd Junior College
Rome, Georgia

Fresno City College
Fresno, California

Greater Hartford Community College
Hartford, Connecticut

Green River Community College
Auburn, Washington

Greenville Technical College
Greenville, South Carolina

Hagerstown Junior College
Hagerstown, Maryland

Halifax Community College
Weldon, North Carolina

Harford Community College
Bel Air, Maryland

Hartnell College
Salinas, California

Hawkeye Institute of Technology
Waterloo, Iowa

Howard Community College
Columbia, Maryland

Hudson Valley Community College
Troy, New York

Indian Hills Community College-Centerville Campus
Centerville, Iowa

Iowa Lakes Community College
Estherville, Iowa

Itawamba Junior College
Fulton, Mississippi

Jackson State Community College
Jackson, Tennessee

James H. Faulkner State Junior College
Bay Minette, Alabama

John C. Calhoun State Community College
Decatur, Alabama

J. S. Reynolds Community College
Richmond, Virginia

Kent State University-Ashtabula Campus
Ashtabula, Ohio

Kirtland Community College
Roscommon, Michigan

Kishwaukee College
Malta, Illinois

Lakeshore Technical Institute
Cleveland, Wisconsin

Lassen College
Susanville, California

Lenoir Community College
Kinston, North Carolina

Lincoln Land Community College
Springfield, Illinois

Lorain County Community College
Elyria, Ohio

Los Angeles Pierce College
Woodland Hills, California

Lower Columbia College
Longview, Washington

Lurleen B. Wallace State Junior College
Andalusia, Alabama

Marshalltown Community College
Marshalltown, Iowa

Mendocina College
Ukiah, California

Merced College
Merced, California

Mesa Community College
Mesa, Arizona

Metropolitan Technical Community College
Omaha, Nebraska

Miami-Dade Community College
Miami, Florida

Middle Georgia Community College
Cochran, Georgia

Middlesex County College
Edison, New Jersey

Miles Community College
Miles City, Montana

Milwaukee Area Technical Institute
Milwaukee, Wisconsin

Mississippi County Community College
Blytheville, Arkansas

Mississippi Gulf Coast Junior College-Jefferson Davis Campus
Gulfport, Mississippi

Mohawk Valley Community College
Utica, New York

Monroe County Community College
Monroe, Michigan

Morgan Community College
Fort Morgan, Colorado

Mount Hood Community College
Gresham, Oregon

Mount San Jacinto College
San Jacinto, California

Mount Wachusett Community College
Gardner, Massachusetts

New Hampshire Technical Institute
Concord, New Hampshire

New River Community College
Dublin, Virginia

Northern Oklahoma College
Tonkawa, Oklahoma

Northern Virginia Community College-Alexandria Campus
Alexandria, Virginia

North Country Community College
Sarnac Lake, New York

North Dakota State School of Science
Wahpeton, North Dakota

Northampton County Area Community College
Bethlehem, Pennsylvania

North Hennepin Community College
Brooklyn Park, Minnesota

Northwest Alabama State Junior College
Phil Campbell, Alabama

Northwest Technical College
Archbold, Ohio

Oakland Communtiy College-Auburn Hills Campus
Auburn Hills, Michigan

Oakton Community College
Morton Grove, Illinois

Pearl River Junior College
Poplarville, Mississippi

Peninsula College
Port Angeles, Washington

Pima Community College
Tucson, Arizona

Platte Technical Community College
Columbus, Nebraska

Potomac State College
Keyser, West Virginia

Quinebaug Valley Community College
Danielson, Connecticut

Roanoke-Chowan Technical Institute
Ahoskie, North Carolina

Saddleback College
Mission Viejo, California

Saint Bernard Parish Community College
Chalmette, Louisiana

Saint Petersburg Junior College
Saint Petersburg, Florida

San Antonio College
San Antonio, Texas

San Bernadino Valley College
San Bernadino, California

San Diego Mesa College
San Diego, California

Santa Rosa Junior College
Santa Rosa, California

Seminole Community College
Sanford, Florida

Shawnee State General and Technical College
Portsmouth, Ohio

Sinclair Community College
Dayton, Ohio

Southeastern Community College
Burlington, Iowa

South Georgia College
Douglas, Georgia

South Oklahoma City Junior College
Oklahoma City, Oklahoma

South Seattle Community College
Seattle, Washington

Southwest Mississippi Junior College
Summit, Mississippi

Spokane Community College
Spokane, Washington

Staten Island Community College
Staten Island, New York

Thomas Nelson Community College
Hampton, Virginia

Three Rivers Community College
Poplar Bluff, Missouri

Tidewater Community College
Portsmouth, Virginia

Umpqua Community College
Roseburg, Oregon

University of Maine-Augusta Branch
Augusta, Maine

University of Minnesota Technical College-Waseca Campus
Waseca, Minnesota

University of South Carolina-Lancaster Regional Campus
Lancaster, South Carolina

Utah Technical College at Provo
Provo, Utah

Valencia Community College
Orlando, Florida

Waubonsee Community College
Sugar Grove, Illinois

Wayne County Community College
Detroit, Michigan

Weatherford College
Weatherford, Texas

Western Texas College
Snyder, Texas

Western Wisconsin Technical Institute
La Crosse, Wisconsin

West Virginia Northern Community College
Wheeling, West Virginia

William Rainey Harper College
Palatine, Illinois

Willmar Community College
Willmar, Minnesota

Wytheville Community College
Wytheville, Virginia

APPENDIX B

SAMPLE CHARACTERISTICS

Table B.1 Regional Distribution of Sample Institutions and All Public Institutions[a]

Region[b]	Sample		Population	
	Number	Percent	Number	Percent
Northeast	6	4.2	98	9.6
Middle States	16	11.3	67	6.5
South	41	28.9	314	30.7
Midwest	34	23.9	271	26.5
Middle Plains	13	9.2	75	7.3
West	32	22.5	198	19.4
TOTAL	142	100.0	1023	100.0

[a]CSCC computer tapes, and 1977 Community Junior, and Technical College Directory (AACJC 1978).

[b]The states comprising each region are listed in Appendix F.

Table B.2 Mean Age in Years of Sample Institutions and All Public Two-Year Institutions[a]

	Sample	Population
Mean Age	22	20
Number of Institutions	142	1023

[a]1977 Community, Junior and Technical College Directory (AACJC 1978).

Table B.3 Mean Size in Headcount of Sample Institutions and All Public Two-Year Institutions[a]

	Sample	Population
Mean Size	5,325	4,067
Number of Institutions	142	1,023

[a]CSCC computer tapes, and 1977 Community, Junior and Technical College Directory (AACJC 1978).

Table B.4 Institutional Emphasis of Sample Institutions[a]

Emphasis	Sample Number	Sample Percent
Comprehensive	125	88
Non-Comprehensive	17	12
TOTAL	142	100.0

[a]CSCC Computer Tapes.

Table B.5 Institutional Organization of Sample Institutions[b]

Organization	Sample Number	Sample Percent
Single Campus	107	75.4
Not Single Campus	35	24.6
TOTAL	142	100.0

[a]CSCC Computer Tapes.

Table B.6 Chi-Square Test of Missing Data and Non-Missing Data Groups by Region

Count Row % Col. % Tot. %	Northeast	Middle States	South	Midwest	Mountain Plains	West	Row Totals
All Variables Present	1 1.5 16.7 .7	9 13.6 56.3 6.3	20 30.3 48.8 14.1	19 28.8 55.9 13.4	6 9.1 46.2 4.2	11 16.7 34.4 7.7	66 46.5
Some Variables Missing	5 6.6 83.3 3.5	7 9.2 43.8 4.9	21 27.6 51.2 14.8	15 19.7 44.1 10.6	7 9.2 53.8 4.9	21 27.6 65.6 14.8	76 53.5
Column Totals	6 4.2	16 11.3	41 28.9	34 23.9	13 9.2	32 22.5	142 100.0

Raw Chi Square = 5.93880 with 5 degrees of freedom.

Significance = .3122

Table B.7 Chi-Square Test of Missing Data and Non-Missing Data Groups by Age

Count Row % Col. % Tot. %	Founded After 1970	Founded Between 1960-1969	Founded Before 1959	Row Totals
All Variables Present	8 12.1 30.8 5.6	35 53.0 50.0 24.6	23 34.8 50.0 16.2	66 46.5
Some Variables Missing	18 23.7 69.2 12.7	35 46.1 50.0 24.6	23 30.3 50.0 16.2	76 53.5
Column Totals	26 18.3	70 49.3	46 32.4	142 100.0

Raw Chi Square = 3.15759 with 2 degrees of freedom.

Significance = .2062

Table B.8 Chi-Square Test of Missing Data and Non-Missing Data Groups by Headcount Size

Count / Row % / Col. % / Tot. %	Size: 1 to 999	1000 to 2499	2500 to 6999	7000 or more	Row Totals
All Variables Present	9 13.6 42.9 6.3	24 36.4 55.8 16.9	25 37.9 54.3 17.6	8 12.1 25.0 5.6	66 46.5
Some Variables Missing	12 15.8 57.1 8.5	19 25.0 44.2 13.4	21 27.6 45.7 14.8	24 31.6 75.0 16.9	76 53.5
Column Totals	21 14.8	43 30.3	46 32.4	32 22.5	142 100.0

Raw Chi-Square = 8.69670 with 3 degrees of freedom.

Significance = .0336.

Table B.9 Chi-Square Test of Missing Data and Non-Missing Data Groups by Organization

Count Row % Col. % Tot. %	Organization Single Campus	Not Single Campus	Row Totals
All Variables Present	59 89.4 55.1 41.5	7 10.6 20.0 4.9	66 46.5
Some Variables Missing	48 63.2 44.9 33.8	28 36.8 80.0 19.7	76 53.5
Column Totals	107 75.4	35 24.6	142 100.0

Corrected Chi-Square = 11.71703 with 1 degree of freedom.

Significance = .0006

Table B.10 Chi-Square Test of Missing Data and Non-Missing Data Groups by Emphasis

Count Row % Col. % Tot. %	Emphasis Comprehensive	Not Comprehensive	Row Total
All Variables Present	60 90.9 48.0 42.3	6 9.1 35.3 4.2	66 46.5
Some Variables Missing	65 85.5 52.0 45.8	11 14.5 64.7 7.7	76 53.5
Column Totals	125 88.0	17 12.0	142 100.0

Corrected Chi-Square = .52757 with 1 degree of freedom.

Significance = .4676.

Table B.11 T-Tests of Missing Data and Non-Missing Data Groups by Independent and Dependent Variables[a]

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	T Value	Degrees of Freedom	2-tail Probability
Institutional FTE Enrollment Change							
Non-Missing Data	66	1.8829	5.317	.654	- .04	109.45	.969
Missing Data	68	1.9130	3.371	.409			
Institutional Total Current Funds Expenditure Change Over Inflation							
Non-Missing Data	66	.7123	.849	.104	- .28	114	.779
Missing Data	50	.7558	.794	.112			
Institutional Total Expenditures Per Student Change Adjusted for Inflation							
Non-Missing Data	66	- .2761	.447	.055	.23	113	.817
Missing Data	49	- .2962	.475	.068			
Institutional Instructional Expenditure Proportion Change							
Non-Missing Data	66	- .0617	.118	.014	1.37	114	.173
Missing Data	50	- .0927	.124	.018			
Humanities Budget Proportion							
Non-Missing Data	66	.1501	.114	.014	1.36	92	.178
Missing Data	28	.1169	.096	.018			

Table B.11 Continued

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	T Value	Degrees of Freedom	2-tail Probability
Humanities FTE Faculty Proportion Change							
Non-Missing Data	66	.0038	.055	.007	- .51	86	.610
Missing Data	22	.0115	.076	.016			
Humanities FT/PT Faculty Ratio Comparison Change							
Non-Missing Data	66	.4519	1.095	.135	- .59	24.51	.562
Missing Data	22	.7406	2.214	.472			
Humanities S/F Ratio Comparison Change							
Non-Missing Data	66	- .0495	.359	.044	.33	85	.743
Missing Data	21	- .0800	.401	.087			
Humanities Enrollment Proportion Change							
Non-Missing Data	66	- .0370	.092	.011	- .51	139	.612
Missing Data	75	- .0298	.077	.009			
Humanities Responsiveness							
Non-Missing Data	66	36.6558	21.233	2.614	-1.12	60.57	.267
Missing Data	27	41.3184	16.841	3.241			

[a]See Chapter 2 for variable description.

APPENDIX C

DATA ELEMENTS WITH DERIVATIONS OR SOURCES

[a]Elements marked by an asterisk are variables used in the analysis.
[b]Numbers without quotation marks are element numbers. Numbers in quotation marks are data values.
[c]See Bibliography.
[d]See Appendix D. "FS" refers to the CSCC Facilitator Survey. "IS" refers to the CSCC Instructor Survey.

Data Element No.[a]	Label	Derivation[b]	Source
1	Instnl. FTE Students Fall 1971		NCES 1973: pp. 236 ff[c]
2	Instnl. FT Male Students Fall 1976		NCES 1978: pp. 64 ff[c]
3	Instnl. FT Female Students Fall 1976		NCES 1978: pp. 64 ff[c]
4	Instnl. PT Male Students Fall 1976		NCES 1978: pp. 64 ff[c]
5	Instnl. PT Female Students FAll 1976		NCES 1978: pp. 64 ff[c]
6	Instnl. FTE Students Fall 1976	1/3(4 + 5) + 2 + 3	
7*	Pct. FTE Enrlmt. Chng. Fall 1971-1976	(6 - 1) ÷ 1	
8	Instnl. Tot. Crnt. Fnds Revs. FY 1972		HEGIS 1972: Part A Line 48[d]

Data Element No.[a]	Label	Derivation[b]	Source
9	Instnl. Tot. Crnt. Fnds. Revs. FY 1977		HEGIS 1977: Part A Line 19[d]
10	Pct. Instnl. Totl. Crnt. Fnds. Rev. Chng. FY 1972-1977	(9 - 8) ÷ 8	
11	Pct. Rev. Chng. Over Pct. Inflation Index Chng. FY 1972-1977	10 - ".39"	
12	Instnl. Tot. Crnt. Fnds. Expncts. FY 1972		HEGIS 1972: Part B Line 18[d]
13	Instnl. Tot. Crnt. Fnds. Expnds. FY 1977		HEGIS 1977: Part B Line 19[d]
14	Pct. Instnl. Tot. Crnt. Fnds. Expnd. Chng. FY 1972-1977	(13 - 12) ÷ 12	
15*	Pct. Expnd. Chng. Over Pct. Inflation Index Chng. FY 1972-1977	14 - ".39"	
16	Instnl. Instructnl. Expnds. FY 1972		HEGIS 1972: Part B Line 2[d]
17	Instnl. Instructnl. Expdns. FY 1977		HEGIS 1977: Part B Line 1[d]

Data Element No.[a]	Label	Derivation[b]	Source
18	Instnl. Edctnl. and Gen. Expnds. FY 1972		HEGIS 1972: Part B Line 1[d]
19	Instnl. Edctnl. and Gen. Expnds. FY 1977		HEGIS 1977: Part B Line 12[d]
20	Pct. Instructnl. Expnds. of Ed. and Gen. Expnd. Fy 1972	16 ÷ 18	
21	Pct. Instructnl. Expnd. of Ed. and Gen. Expnd. Fy 1977	17 ÷ 19	
22*	Pct. Instructnl. Expnd. of Ed. and Gen. Expnd. Chang. FY 1972-1977	21 - 20	
23	Instnl. Crnt. Fnds. Revs. per FTE Student 1972	8 ÷ 1	
24	Instnl. Crnt. Fnds. Revs. per FTE Student 1977	9 ÷ 6	
25	Pct. Chng. in Crnt. Fnds. Revs. FTE per Student 1972-1977	(24 - 23) ÷ 23	
26	Pct. Rev. per Student Chng. Over Inflation Index Chng. 1972-1977	25 - ".39"	

Data Element No.[a]	Label	Derivation[b]	Source
27	Instnl. Crnt. Fnds. Expnds. per FTE Student 1972	12 ÷ 1	
28	Instl. Crnt. Fnds. Expnds. per FTE Student 1977	13 ÷ 6	
29	Pct. Chng. Crnt. Fnds. Expnds. per FTE Student 1972-1977	(28 - 27) ÷ 27	
30*	Pct. Expnd. per Student Chng. Over Inflation Index Chng. 1972-1977	29 - ".39"	
31	Hums. Class Enrlmt. Spring 1975		CSCC, FS: Item 2[d]
32	Inst. Headcount Enrlmt. Spring 1975		CSCC, FS: Item 1[d]
33	Pct. Hums. Class Enrlmt. of Instl. Headcount 1975	31 ÷ 32	
34	Hums. Class Enrlmt. Spring 1977		CSCC, FS: Item 2[d]
35	Instnl. Headcount Enrlmt. Spring 1977		CSCC, FS: Item 1[d]

Data Element No.[a]	Label	Derivation[b]	Source
36	Pct. Hums. Class Enrlmt. of Instnl. Headcount 1977	34 ÷ 35	
37*	Chng. in Hums. Pct. of Instnl. Headcount Enrlmt. 1975-1977	36 - 33	
38	Hum. Operating Bdgt. FY 1978		Mail Survey[d]
39	Instnl. Eductnl. and Gen. Bdgt. FY 1978		Mail Survey[d]
40	Pct. Hums. Bdgt. of Instnl. Ed. and Gen. Budgt. FY 1978	38 ÷ 39	
41	Instnl. Instructnl. Bdgt. FY 1978		Mail Survey[d]
42*	Pct. Hums. Bdgt. of Instnl. Instructnl. Bdgt. FY 1978	38 ÷ 41	
43	Hums. FT Faculty Fall 1975		Mail Survey[d]
44	Hums. FT Faculty Fall 1977		Mail Survey[d]
45	Instnl. FT Faculty Fall 1975		AACJC 1976 Directory[c]
46	Instnl. FT Faculty Fall 1977		AACJC 1978 Directory[c]

Data Element No.[a]	Label	Derivation[b]	Source
47	Hums. PT Faculty Fall 1975		Mail Survey[d]
48	Hums. PT Faculty Fall 1977		Mail Survey[d]
49	Instnl. PT Faculty Fall 1975		AACJC 1976 Directory[c]
50	Instnl. PT Faculty Fall 1977		AACJC 1978 Directory[c]
51	Hums. FTE Faculty Fall 1975	43 + 1/3(47)	
52	Hums. FTE Faculty Fall 1977	44 + 1/3(48)	
53	Instnl. FTE Faculty Fall 1975	45 + 1/3(49)	
54	Instnl. FTE Faculty Fall 1977	46 + 1/3(50)	
55	Pct. Hums. FTEF of Instnl. FTEF Fall 1975	51 ÷ 53	
56	Pct. Hums. FTEF of Instnl. FTEF Fall 1977	52 ÷ 54	
57*	Chng. in Hums. FTEF Pct. Fall 1975-1977	50 - 55	
58*	Pct. Chng. in Difrnc. Hums. FTF/PTF to Instnl. 1975-1977	$\frac{[(44\div48)\div(46\div50)]-[(43\div46)\div(45\div49)]}{[(43\div46)\div(45\div49)]}$	

Data Element No.[a]	Label	Derivation[b]	Source
59*	Pct. Chng. in Difrnc. Hums. S/FTEF to Instnl. 1975-1977	$\frac{[(34\div52)\div(35\div54)]-[(31\div51)\div(32\div53)]}{[(31\div51)\div(32\div53)]}$	
60	New Hums. Courses or Programs	Yes = "9" No = "0"	CSCC, FS: Item 7a[d]
61	Sponsorship of Hums. Conferences	Yes = "6" No = "0"	CSCC, FS: Item 7f[d]
62	Extracurricular Art Exhibits	"1" = "0" "2" = ".2" "3" = ".4" "4" = ".6" "5" = ".8" "6" = "1"	CSCC, FS: Item 4[d]
63	Extracurricular Concerts	"1" = "0" "2" = ".2" "3" = ".4" "4" = ".6" "5" = ".8" "6" = "1"	CSCC, FS: Item 4[d]
64	Extracurricular Hums. Lectures	"1" = "0" "2" = ".2" "3" = ".4" "4" = ".6" "5" = ".8" "6" = "1"	CSCC, FS: Item 4[d]
65	Extracurricular Hums. Clubs	"1" = "0" "2" = ".2" "3" = ".4" "4" = ".6" "5" = ".8" "6" = "1"	CSCC, FS: Item 4[d]
66	Extracurricular Theatrical Productions	"1" = "0" "2" = ".2" "3" = ".4" "4" = ".6" "5" = ".8" "6" = "1"	CSCC, FS: Item 4[d]
67	Other Extracurricular Hums. Events	"1" = "0" "2" = ".2" "3" = ".4" "4" = ".6" "5" = ".8" "6" = "1"	CSCC, FS: Item 4[d]

Data Element No.[a]	Label	Derivation[b]	Source
68	Humanities Activities Score	$\frac{1}{2}(62+63+64+65+66+67)$	
69	Humanities PT Faculty Proportion Increase	"Yes" = "3" "No" = "0"	Mail Survey[d]
70	Hums. Faculty Desire Larger Classes	"Yes" = "3"	CSCC, IS: Item 14d[d]
71	Hums. Faculty Desire Smaller Classes	"Yes" = "-3"	CSCC, IS: Item 14e[d]
72	Hums. Faculty Desire Fewer or No Prerequisites	"Yes" = "3"	CSCC, IS: Item 14j[d]
73	Hums. Faculty Desire Stricter Prerequisites	"Yes" = "-3"	CSCC, IS: Item 14i[d]
74	Hums. Degree Rqmt. Increase	No = "0" Yes Down = "-32" Yes Up = "32"	CSCC, FS: Item 7b[d]
75	Efforts to Attract New Students to Hums.	Yes = "9" No = "0"	CSCC, FS: Item 7c[d]
76	Special Hums. Classes or Units for Occuptnl. Students	Yes = "9" No = "0"	CSCC, FS: Item 7d[d]
77	Acquisition of Grants to Further Hums.	Yes = "12" No = "0"	CSCC, FS: Item 7g[d]

Data Element No.[a]	Label	Derivation[b]	Source
78	Employment of New Media in Hums. Classes	Yes = "3" No = "0"	CSCC, FS: Item 7e[d]
79	Reorganization of Humanities Disciplines	Yes = "9" No = "0"	Mail Survey[d]
80*	Humanities Responsiveness Indicator	Σ(60, 61, 68 through 79)	

APPENDIX D

SURVEY FORMS

450-004

Center for the Study of Community Colleges
INSTRUCTOR SURVEY

Your college is participating in a nationwide study conducted by the Center for the Study of Community Colleges under a grant from the National Endowment for the Humanities. The study is concerned with the role of the humanities in two-year colleges — how they are taught by faculty, understood by students, and supported by administrators.

The survey asks questions about one of your classes. The information gathered will help inform groups making policy that affects the humanities. All information is treated as confidential and at no time will your answers be singled out. Our concern is with aggregate instructional practices as discerned in a national sample.

We recognize that the survey is time-consuming and we appreciate your efforts in completing it. Thank you very much.

1a. Your college's class schedule indicates that in Fall, 1977, you are teaching:

_____ 15-17 _____
(Course) (Section)

If this class was assigned to a different instructor, please allow that person to complete this survey.

If the class is not being taught this term, please give us the reason why, and then return the uncompleted survey form in the accompanying envelope.

b. Class is not being taught because: (explain briefly) _____

_____

_____

Please answer the questions in relation to the specified class.

2. How many students are enrolled in this class? _____ 18-20

3. What do you see as the major goal of this course? (Please describe) _____

_____

_____

_____ 21-
22-

4a. Instructors may desire many qualities for their students. Which one of the following qualities do you most want your students to achieve?

1) Develop citizenship qualities . . . . . ☐ 1
2) Develop aesthetic appreciation/sensitivity . . . . . ☐ 2
3) Develop language sensitivity and skill . . . . . ☐ 3
4) Learn to make better use of leisure time . . . . . ☐ 4

23

b. Of the qualities listed below, which one do you most want your students to achieve?

1) Understand their own and other cultures . . . . . ☐ 1
2) Develop their own values . . . . . ☐ 2
3) Gain abilities to study further in the field . . . . . ☐ 3
4) Gain respect for traditions/heritage . . . . . ☐ 4

24

c. And from this list, which one do you most want your students to achieve?

1) Learn to use tools of research in humanities . . . . . ☐ 1
2) Gain qualities of mind useful in further education . . . . . ☐ 2
3) Understand self . . . . . ☐ 3
4) Develop the ability to think critically . . . . . ☐ 4

25

5. Over the entire term, what percent of class time is devoted to each of the following:

a. Your own lectures . . . . . _____ % 26/27
b. Guest lecturers . . . . . _____ % 28/29
c. Student verbal presentations . . . . . _____ % 30/31
d. Class discussion . . . . . _____ % 32/33
e. Viewing and/or listening to media . . . . . _____ % 34/35
f. Simulation/gaming . . . . . _____ % 36/37
g. Quizzes/examinations . . . . . _____ % 38/39
h. Field trips . . . . . _____ % 40/41
i. Other *(please specify)*: _____ _____ % 42/43

Please add percentages to make sure they agree with total

TOTAL: 100 %

6. How frequently are each of the following instructional media used in this class?

(Also check last box if you or any member of your faculty developed any of the designated media for this course.)

	Frequently used	Occasionally used	Never used	Developed by self or other faculty member	
a. Films	☐ 1	☐ 2	☐ 3	☐ 4	44
b. Single concept film loops	☐ 1	☐ 2	☐ 3	☐ 4	45
c. Filmstrips	☐ 1	☐ 2	☐ 3	☐ 4	46
d. Slides	☐ 1	☐ 2	☐ 3	☐ 4	47
e. Audiotape/slide/film combinations	☐ 1	☐ 2	☐ 3	☐ 4	48
f. Overhead projected transparencies	☐ 1	☐ 2	☐ 3	☐ 4	49
g. Audiotapes, cassettes, records	☐ 1	☐ 2	☐ 3	☐ 4	50
h. Videotapes	☐ 1	☐ 2	☐ 3	☐ 4	51
i. Television (broadcast/closed circuit)	☐ 1	☐ 2	☐ 3	☐ 4	52
j. Maps, charts, illustrations, displays	☐ 1	☐ 2	☐ 3	☐ 4	53
k. Three dimensional models	☐ 1	☐ 2	☐ 3	☐ 4	54
l. Other *(please specify)*:_____	☐ 1	☐ 2	☐ 3	☐ 4	55

7. Which of the following materials are used in this class? CHECK EACH TYPE USED. THEN, FOR EACH TYPE USED, PLEASE ANSWER ITEMS A-D.

	A.		B.			C.		D.			
								How much say did you have in the selection of these materials?			
	Check Materials Used	How many pages in total are students required to read?	How satisfied are you with these materials? Well-satisfied	Would like to change them	Definitely intend changing them	Did you prepare these materials? Yes	No	Total say	Selected them but had to verify with a chairperson or administrator	Was member of a group that selected them	Someone else selected them
56-	☐ 1 Texts and other assigned books	57-59	60- ☐ 1	☐ 2	☐ 3	61- ☐ 1	☐ 2	62- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 2 Laboratory materials and workbooks	63-65	66- ☐ 1	☐ 2	☐ 3	67- ☐ 1	☐ 2	68- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 3 Collections of readings	69-71	72- ☐ 1	☐ 2	☐ 3	73- ☐ 1	☐ 2	74- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 4 Reference books	75-77	78- ☐ 1	☐ 2	☐ 3	79- ☐ 1	☐ 2	80- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 5 Journal and/or magazine articles	12-14	15- ☐ 1	☐ 2	☐ 3	16- ☐ 1	☐ 2	17- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 6 Newspapers	18-20	21- ☐ 1	☐ 2	☐ 3	22- ☐ 1	☐ 2	23- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 7 Syllabi and handout materials	24-26	27- ☐ 1	☐ 2	☐ 3	28- ☐ 1	☐ 2	29- ☐ 1	☐ 2	☐ 3	☐ 4
	☐ 8 Other *(please specify)*										
	_____	30-32	33- ☐ 1	☐ 2	☐ 3	34- ☐ 1	☐ 2	35- ☐ 1	☐ 2	☐ 3	☐ 4
	_____	36-38	39- ☐ 1	☐ 2	☐ 3	40- ☐ 1	☐ 2	41- ☐ 1	☐ 2	☐ 3	☐ 4

8. **Please indicate the emphasis given to each of the following student activities in this class.**

	Not included in determining student's grade	Included but counts less than 25% toward grade	Counts 25% or more toward grade	
a. Papers written outside of class	☐ 1	☐ 2	☐ 3	42
b. Papers written in class	☐ 1	☐ 2	☐ 3	43
c. Quick-score/objective tests	☐ 1	☐ 2	☐ 3	44
d. Essay exams	☐ 1	☐ 2	☐ 3	45
e. Field reports	☐ 1	☐ 2	☐ 3	46
f. Oral recitations	☐ 1	☐ 2	☐ 3	47
g. Workbook completion	☐ 1	☐ 2	☐ 3	48
h. Regular class attendance	☐ 1	☐ 2	☐ 3	49
i. Participation in class discussions	☐ 1	☐ 2	☐ 3	50
j. Individual discussions with instructor	☐ 1	☐ 2	☐ 3	51
k. Other *(please specify):*_____	☐ 1	☐ 2	☐ 3	52

9. **Examinations or quizzes given to students may ask them to demonstrate various abilities. Please indicate the importance of each of these abilities in the tests you give in this course.**

	Very important	Somewhat important	Not important	
a. Mastery of a skill	☐ 1	☐ 2	☐ 3	53
b. Acquaintance with concepts of the discipline	☐ 1	☐ 2	☐ 3	54
c. Recall of specific information	☐ 1	☐ 2	☐ 3	55
d. Understanding the significance of certain works or events	☐ 1	☐ 2	☐ 3	56
e. Ability to synthesize course content	☐ 1	☐ 2	☐ 3	57
f. Relationship of concepts to student's own values	☐ 1	☐ 2	☐ 3	58
g. Other *(please specify):*_____	☐ 1	☐ 2	☐ 3	59

10. What grading practice do you employ in this class? 60

- ABCDF . . . . . ☐ 1
- ABCD/No credit . . ☐ 2
- ABC/No credit . . ☐ 3
- Pass/Fail . . . . ☐ 4
- Pass/No credit . . ☐ 5
- No grades issued . . ☐ 6
- Other _____ ☐ 7
  (please specify)

11. For each of the following out-of-class activities please indicate if attendance is required, recommended or neither.

	Attendance required for course credit	Attendance recommended but not required	Neither required nor recommended	
a. On-campus educational type films	☐ 1	☐ 2	☐ 3	61
b. Other films	☐ 1	☐ 2	☐ 3	62
c. Concerts, recitals	☐ 1	☐ 2	☐ 3	63
d. Television programs	☐ 1	☐ 2	☐ 3	64
e. Museums/exhibits	☐ 1	☐ 2	☐ 3	65
f. Theatrical productions	☐ 1	☐ 2	☐ 3	66
g. Lectures	☐ 1	☐ 2	☐ 3	67
h. Field trips	☐ 1	☐ 2	☐ 3	68
i. Volunteer service on educational/ community project	☐ 1	☐ 2	☐ 3	69
j. Other *(please specify)*: _____	☐ 1	☐ 2	☐ 3	70

12a. Is this class conducted as an interdisciplinary course? 71

- Yes . . . . . ☐ 1
- No . . . . . ☐ 2

b. IF YES: Which other disciplines are involved? _____
(please specify)

_____ 72-
_____ 73-
_____ 74-

c. Are instructors from other disciplines involved . . .

	YES	NO	
. . . in course planning?	☐ 1	☐ 2	75
. . . in team teaching?	☐ 1	☐ 2	76
. . . in offering guest lectures?	☐ 1	☐ 2	77

13a. Which of these types of assistance are available to you this term? **CHECK AS MANY AS APPLY.**

13b. Which will you utilize this term? **CHECK AS MANY AS APPLY.**

	a. Assistance is available to me in the following areas	b. Will utilize this term
a. Clerical help	12- ☐ 1	13- ☐ 1
b. Test-scoring facilities	☐ 2	☐ 2
c. Tutors	☐ 3	☐ 3
d. Readers	☐ 4	☐ 4
e. Paraprofessional aides/instructional assistants	☐ 5	☐ 5
f. Media production facilities/assistance	☐ 6	☐ 6
g. Library/bibliographical assistance	☐ 7	☐ 7
h. Other *(please specify)*:_____	☐ 8	☐ 8

14. Although this course may be very effective, what would it take to make it better? **CHECK AS MANY AS APPLY.**

a. More freedom to choose materials	☐ 1	14
b. More interaction with colleagues or administrators	☐ 2	
c. Less interference from colleagues or administrators	☐ 3	
d. Larger class (more students)	☐ 4	
e. Smaller class	☐ 5	
f. More reader/paraprofessional aides	☐ 6	
g. More clerical assistance	☐ 7	
h. Availability of more media or instructional materials	☐ 8	
i. Stricter prerequisites for admission to class	☐ 9	
j. Fewer or no prerequisites for admission to class	☐ 1	15
k. Changed course description	☐ 2	
l. Instructor release time to develop course and/or materials	☐ 3	
m. Different goals and objectives	☐ 4	
n. Professional development opportunities for instructors	☐ 5	
o. Other *(please specify)*:_____	☐ 6	

Now, just a few questions about you . . .

15. How many years have you taught in any two-year college? 16

- a. Less than one year . . . . . ☐ 1
- b. 1-2 years . . . . . ☐ 2
- c. 3-4 years . . . . . ☐ 3
- d. 5-10 years . . . . . ☐ 4
- e. 11-20 years . . . . . ☐ 5
- f. Over 20 years . . . . . ☐ 6

16. At this college, are you considered to be a: 17

- a. Full-time faculty member . . . . . ☐ 1
- b. Part-time faculty member . . . . . ☐ 2
- c. Department or division chairperson . . . ☐ 3
- d. Administrator . . . . . ☐ 4
- e. Other *(please specify)*:

  _____ . . . ☐ 5

17. What is the highest degree you presently hold? 18

- a. Bachelor's . . . . . ☐ 1
- b. Master's . . . . . ☐ 2
- c. Doctorate . . . . . ☐ 3

IMPORTANT INSTRUCTIONS

If you have a course syllabus or other material that further describes your class and would like to share it, please append it to this questionnaire.

Thank you for taking the time to complete this survey. Please seal the completed questionnaire in the envelope which is addressed to the project facilitator on your campus and return it to that person. After collecting the forms from all participants, the facilitator will forward the sealed envelopes to the Center.

We appreciate your prompt attention and participation in this important survey.

Arthur M. Cohen
Principal Investigator

Florence B. Brawer
Research Director

CENTER FOR THE STUDY OF COMMUNITY COLLEGES
A NON PROFIT CORPORATION

ARTHUR M. COHEN
JOHN LOMBARDI
FLORENCE B. BRAWER

1047 GAYLEY AVENUE, SUITE 205
LOS ANGELES, CALIFORNIA 90024
(213) 477-6093

Dear Colleague:

In the past few months you have received various papers and reports emanating from our nationwide study of people teaching the humanities in two-year colleges. This fall you will also receive a book that deals with major findings about the faculty, draws implications from these data, and makes policy recommendations for implementation.

Now, as campus facilitator for the curriculum and instruction phase of this National Endowment for the Humanities-sponsored study, we ask you to obtain answers to a few pertinent questions. As with other data that this project has generated, all information is treated as confidential. At no time will answers from any person or institution be singled out. Our concern is with aggregate curricular and instructional practices as well as with general enrollment figures.

Thanks for your efforts.

Arthur M. Cohen
Principal Investigator

Florence B. Brawer
Research Director

1. What was your total college enrollment (head count) in:

Spring, 1975_____

Spring, 1977_____

Questions 2 and 3 are concerned with specific enrollments. If number 2 cannot be answered please make the estimates as indicated in number 3.

2. If the figures are available, please list the total enrollment in all sections of the following courses for _____1975 and _____1977.

Check whether enrollment figures are:

1975 Census week_____ End of term_____

1977 Census week_____ End of term_____

Number	Course Title	1975 enrollment	1977 enrollment

3. If enrollment figures are not available, what is your estimate of the average enrollment in each class section of the courses in the following disciplines?

Discipline	Spring 1975	Spring 1977
Cultural Anthropology	____	____
Art History/Appreciation	____	____
Foreign Language	____	____
History	____	____
Humanities	____	____
Literature	____	____
Music History/Appreciation	____	____
Philosophy	____	____
Political Science/Government	____	____
Religion	____	____
Social Studies/Ethnic Studies	____	____
Jurisprudence	____	____
Cultural Geography	____	____
Theatre	____	____

4. In addition to enrollment figures, we are interested in learning about extra-curricular activities in the humanities. These activities are frequently offered through Community Services, Student Activities and/or Adult Division and usually do not appear on lists of credit courses. How many of the following activities did your college offer in Spring, 1977?

	0	1	2-5	6-10	11-20	Over 20
Art Exhibits	___	___	___	___	___	___
Concerts, Recitals, Musical Events	___	___	___	___	___	___
Lectures, Seminars, Colloquia	___	___	___	___	___	___
Student Clubs	___	___	___	___	___	___
Theatrical Productions	___	___	___	___	___	___
Other _____	___	___	___	___	___	___

5. Approximately what percent of all students attend these events? ____%

6. Approximately what percent of the college faculty participate in these events, either by teaching the courses, preparing the programs, or giving the lectures? ____%

7. We are also interested in knowing what has been happening to the humanities at your college in the past few years. Please elaborate on your reponses to these questions:

   a. Have new types of courses or programs been introduced?_____

   _____

   _____

   b. Have any changes occurred in the humanities graduation requirements?

   _____

   _____

   c. Have any special efforts been made to attract new groups of students to humanities courses (e.g. "Literature for Women")?_____

   _____

   _____

   d. Have special humanities classes or units for students in occupational program been instituted--for example, "Dealing with the Terminal Patient" (for nursing students); "Ethics of Pricing" (for auto repair students)?

   _____

   _____

   e. Are new media being employed in humanities courses--e.g. use of televised programs?_____

   _____

   f. Has your college sponsored any conferences dealing with some aspect of the humanities?_____

   _____

   g. Has your college received any grants to further the humanities?_____

   _____

   h. Any other new developments?_____

   _____

Thanks for completing this form. Please return it to the Center.

In the Fall we plan to sample a small number of faculty for information about the classes they teach. Please enclose a copy of your Fall 1977 Class Schedule so that we can pull this sample or, if it is not yet available, send it when you can. We will communicate with you later about this survey. In the meantime, please know that we most appreciate your assistance. Thank you and have a good summer.

D.2. HEGIS Forms

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY

FINANCIAL STATISTICS OF INSTITUTIONS OF HIGHER EDUCATION FOR FISCAL YEAR ENDING 1972

INSTRUCTIONS AND DEFINITIONS

GENERAL

To avoid unnecessary overlapping of Federal surveys of the finances of your institution, this survey is designed to include the financial statistics previously collected by the U.S. Department of Commerce, Bureau of the Census Form F-13.

The definitions and instructions used here are compatible with those in College and University Business Administration, Revised Edition, published by the American Council on Education, One Dupont Circle, Washington, D.C. 20036.

Please attach supplemental information, comments, etc., on a separate sheet.

Please examine the definitions and instructions. If you need additional clarification on any of the items, please call Mr. Paul F. Mertins at (202) 962-7301, in Washington, D.C.

Data requested on this financial survey are for the fiscal year of your institution.

Data for your institution which are not kept on the books of account of your institution, but are kept on the records of another organization or agency for your institution, should be included *(e.g., State schools should report or estimate the value of physical plant even though records are maintained by a State agency).*

Exclude agency funds; i.e., funds handled by the institution in a custodial capacity only *(e.g., funds for student organizations).*

All data reported should be whole dollars only--omit cents.

Please complete this survey and return it to the U.S. Office of Education, National Center for Educational Statistics, ATTENTION: Room 2136-HEGIS, 400 Maryland Avenue, SW., Washington, D.C. 20202, not later the October 31, 1972.

NOTE: *This year's form is in six parts. For any item in any part where exact data do not exist, please give estimates. Items referenced in specific instructions below will be referred to by their line numbers.*

SPECIFIC

PART A - CURRENT FUNDS REVENUES BY SOURCE FOR FISCAL YEAR ENDING 1972

LINE 1. This line is the sum of Lines 2, 3, 9, 10, 11, 18, 19, 26, 29, 30, and 31.

LINE 2. Report all tuition and fees assessed against students for educational and general purposes. Include here those tuition and fees which your State collects and returns in the form of State appropriations. Tuition and fee remissions or exemptions should be assessed and reported as student fees revenues although it is not intended to effect collection from the students. A corresponding amount, as well as the amount of other student aid granted out of current funds revenues, should be shown as expenditures of student aid grants *(Part B, Line 11).*

LINE 3. Governmental appropriations include all amounts received from governmental sources that are expendable for educational and general purposes. This item is the sum of Lines 4, 7, and 8.

LINE 5. Report Federal payments channeled through State finance agencies.

LINE 9. Report income from investments of restricted and unrestricted endowment, term endowment, quasi-endowment funds, Federal and State land-grant funds *(land-grant institutions),* and income from funds held in irrevocable trusts by others.

LINE 10. Report educational and general revenues given to the institution by any nongovernmental source. Include estimated value of services contributed by members of religious orders *(a corresponding amount should be reported under expenditures).* Include bequests. Do not include funds received for specified research or other sponsored programs in accordance with grants, contracts, or other written agreements.

LINE 11. Sponsored research includes revenues from outside organizations for specific research projects made in accordance with written agreements. Do not include recovery of indirect costs here. Do not include Federally Funded Research and Development Centers. Sum of Lines 12 through 15.

LINE 15. Include revenues from nongovernmental sources such as foundations, business corporations, other organizations, or individuals which are received in accordance with contracts, grants, or other written agreements. This line is the sum of Lines 16 and 17.

LINE 16. Report revenues from grants or contracts to do research of a philanthropic nature.

LINE 17. Report revenues from written agreements to do sponsored research which is not primarily philanthropic in nature *(i.e., proprietary research).*

LINE 18. Report gross revenues for separately organized research divisions that are not financed in the manner described for sponsored research (Line 11).

LINE 19. Include for sponsored programs all separately budgeted programs, other than research, which are supported by sponsors outside the institution. Examples are training programs, workshops, training and instructional institutes such as counseling institutes, college work-study programs, and similar activities for which payments are made in accordance with contracts, grants, or other written agreements. Sum of Lines 20 through 23.

LINE 23. Nongovernmental should include revenues from foundations and other nongovernmental sources *(Lines 24 and 25).*

LINE 26. Include recovery of indirect costs accruing from sponsored research and other sponsored programs *(Lines 27 and 28)*.

LINE 29. Incidental revenues of educational departments are included here.

LINE 30. This category should contain revenues of activities organized and operated in connection with instructional departments, and conducted primarily to provide instructional or laboratory training of students. Include, also, revenues for activities of a cultural nature, e.g., concerts, dramatic productions.

LINE 31. This item is for revenues for educational and general purposes not covered elsewhere. Important items and those of major magnitude which are reported here should be explained in a separate note, or attachment, accompanying this survey.

LINE 32. Student aid grants--do not include loans or work assignments. Report only grants, scholarships, and fellowships to students for which no services or repayments are required of the student. This item is equal to the sum of Lines 33 through 38, inclusive.

LINE 39. The figure reported here should be the sum of Lines 40 and 44.

LINE 40. Report revenues from hospitals in which service to the community or State is paramount (not infirmaries for students). This line is the sum of Lines 41, 42, and 43.

LINE 41. Report gross charges revenues of the public service hospital.

LINE 42. Report all revenues from the Federal Government for the hospital.

LINE 44. Report revenues from other major service programs or activities that are primarily community or public services performed by the institution, and are not essential in meeting the educational objectives of the institution. Examples are Federally Funded Research and Development Centers, international programs, and regulatory services.

LINE 45. Auxiliary enterprises represent the sum of Lines 46 and 47. Report gross revenues of activities which furnish a service to students, faculty, or staff, and which charge a fee to cover the cost *(or a portion thereof)* of the service.

LINE 47. Examples of other auxiliary enterprises would be college unions, revenues from intercollegiate athletics, etc. If of major magnitude, attach to this form a note explaining which items are included in this item.

LINE 48. This line should include ALL current funds revenues. It is the sum of Lines 1, 32, 39, and 45.

PART B - CURRENT FUNDS EXPENDITURES BY FUNCTION FOR FISCAL YEAR ENDING 1972

NOTE: For Part B, report expenditures of both restricted and unrestricted funds made for current operations.

LINE 1. Report the sum of Lines 2 through 10, inclusive.

LINE 2. Include all expenditures of the departments, colleges, schools, and instructional divisions of the institution.

LINE 3. Report expenditures for those activities listed on Line 30 *(Part A)*.

LINE 4. Report expenditures for those activities listed on Line 11 *(Part A)*. Do NOT include expenditures for indirect costs.

LINE 5. Report expenditures for research divisions and activities which are not for sponsored research or instruction and departmental research.

LINE 6. Other sponsored programs -- report expenditures for those activities mentioned on Line 19 *(Part A)*. Do NOT include indirect costs.

LINE 7. Extension and public service refers to educational and other activities designed primarily to serve the general public. However, do NOT include major service programs *(Lines 13 and 14)*.

LINE 8. Libraries -- report total expenditures for separately organized libraries, both general and departmental. Include operating expenses *(salaries, wages, etc.)*, books, subscriptions, etc.

LINE 9. Include salaries, supplies, materials, and other expenditures for maintenance and operation of all facilities except those properly charged to auxiliary enterprises and organized activities relating to instructional departments.

LINE 10. Include all expenditures of the general executive and administrative offices, expenditures for services to students, staff benefits expenditures, and other expenditures for educational and general purposes not included above. Do not include expenditures chargeable to auxiliary enterprises, organized activities, libraries, or physical plant operations.

LINE 11. Report expenditures for all student aid grants.

LINES 13 and 14. Report expenditures for those activities listed in Part A *(Lines 40 and 44)*.

LINES 16 and 17. Report gross expenditures of all auxiliary enterprises--include their physical plant charges, general institutional expenses, administrative charges, and other indirect costs.

LINE 18. Total current funds expenditures is the sum of Lines 1, 11, 12, and 15.

LINE 19. How much of total expenditures reported by your institution on Line 18 was expended for physical plant assets? If data are not available, then estimate the figure. Distribute this amount in columns (3), (4), and (5) of Line 19. Note that these amounts should NOT be included in columns (3), (4), or (5) at Lines 1 through 18, but only in column (2) of those lines.

LINE 20. How much of total expenditures reported by your institution on Line 18 was expended for agricultural experiment stations and extension services? This sum must appear in one or more of the above expenditures items.

COLUMN (2). This column should include expenditures of current funds only. If any current funds reported in column (2) went for capital outlays, see instruction at Line 19 above.

COLUMNS (3), (4), and (5). Report at Lines 1, 13, 14, 15, and 20, all expenditures for capital outlay from bond proceeds and all other funds except for current funds reported in Column (2). In Column (3), include purchase of equipment *(replacements as well as additions)*. In Column (4), report purchases of land and existing structures. In Column (5), report spending for new structures and other improvements, additions, replacements, and major alterations.

PART C - PHYSICAL PLANT ASSETS FOR FISCAL YEAR ENDING 1972

In part C, report data on physical plant assets: land, buildings, and equipment *(not plant cash or investments of plant cash)*. Data for your institution which are not kept on the books of account of your institution, but are kept on the records of another organization or agency for your institution, should be included *(e.g., State schools should report physical plant even though records are maintained by a State agency)*. Estimate value of plant even though it is rented or leased.

LINE 1. Report all land values except those land values which are a part of endowment or other capital fund investments in real estate.

LINE 2. Buildings include all buildings except those which are a part of endowment or other capital funds investments on real estate.

LINE 3. Equipment includes all equipment which your institution includes as an asset on inventory records.

COLUMN (2). Book value of plant at the beginning of the fiscal year is intended as the dollar amount of value as shown on the institution's accounting records. Provide estimates for assets not recorded in the accounts of the institution.

COLUMN (3). Additions during the year are additions to plant made through purchase, by gift-in-kind from donor, and from other additions.

COLUMN (4). Deductions from the plant are deductions resulting from selling, razing, fire or other hazards, or other disposition of assets, or from obsolescence.

COLUMN (5). Book value of plant at the ending of the fiscal year is intended as the dollar amount of value as shown on the institution's accounting records. Provide estimates for assets not recorded in the accounts of the institution.

PART D - INDEBTEDNESS ON PHYSICAL PLANT FOR FISCAL YEAR ENDING 1972

In Part D, report data on indebtedness liability *(principal only, not interest)* against the physical plant. Include auxiliary enterprises facilities as well as educational and general facilities. Examples of auxiliary enterprises facilities are those used for operation of housing, food service, bookstores, and other units which are classified as auxiliary enterprises. Enter zeroes or NA's if your institution has no indebtedness.

LINE 1. Balance owed on indebtedness principal at the beginning of the year is that amount shown in the liability section of the plant fund balance sheet.

LINE 2. Additional principal borrowed during the year is loans received through bonds, mortgages, notes, or any other type of financing *(including short-term notes)* and amounts borrowed from other institutional funds.

LINE 3. Payments on plant loans principal during the year is the amount expended to reduce the principal of loans, regardless of the source of funds.

LINE 4. Balance owed on indebtedness principal at the ending of the year is that amount shown in the liability section of the plant fund balance sheet. It is the sum of Line 1 plus Line 2, less Line 3.

PART E - ENDOWMENT BY BOOK AND MARKET VALUES, EARNINGS, AND REALIZED GAINS FOR THE FISCAL YEAR ENDING 1972

In Part E, report data on investment of endowment, term-endowment, and quasi-endowment *(funds functioning as endowment)*. If your institution has no endowment, enter zeroes or NA's.

LINE 1. Book value at the beginning of the fiscal year is the value shown on the accounting records of your institution.

LINE 2. Market value at the beginning of the fiscal year is the value shown usually in the footnotes of the annual financial report. *(If market value on some investments is not available, use whatever value was assigned by your institution, as included in the footnote.)*

LINE 3. Book value at the ending of the fiscal year is the value shown on the accounting records of your institution.

LINE 4. Market value at the ending of the fiscal year is the value shown usually in the footnotes of the annual financial report.

LINE 5. Earnings include all earnings *(not realized gains)* on investments of endowment regardless of distribution made of the earnings to various institutional funds.

LINE 6. Net realized gains are appreciations *(amount selling price is greater than purchasing price)* on securities and other investments sold during the fiscal year. Not all investments are sold at a gain. Losses should be subtracted from gains in reporting here.

INSTRUCTIONS FOR PART F ON REVERSE.

PART F - TO BE COMPLETED BY PUBLIC INSTITUTIONS ONLY

LINE 1. Report all gifts and grants received during the fiscal year from private individuals and organizations. Include nonexpendable grants as well as benefactions available for plant expansion, or for current expenditure.

LINE 2. Report interest, dividends, rents, and other earnings on all invested funds, including endowment and plant funds. Exclude receipts from sale of securities other than any recorded profits. Exclude earnings of State land funds allocated to your institution.

LINE 3. Report total expenditures during the fiscal year for gross salaries and wages of the total academic and nonacademic staff, including paid student help and part-time employees. Include amounts for auxiliary enterprises.

LINE 4. Include such expenditures from all funds, both restricted and unrestricted. Exclude payments to students rendering services (teaching fellows, etc.).

LINE 5. Report interest paid from all funds--general, auxiliary enterprise, plant funds, etc.

LINES 6 through 9. Report bonds, mortgages, etc., with an original term of more than one year, which are payable solely from pledged earnings, charges, or fees (e.g., dormitory, stadium, and student-union revenue bonds). Include any loans (not "Commitments") from H.H.F.A. and other Federal agencies. Exclude obligations backed by a pledge of credit of the State.

LINES 10 and 11. Report bond anticipation notes, interest-bearing warrants and other obligations with a term of one year or less. Exclude accounts payable and other noninterest-bearing obligations. Do not include interfund loans, or advances from State funds.

Lines 12 through 16. Report amounts of cash on hand and on deposit, and security holdings (at par value) as to all funds and accounts of your institution except agency accounts held in private trust or custodial capacity, and any contributory employee-retirement system funds. Include endowment funds, loan funds, and plant funds, as well as current funds. Exclude accounts receivable, value of property other than securities, and any amounts held for your institution by the State Treasurer. Sinking funds (Column (2)) are reserves held specifically for redemption of the long-term debt reported in Line 9 (but exclude any amounts for interest requirements). Bond funds (Column (3)) are funds established to account for the proceeds of bond issues pending their disbursement.

LINE 12. Report cash on hand and demand and time or savings deposits.

LINE 14. Include holdings of bonds and other securities issued by State and local government institutions and agencies. Exclude interfund loans and advances.

LINE 15. Report bonds, stocks (at book value), mortgages, notes, student loans, etc., not included in Lines 12 through 14.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY

FINANCIAL STATISTICS OF INSTITUTIONS OF HIGHER EDUCATION FOR FISCAL YEAR ENDING 1972

PLEASE READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

O.M.B. NO. 51-R0284
APPROVAL EXPIRES: 6/30/74

1. INSTITUTION CODE NUMBER

2. DUE DATE
October 31, 1972

Items 1, 3, 4, 5, and 6 MUST be completed by all institutions. If applicable, complete items 7 and 8. Submit a separate survey form for each of the campuses or branch campuses of the institution. If it is impossible to provide separate data for any branch campus, and the data for that branch must be included in the parent institution's report, indicate this in item 8 below.

3. NAME AND MAILING ADDRESS OF INSTITUTION OR CAMPUS COVERED BY THIS REPORT *(Include city, State, and ZIP code)*

4. NAME AND TITLE OF RESPONDENT

5. TELEPHONE NUMBER OF RESPONDENT *(Area code, local number and extension)*

6. THE INSTITUTION COVERED BY THIS REPORT IS *(Check only one)*

(a) ☐ A SINGLE-CAMPUS INSTITUTION

(b) ☐ A MAIN CAMPUS *("parent" institution)* WITH ONE OR MORE BRANCH CAMPUSES AND/OR OTHER CAMPUSES *(Specify in item 8 below)*

(c) ☐ A BRANCH CAMPUS OF A PARENT INSTITUTION *(Write the name of parent institution below)*

(d) ☐ ONE OF THE ADMINISTRATIVELY EQUAL CAMPUSES OF A MULTI-CAMPUS INSTITUTION

7. IF THE INSTITUTION COVERED BY THIS REPORT IS INCLUDED IN AN "INSTITUTIONAL SYSTEM", WRITE THE NAME OF THE SYSTEM BELOW.

8. PARENT INSTITUTIONS *(As checked in item 6b)* SHOULD LIST THE NAMES OF ALL THEIR BRANCH CAMPUSES BELOW. USE THE FIRST COLUMN TO SHOW WHETHER DATA FOR ANY OF THESE UNITS ARE INCLUDED WITH THE DATA FOR THE "PARENT" IN THIS REPORT.

ARE DATA FOR THIS UNIT INCLUDED IN THIS REPORT?	NAME OF BRANCH CAMPUS AND/OR OTHER CAMPUS	ADDRESS *(City, State, and ZIP code)*
☐ YES ☐ NO		
☐ YES ☐ NO		
☐ YES ☐ NO		

DEFINITIONS

MULTI-CAMPUS INSTITUTION. An organization bearing a resemblance to an institutional system, but unequivocally designated as a single institution with either of two organizational structures: *(1)* an institution having two or more campuses responsible to a central administration *(which central administration may or may not be located on one of the administratively equal campuses)* or *(2)* an institution having a main campus with one or more branch campuses attached to it.

MAIN CAMPUS. In those institutions comprised of a main campus and one or more branch campuses, the main campus *(sometimes called the parent institution)* is usually the location of the core, primary, or most comprehensive program. Unless the institution-wide or central administrative office for such institutions is reported to be at a different location, the main campus is also the location of the central administrative office.

BRANCH CAMPUS. A campus of an institution of higher education which is organized on a relatively permanent basis *(i.e., has a relatively permanent administration)*, which offers an organized program or programs of work of at least 2 years *(as opposed to courses)*, and which is located in a community different from that in which its parent institution is located. To be considered in a community different from that of the parent institution, a branch shall be located beyond a reasonable commuting distance from the main campus of the parent institution.

INSTITUTIONAL SYSTEM. A complex of two or more institutions of higher education, each separately organized or independently complete, under the control or supervision of a single administrative body.

PART A - CURRENT FUNDS REVENUES BY SOURCE FOR FISCAL YEAR ENDING 1972

SOURCE	LINE NO.	AMOUNT (whole dollars only)	SOURCE	LINE NO.	AMOUNT (whole dollars only)
I. EDUCATIONAL AND GENERAL REVENUES - TOTAL (sum of lines 2, 3, 9, 10, 11, 18, 19, 26, 29, 30, and 31)	1	$	H. RECOVERY OF INDIRECT COSTS (sum of lines 27 and 28)	26	$
A. STUDENT TUITION AND FEES	2		1. SPONSORED RESEARCH	27	
B. GOVERNMENTAL APPROPRIATIONS (sum of lines 4, 7, and 8)	3	$	2. OTHER SPONSORED PROGRAMS	28	
1. FEDERAL GOVERNMENT (sum of lines 5, and 6)	4	$	1. SALES AND SERVICES OF EDUCATIONAL DEPARTMENTS	29	
a. FEDERAL PAYMENTS RECEIVED THROUGH STATE CHANNELS	5		J. ORGANIZED ACTIVITIES RELATED TO EDUCATIONAL DEPARTMENTS	30	
b. ALL OTHER FEDERAL APPROPRIATIONS	6		K. OTHER SOURCES	31	
2. STATE GOVERNMENT	7		II. STUDENT AID GRANTS - TOTAL (sum of lines 33 through 36)	32	$
3. LOCAL GOVERNMENT	8		A. FEDERAL GOVERNMENT	33	
C. ENDOWMENT INCOME	9		B. STATE GOVERNMENT	34	
D. PRIVATE GIFTS	10		C. LOCAL GOVERNMENT	35	
E. SPONSORED RESEARCH (sum of lines 12, 13, 14, and 15)	11	$	D. PRIVATE GIFTS AND GRANTS	36	
1. FEDERAL GOVERNMENT	12		E. ENDOWMENT INCOME	37	
2. STATE GOVERNMENT	13		F. OTHER STUDENT AID GRANTS	38	
3. LOCAL GOVERNMENT	14		III. MAJOR SERVICE PROGRAMS - TOTAL (sum of lines 40 and 44)	39	$
4. NONGOVERNMENTAL (sum of lines 16 and 17)	15	$	A. HOSPITALS (sum of lines 41, 42, and 43)	40	$
a. PHILANTHROPIC	16		1. HOSPITAL CHARGES	41	
b. OTHER NONGOVERNMENTAL	17		2. FEDERAL FUNDS FOR HOSPITALS	42	
F. OTHER SEPARATELY BUDGETED RESEARCH	18		3. OTHER HOSPITAL REVENUES	43	
G. OTHER SPONSORED PROGRAMS (sum of lines 20 through 23)	19	$	B. OTHER SERVICE PROGRAMS *	44	
1. FEDERAL GOVERNMENT	20		IV. AUXILIARY ENTERPRISES - TOTAL (sum of lines 46 and 47)	45	$
2. STATE GOVERNMENT	21		A. HOUSING AND FOOD SERVICES	46	
3. LOCAL GOVERNMENT	22		B. OTHER AUXILIARY ENTERPRISES	47	
4. NONGOVERNMENTAL (sum of lines 24 and 25)	23	$	V. TOTAL CURRENT FUNDS REVENUES - GRAND TOTAL (sum of lines 1, 32, 39, and 45)	48	$
a. PHILANTHROPIC	24				
b. OTHER NONGOVERNMENTAL	25		*Please attach a list of the names of Federally Funded Research and Development Centers for which these revenues were received.		

1. INSTITUTION CODE NUMBER

PART B - CURRENT FUNDS EXPENDITURES AND ALL EXPENDITURES FOR CAPITAL OUTLAY *(ALL FUNDS)* BY FUNCTION FOR FISCAL YEAR ENDING 1972

FUNCTION (1)	LINE NO.	CURRENT FUNDS EXPENDITURES (2)	EXPENDITURES FOR CAPITAL OUTLAY (from all funds other than current funds) PURCHASE OF EQUIPMENT (3)	PURCHASE OF LAND AND BUILDINGS (4)	CONSTRUCTION (5)
I. EDUCATIONAL AND GENERAL EXPENDITURES - TOTAL (sum of lines 2 through 10)	1	$	$	$	$
A. INSTRUCTION AND DEPARTMENTAL RESEARCH	2				
B. ORGANIZED ACTIVITIES RELATED TO EDUCATIONAL DEPARTMENTS	3				
C. SPONSORED RESEARCH	4				
D. OTHER SEPARATELY BUDGETED RESEARCH	5				
E. OTHER SPONSORED PROGRAMS	6				
F. EXTENSION AND PUBLIC SERVICE	7				
G. LIBRARIES	8				
H. PHYSICAL PLANT MAINTENANCE AND OPERATION	9				
I. OTHER EDUCATIONAL AND GENERAL	10				
II. STUDENT AID GRANTS	11	$			
III. MAJOR SERVICE PROGRAMS - TOTAL (sum of lines 13 and 14)	12	$			
A. HOSPITALS	13				
B. OTHER SERVICE PROGRAMS	14				
IV. AUXILIARY ENTERPRISES - TOTAL (sum of lines 16 and 17)	15	$	$	$	$
A. HOUSING AND FOOD SERVICES	16				
B. OTHER AUXILIARY ENTERPRISES	17				
V. TOTAL CURRENT FUNDS EXPENDITURES - GRAND TOTAL (sum of lines 1, 11, 12, and 15)	18	$			
ESTIMATE OF AMOUNT ON LINE 18 EXPENDED FOR PHYSICAL PLANT ASSETS	19	$			
ESTIMATE OF AMOUNT ON LINE 18 EXPENDED FOR AGRICULTURAL EXPERIMENT STATIONS AND EXTENSION SERVICES	20	$	$	$	$

PART C - PHYSICAL PLANT ASSETS FOR FISCAL YEAR ENDING 1972

TYPE OF ASSET (1)	LINE NO.	BOOK VALUE AT BEGINNING OF YEAR (2)	ADDITIONS DURING YEAR (3)	DEDUCTIONS DURING YEAR (4)	BOOK VALUE AT END OF YEAR (5)
LAND	1	$	$	$	$
BUILDINGS	2				
EQUIPMENT	3				

PART D - INDEBTEDNESS ON PHYSICAL PLANT FOR FISCAL YEAR ENDING 1972		
BALANCE AND TRANSACTION	LINE NO.	AMOUNT (whole dollars only)
BALANCE OWED ON PRINCIPAL AT BEGINNING OF YEAR	1	$
ADDITIONAL PRINCIPAL BORROWED DURING THE YEAR	2	
PAYMENTS MADE ON PRINCIPAL DURING THE YEAR	3	
BALANCE OWED ON PRINCIPAL AT END OF YEAR (line 1, plus line 2, minus line 3)	4	$

PART E - ENDOWMENT BY BOOK AND MARKET VALUES, EARNINGS, AND REALIZED GAINS FOR FISCAL YEAR ENDING 1972		
BALANCE AND TRANSACTION	LINE NO.	AMOUNT (whole dollars only)
VALUE OF ENDOWMENT AT THE BEGINNING OF THE FISCAL YEAR		
a. BOOK VALUE	1	$
b. MARKET VALUE	2	$
VALUE OF ENDOWMENT AT THE END OF THE FISCAL YEAR		
a. BOOK VALUE	3	$
b. MARKET VALUE	4	$
ENDOWMENT EARNINGS (dividends, interest, rents, etc.)	5	$
NET REALIZED GAINS OR LOSSES ON SALE OF INVESTMENTS	6	$

PART F - TO BE COMPLETED BY *PUBLIC* INSTITUTIONS ONLY

ITEM	LINE NO.	AMOUNT (whole dollars only)
I. REVENUES (all funds) A. ALL PRIVATE GIFTS	1	$
B. EARNINGS ON INVESTMENTS	2	
II. EXPENDITURES (all funds) A. PERSONAL SERVICES (gross salaries and wages)	3	
B. SCHOLARSHIPS AND PRIZES	4	
C. INTEREST ON DEBT PAID FROM ALL FUNDS (enter amount here) → If Part B includes any expenditures for interest, enter total amount here →	5	
III. DEBT OUTSTANDING, ISSUED, AND RETIRED A. NONGUARANTEED LONG-TERM DEBT 1. TOTAL OUTSTANDING AT BEGINNING OF FISCAL YEAR	6	
2. TOTAL ISSUED DURING FISCAL YEAR	7	
3. TOTAL RETIRED DURING FISCAL YEAR	8	
4. *TOTAL OUTSTANDING AT END OF FISCAL YEAR (line 6 plus, line 7, minus line 8)*	9	$
B. SHORT-TERM (interest-bearing) DEBT 1. AMOUNT OUTSTANDING AT BEGINNING OF FISCAL YEAR	10	$
2. AMOUNT OUTSTANDING AT END OF FISCAL YEAR	11	

IV. CASH AND SECURITY HOLDINGS AT END OF FISCAL YEAR

TYPE OF ASSET (1)	LINE NO.	AMOUNT AT END OF FISCAL YEAR: HELD IN SINKING FUNDS (see definitions) (2)	HELD IN BOND FUNDS (see definitions) (3)	HELD IN ALL OTHER FUNDS, EXCEPT FOR ANY EMPLOYEE-RETIREMENT FUND (4)
A. CASH AND DEPOSITS	12	$	$	$
B. FEDERAL SECURITIES - U.S. TREASURY OBLIGATIONS	13			
C. STATE AND LOCAL GOVERNMENT SECURITIES	14			
D. OTHER SECURITIES	15			
E. *TOTAL (sum of lines 12 through 15)*	16	$	$	$

NOTE: Use attachments for comments, supplemental information, etc.

GPO 823-791

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
EDUCATION DIVISION
WASHINGTON, D.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY (HEGIS XII)

DEFINITIONS AND INSTRUCTIONS

FINANCIAL STATISTICS OF INSTITUTIONS OF HIGHER EDUCATION FOR FISCAL YEAR ENDING 1977

(OMB NO. 51-R0566)

STATEMENT OF CHANGES

Parts A and B have been changed to coincide with the recently published standards of college and university financial reporting. The categories of current funds revenues, current funds expenditures, and transfers are now consistent with the *College and University Business Administration: Administrative Service* (published in 1974 by the National Association of College and University Business Officers), the *Higher Education Finance Manual* (published in 1975 by the National Center for Education Statistics), and with the *Audits of Colleges and Universities* (as amended August 31, 1974 by the American Institute of Certified Public Accountants).

Part F has been modified to include separate columns for unrestricted current funds and restricted current funds.

Part G is designed for use by the Bureau of Census, U.S. Department of Commerce. It is to be completed by publicly controlled institutions only. The instructions, definitions, and reporting procedures for Part G may differ from those given in the aforementioned publications, but are consistent with the U.S. Department of Commerce's alastification manual for public jurisdictions that are applied to the finances of all governments.

GENERAL

If you need clarffication on any of the definitions or instructions on Parts A-F, please call Mr. Norman Brandt, the survey director, or Mrs. Angelyn T. McLilly, associate survey director, at (202)245-8392 in Washington, D.C. For clarification on Part G, call Mr. Howard Sales, Bureau of the Census, at (301) 763-7783.

To avoid unnecessary overlapping of Federal surveys of the finances of your institution, this survey is designed to include the financial statistics previously collected by the U.S. Department of Commerce, Bureau of the Census Form F-15.

Please attach supplemental information, comments, etc., on a separate sheet.

Do NOT report funds received or disbursed for Basic Educational Opportunity Grants (BEOGs) anywhere on this survey form.

All data reported should be whole dollars only, omit cents.

Please complete this survey and return it to the U.S. Department of Health, Education, and Welfare, Education Division, National Center for Education Statistics, ATTENTION: Room 3073-HEGIS, 400 Maryland Avenue, SW., Washington, D.C. 20202, not later than October 31, 1977.

NOTE: This year's form is in seven parts. For any item in any part where exact data do not exist, please give estimates. Items referenced in specific instructions below will be referred to by their line numbers.

SPECIFIC

These definitions are consistent with those given in the Higher Education Finance Manual (HEFM).

Part A. Current funds revenues by source for fiscal year ending 1977

Instructions for Part A. Current funds revenues include all unrestricted gifts and other unrestricted revenues earned during the fiscal year and restricted current funds to the extent that such funds were expended for current operating purposes.

LINE 1. Tuition and fees. Report all tuition and fees assessed against students for current operating purposes. Include tuition and fee remissions or exemptions even though there is no intention of collecting from the student. Include here those tuitions and fees which are remitted to the State as an offset to the State appropriation. (Charges for room, board, and other services rendered by auxiliary enterprises are not reported here. See line 16.)

LINES 2, 3, and 4. Governmental appropriations include all amounts received from or made available to the institution through acts of a legislative body, except grants or contracts. These funds are for meeting current operating expenses and NOT for specific projects or programs. Examples are Federal land-grant appropriations and Federal revenue sharing funds (line 2). Federal appropriations received through State channels is a subset of line 2 and should be included in the line 2 total for Federal appropriations.

LINES 5-10. Governmental grants and contracts. Report revenues from governmental agencies which are for specific research projects or other types of programs. Examples are research projects, training programs, and similar activities for which amounts are received or expenditures are reimbursable under the terms of a government grant or contract. Amounts equal to direct costs incurred should be recorded as charges against current restricted funds and reported as restricted current funds revenues (lines 6, 8, and 10). Related indirect costs recovered should be reported as unrestricted revenues (lines 5, 7, and 9). Do not include BEOGs.

LINES 11 and 12. Private gifts, grants, and contracts. Private gifts and grants include revenues from private donors for which no legal consideration is involved. Private contracts include those funds for which specific goods and services must be provided to the funder as stipulation for receipt of the funds. Include only those gifts, grants, and contracts that are directly related to instruction, research, or public service. Moneys received as a result of gifts, grants, or contracts from a foreign government would be reported here. Include the estimated dollar amount of contributed services on line 11.

LINES 13 and 14. Endowment income. Report: (1) the unrestricted income of endowment and similar funds; (2) restricted income of endowment and similar funds to the extent expended for current operating purposes; and (3) income from funds held in trust by others under irrevocable trusts. Do not include capital gains or losses.

LINE 15. Sales and services of educational activities. Report revenues derived from the sales of goods or services that are incidental to the conduct of instruction, research, or public service. Examples include film rentals, scientific and literary publications, testing services, university presses, and dairy products.

LINE 16. Sales and services of auxiliary enterprises. Report here all revenues generated by the auxiliary enterprise operations of the institution. Auxiliary enterprises are managed as essentially self-supporting activities. Examples are residence halls, food services, student health services, college unions, college stores, barber shops, etc.

LINE 17. Sales and services of hospitals. Include the revenues (net of discounts and allowances) of a hospital operated by the institution. Do NOT include here gifts, grants, appropriations, research revenues, or endowment income. Include revenues of health clinics that are part of the hospital unless such clinics are part of the student health services program.

LINE 18. Other sources. Include all items of revenue not covered elsewhere. Examples are interest income and gains (net of losses) from investments of unrestricted current funds. Include revenues resulting from the sales and services of internal service departments to persons or agencies external to the institution.

LINE 19. Independent operations. Include all revenues associated with operations independent of or unrelated to the primary missions of the institution (i.e., instruction, research, public service) although they may indirectly contribute to these programs. This category generally includes only those revenues associated with major Federally Funded Research and Development Centers.

LINE 20. Total current funds revenues. Report here the sum of lines 1 through 19 inclusive.

Part B. Current funds expenditures and mandatory transfers for fiscal year ending 1977

Report both unrestricted and restricted current funds expenditures in the following functional classifications:

LINE 1. Instruction. Expenditures of the colleges, schools, departments, and other instructional divisions of the institution and expenditures for departmental research and public service which are not separately budgeted should be included in this classification. Include expenditures for both credit and noncredit activities. Exclude expenditures for academic administration where the primary function is administration (e.g., academic deans). This category includes the following: general academic; occupational and vocational instruction; special session instruction; community education; preparatory and adult basic education; and remedial and tutorial instruction.

LINE 2. Research. This category includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. Do not report non-research sponsored programs (e.g., training programs).

LINE 3. Public service. Report all funds budgeted specifically for public service and expended for activities established primarily to provide noninstructional services beneficial to groups external to the institution. Examples are seminars and projects provided to particular sectors of the community. Include expenditures for community services and cooperative extension services.

LINE 4. Academic support. This category includes expenditures for the support services that are an integral part of the institution's primary missions of instruction, research, or public service. Include expenditures for libraries (line 5), museums, galleries, audio/visual services, computing support, ancillary support, academic administration and personnel development, and course and curriculum development. (Include line 5 expenditures in the line 4 total for academic support.)

LINE 6. Student services. Report funds expended for admissions, registrar activities, and activities whose primary purpose is to contribute to students' emotional and physical well-being and to their intellectual, cultural, and social development outside the context of the formal instruction program. Examples are career guidance, counseling, financial aid administration, student health services (except when operated as a self-supporting auxiliary enterprise).

LINE 7. Institutional support. Report expenditures for the day to-day operational support of the institution, excluding expenditures for physical plant operations. Include general administrative services, executive direction and planning, legal and fiscal operations, and community relations.

LINE 8. Operation and maintenance of plant. Report all expenditures for operations established to provide service and maintenance related to campus grounds and facilities. Do not include expenditures made from the institutional plant funds accounts.

LINES 9 and 10. Scholarships and fellowships. This category applies only to moneys given in the form of outright grants and trainee stipends to individuals enrolled in formal coursework, either for credit or not. Do not report Federal Basic Educational Opportunity Grants, ROTC scholarships, or other programs where the institution is not allowed to select the recipient of the grant. Aid to students in the form of tuition or fee remissions should be included. (Exclude those remissions which are granted because of faculty or staff status.)

LINE 11. Educational and general mandatory transfers. Mandatory transfers from current funds are those that must be made in order to fulfill a binding legal obligation of the institution. Report mandatory debt-service provisions relating to academic buildings, including (1) amounts set aside for debt retirement and interest, and (2) required provisions for renewal and replacements to the extent not financed from other sources.

LINE 12. Total educational and general expenditures and mandatory transfers. Enter here the sum of lines 1 through 4 plus 6 through 11.

LINE 13. Mandatory transfers for auxiliary enterprises. Report the amount transferred from current funds for mandatory debt service provisions relating to auxiliary enterprises. Examples include maintenance reserves.

LINE 14. Auxiliary enterprises. This category includes those essentially self-supporting operations which exist to furnish a service to students, faculty, or staff, and which charge a fee that is directly related to, although not necessarily equal to, the cost of the service. Examples are residence halls, food services, college stores, and intercollegiate athletics. (Include the mandatory transfers amount on line 13 in the line 14 amount.)

LINE 15. Mandatory transfers for hospitals. Report the amount transferred from current funds for mandatory debt service provisions relating to hospitals.

LINE 16. Hospitals. Report all expenditures, except depreciation, associated with the operation of the hospital, including nursing expenses, other professional services, general services, administrative services, fiscal services, and charges for physical plant operations. (Include the mandatory transfers amount on line 15 in the line 16 amount.)

LINE 17. Mandatory transfers for independent operations. Report the amount transferred from current funds for mandatory debt service provisions relating to independent operations.

LINE 18. Independent operations. Include all funds expended for operations that are independent of or unrelated to the primary missions of the institution, although they may indirectly contribute to the enhancement of these programs. This category is generally limited to expenditures of a major Federally Funded Research and Development Center. Do not include the expenditures of operations owned and managed as investments of the institution's endowment funds. (Include the line 17 amount in the line 18 amount.)

LINE 19. Total current funds expenditures and mandatory transfers. Report the sum of lines 12, 14, 16, and 18.

Part C. Physical plant assets for fiscal year ending 1977

Report the values of land, buildings, and equipment owned or utilized by the institution. Do not include those plant values which are a part of endowment or other capital fund investments in real estate. Data for your institution which are not kept on the books of account of your institution, but are kept in the records of another organization or agency for your institution, should be included (e.g., State schools should report physical plant even though records are maintained by a State agency).

LINES 1, 2, and 3. Report the book values of land, buildings, and equipment.

COLUMN (2). Book value of plant at the beginning of the fiscal year is intended as the dollar amount of value as shown on the institution's accounting records.

COLUMN (3). Additions during the year are additions to plant made through purchase, by gift-in-kind from donor, and from other additions.

COLUMN (4). Deductions from the plant are deductions resulting from selling, razing, fire or other hazards, or other disposition of assets.

COLUMN (5). Book value of plant at the ending of the fiscal year is intended as the dollar amount of value as shown on the institution's accounting records. Column (5) is the sum of columns (2) and (3), less column (4).

COLUMN (6). Report or estimate the CURRENT COSTS TO REPLACE all buildings owned or utilized by the institution. Report recent appraisal value or what is currently carried as insurance replacement value. Do not include the replacement values of those buildings which are a part of endowment or other capital fund investments in real estate. This figure is not a book value figure.

Part D. Indebtedness of physical plant for fiscal year ending 1977

In Part D, report data on indebtedness liability against the physical plant. Include auxiliary enterprises facilities as well as educational and general facilities. Examples of auxiliary enterprises facilities are those used for operation of housing, food service, bookstores, and other units which are classified as auxiliary enterprises. Enter zeroes or NA's if your institution has no indebtedness.

LINE 1. Balance owed on indebtedness principal at the beginning of the year is that amount shown in the liability section of the plant fund balance sheet.

LINE 2. Additional principal borrowed during the year is loans negotiated through bonds, mortgages, notes, or any other type of financing (including short-term notes) and amounts borrowed from other institutional funds for physical plant.

LINE 3. Payments on plant loans principal during the year is the amount used to reduce the principal of loans, regardless of the source of funds.

LINE 4. Balance owed on indebtedness principal at the ending of the year is that amount shown in the liability section of the plant fund balance sheet. It is the sum of line 1 plus line 2, less line 3.

LINE 5. Interest payments on physical plant indebtedness. Report the total interest charges paid during the fiscal year on physical plant indebtedness. Exclude principal repayments (see line 3).

Part E. Endowment by book and market value for fiscal year ending 1977

In Part E, report data on investment of endowment, term endowment and quasi-endowment (funds functioning as endowment). If your institution has no endowment, enter zeroes or NA's.

LINE 1. Value of endowment at the beginning of the fiscal year. Report the book value of endowment in the first column and the market value in the second column. (If market value on some investments is not available, use whatever value was assigned by the institution in reporting market values in the annual financial report.)

LINE 2. Total additions for the fiscal year. Report the total book value of gifts and additions to endowment in both columns. (Book and market values are usually identical at time of purchase.)

LINE 3. Total withdrawals for the fiscal year. Report the total book value of withdrawals and deductions from endowment in column (1) and the market value in column (2).

LINE 4. Net realized gains or losses on sale of investments (book value only). In the first column only, report the sum of all gains on the sales of investments less the sum of all losses. Net realized gains are appreciation (amount selling price is greater than purchasing price) on securities and other investments sold during the fiscal year. Do not report in column (2).

LINE 5. Appreciation or depreciation for the year (market value only). Report in column (2) the increase (appreciation) in market value of all investments. Deduct any loss (depreciation) of value and report a net figure. Do not report in column (1).

LINE 6. Value of endowment at the end of the fiscal year. The book value of endowment at the end of the fiscal year is the sum of lines 1 and 2, minus line 3, plus (or minus) line 4 in column (1). This figure should agree with that figure shown on the accounting records of your institution. The market value of endowment at the end of the fiscal year is the sum of lines 1 and 2, less line 3, plus (or minus) line 5 in column (2).

LINE 7. Endowment yield (dividends, interest, rents, etc.). Yield includes all earnings (not realized gains) on investments of endowments regardless of distribution made of the earnings to various institutional funds.

Part F. Statement of changes in fund balances for fiscal year ending 1977

The "Statement of Changes in Fund Balances" describes the total institutional flow of funds into, out of, and among all the various fund groups. Also included is a summary of the net effect of these flows (including beginning and ending balances) for each fund group. (See Figure 4 in HEFM.)

LINE 1. Additions. Report all moneys, excluding transfers, added to any fund group during the fiscal year.

LINE 2. Deductions. Report all funds, except transfers, flowing out of any of the fund groups during the fiscal year.

LINE 3. Total transfers into/(out of). Report mandatory and nonmandatory transfers flowing into or out of any of the fund groups during the fiscal year. Transfers are self-balancing across the columns. That is, every transfer results in an equal addition (shown as a positive figure in the receiving fund group column) and deduction (shown as a negative figure in parantheses in the donor fund group column), therefore the net result always will be zero.

LINE 4. Net increase (decrease) for year. Report the net change in fund balances from the beginning to the ending of the fiscal year. It is the difference between lines 6 and 5. A net increase is reported as a positive figure and a net decrease is reported as a negative figure (in parentheses).

LINE 5. Fund balance at beginning of year. Report the total of the fund balance prior to any of the flows additions, deductions, and transfers described in the statement for that fund group.

LINE 6. Fund balance at end of year. Report the total for the fund balance after all of the additions, deductions, and transfers described in the statement.

COLUMN (1). Unrestricted current funds. Report those funds that the

institution's management may use for any purpose it deems necessary. Include unrestricted funds that are designated by the institution's governing board for a specific use.

COLUMN (2). Restricted current funds. Report those funds that are given to the institution for a very specific aspect of the institution's current operations.

COLUMN (3). Loan funds. Report those funds that have been loaned, or are available for loans to students, faculty, and staff. Do not include loans made to the institution.

COLUMN (4). Endowment funds. This fund group includes funds whose principal is nonexpendable and that are intended to be invested to provide earnings for institutional use. Include term endowment and quasi-endowment funds.

COLUMN (5). Annuity and life income funds. This category includes all funds carrying a stipulation that the institution make payments to one or more specified beneficiaries.

COLUMN (6). Plant funds. Report all unexpended plant funds, funds for renewal and replacement, funds for debt service charges and for the retirement of indebtedness, and the amount of institutional funds invested in physical plant facilities (other than those of endowment and similar funds).

Part G - To be completed by PUBLIC institutions only

Part G is designed for use by the Bureau of Census, U.S. Department of Commerce. It is to be completed by publicly controlled institutions only. The instructions, definitions, and reporting procedures for Part G may differ from those given in the aforementioned publications, but are consistent with the U.S. Department of Commerce's classification manual for public jurisdictions that are applied to the finances of all governments. For additional clarification on Part G call Mr. Howard Sales, Bureau of the Census, at (301) 763-7783.

Line 1 - Report all gifts and grants received by all funds during the fiscal year from private individuals and organizations. Include nonexpendable grants as well as benefactions available for plant expansions, or for current expenditure.

Line 2 - Report interest, dividends, rents, and other earnings on all invested funds, including endowment and plant funds. Exclude receipts from sale of securities other than any recorded profits (e.g., capital gains). Also exclude any earnings of State land funds allocated to your institution.

Line 3 - Include receipts from sale of products of agricultural experiment station farms and for agricultural extension services.

Line 4 - This information should only be furnished by two-year institutions which are in part financed from taxes levied specifically for the support of an educational institution(s). Include taxes for current restricted and unrestricted funds as well as for plant funds and for debt service.

Lines 5 and 6 - Include only Federal funds received for hospitals and agricultural experiment stations and extension services. On line 5 report funds received directly from the Federal Government (e.g., HEW and Dept. of Agriculture project grants). On line 6 report Federal monies received through State government agencies including Medicaid payments. All data provided in column (2) should pertain to hospitals in which service to the community or State is paramount (not infirmaries for students).

Note: The sum of the entries in the four columns for lines 7 through 10 should equal total amounts for all funds of your institution excluding interfund transfers. In cases where it is not possible to report data by function, enter the applicable totals for your institution in the "Education and Other" column and indicate that these amounts are "totals."

Line 7 - Report for the functions identified in the column headings gross salaries and wages of the academic and non-academic staff, paid student help, and part-time employees without deduction of withholdings for income tax or employee contributions for social security or retirement coverage. Do not include employer contributions for retirement and other benefits on this line.

Line 8 - Report for the functions identified in the column headings other current expenditures (such as for supplies, materials, contractual services, insurance, etc.) not covered in Part G, lines 7,9,10, and 11 and Part B, lines 9 and 10 (scholarships and fellowships). Also, the following types of payments should be excluded from this line: (1) retirement of debt, (2) investment in securities, (3) making of loans, (4) employer contributions of a State education institution to a State administered employee-retirement system (report at line 13) and contributions of a local education institution to a locally administered employee-retirement system (report at line 14), and (4) interfund transfers.

Lines 9 and 10 - Report on line 9 expenditures (from bond fund proceeds and all other funds) for the construction of new structures and other improvements, additions, replacements, and major alterations. Include in column (4) outlays for physical plant utilized by the departments, colleges, schools, and instructional divisions of the institution. Also include outlays for administrative plant and libraries. On line 10 enter expenditures for the purchase of equipment (replacements as well as additions) and also the purchase of land and existing structures.

Lines 12 through 20 - Report employer contributions made by your institution during the fiscal year to the employee benefit programs listed. Exclude employee contributions.

Lines 21 through 24 - Report bonds, mortgages, etc., with an original term of more than one year, which are payable solely from pledged earnings, charges, or fees (e.g., dormitory, stadium, and student-union revenue bonds). Include any loans (not "Commitments") from H.H.F.A. and other Federal agencies. Exclude guaranteed long-term debt (i.e., those obligations that are issued by the State and backed by a pledge of credit to the State).

Lines 25 and 26 - Report anticipation notes, interest-bearing warrants and other obligations with a term of one year or less. Exclude accounts payable and other noninterest-bearing obligations. Do not include inter-funds loans, or advances from State funds.

Lines 27 through 31 - Report amounts of cash on hand and on deposit, and security holdings (at par value) as to all funds and accounts of your institution except agency accounts held in private trust or custodial capacity, and any contributory employee-retirement systems funds. Include endowment funds, loan funds, and plant funds, as well as current funds. Exclude accounts receivable, value of property other than securities, and any amounts held for your institution by the State Treasurer. Sinking funds (column (2)) are reserves held specifically for redemption of long-term debt reported in line 24 (but exclude any amounts for interest requirements). Bond funds (column (3)) are funds established to account for the proceeds of bond issues pending their disbursement.

Line 29 - Report the obligations of the following government-owned agencies: CCC, Export-Import Bank, Federal Financing Banks, FHA, GNMA, Postal Service, and TVA.

Line 30 - Include holdings of bonds and other securities issued by State and local government institutions and agencies. Exclude interfund loans and advances.

Line 31. Report bonds, stocks (at book value), mortgages, notes, student loans, etc., not included in lines 27 through 30. Include the following privately financed former Federal agencies; FHLB, FLB, FNMA, Banks for Cooperative and Federal Intermediate Credit Banks.

☆U.S. GOVERNMENT PRINTING OFFICE: 1979 281-253/2012 1-3

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
EDUCATION DIVISION
WASHINGTON, D.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY (HEGIS XII)

FINANCIAL STATISTICS OF INSTITUTIONS OF HIGHER EDUCATION FOR FISCAL YEAR ENDING 1977

PLEASE READ INSTRUCTIONS BEFORE COMPLETING THIS FORM.

FORM APPROVED
OMB NO. 51-R0566

1. INSTITUTION CODE NUMBER

2. DUE DATE
Not later than October 31, 1977

Each item on this page must be completed by all institutions. Please return the completed form either directly to Department of Health, Education, and Welfare, Education Division, National Center for Education Statistics, ATTN: Room 3073-HEGIS, 400 Maryland Avenue, SW., Washington, D.C. 20202, or to the HEGIS coordinator, if there is a HEGIS coordinator in your State.

3. NAME AND MAILING ADDRESS OF INSTITUTION OR CAMPUS COVERED BY THIS REPORT *(include city, State, and ZIP code)*

4. NAME AND TITLE OF RESPONDENT

5. TELEPHONE NUMBER OF RESPONDENT *(area code, local number, and extension)*

6. PLEASE NOTE THAT EACH INSTITUTION, BRANCH, CAMPUS OR OTHER ENTITY SEPARATELY CERTIFIED BY THE ACCREDITATION AND INSTITUTIONAL ELIGIBILITY UNIT OF THE U.S. OFFICE OF EDUCATION, WITH ITS OWN FICE CODE, AND LISTED SEPARATELY IN THE EDUCATION DIRECTORY - HIGHER EDUCATION, SHOULD BE REPORTED ON A SEPARATE SURVEY FORM AND NOT INCLUDED OR COMBINED WITH ANY OTHER SUCH CERTIFIED UNIT. BRANCHES, CAMPUSES, AND OTHER ORGANIZATIONAL ENTITIES NOT SEPARATELY CERTIFIED SHOULD BE INCLUDED WITH THE APPROPRIATE INSTITUTION OR BRANCH REPORT. IF SUCH ARE INCLUDED IN THIS REPORT, PLEASE LIST THEM BELOW.

ARE DATA FOR THIS UNIT INCLUDED IN THIS REPORT?	NAME OF BRANCH AND/OR OTHER CAMPUS	ADDRESS *(city, State, and ZIP code)*
☐ YES ☐ NO		
☐ YES ☐ NO		
☐ YES ☐ NO		

7. IF THE EDUCATIONAL ORGANIZATION OR ENTITY COVERED BY THIS SURVEY REPORT IS PART OF A MULTI-CAMPUS INSTITUTION, OR PART OF A SYSTEM OF INSTITUTIONS, PLEASE ENTER THE NAME OF THE INSTITUTION OR SYSTEM BELOW.

IF NOT APPLICABLE, CHECK HERE ➡ ☐

DEFINITIONS

MULTI-CAMPUS INSTITUTION. An organization bearing a resemblance to an institutional system, but unequivocally designated as a single institution with either of two organizational structures: (1) an institution having two or more campuses responsible to a central administration (which central administration may or may not be located on one of the administratively equal campuses) or (2) an institution having a main campus with one or more branch campuses attached to it.

MAIN CAMPUS. In those institutions comprised of a main campus and one or more branch campuses, the main campus (sometimes called the parent institution) is usually the location of the core, primary, or most comprehensive program. Unless the institution-wide or central administrative office for such institutions is reported to be at a different location, the main campus is also the location of the central administrative office.

BRANCH CAMPUS. A campus of an institution of higher education which is organized on a relatively permanent basis (i.e., has a relatively permanent administration), which offers an organized program or programs of work of at least 2 years (as opposed to courses), and which is located in a community different from that in which its parent institution is located. To be considered in a community different from that of the parent institution, a branch shall be located beyond a reasonable commuting distance from the main campus of the parent institution.

INSTITUTIONAL SYSTEM. A complex of two or more institutions of higher education, each separately organized or independently complete, under the control or supervision of a single administrative body.

INSTITUTION CODE NUMBER

PART A - CURRENT FUNDS REVENUES BY SOURCE FOR FISCAL YEAR ENDING 1977

SOURCE		LINE NO.	AMOUNT (whole dollars)
TUITION AND FEES		1	$
GOVERNMENT APPROPRIATIONS			
FEDERAL TOTAL →		2	
through State channels → $			
STATE		3	
LOCAL		4	
GOVERNMENT GRANTS & CONTRACTS			
FEDERAL	UNRESTRICTED	5	
	RESTRICTED	6	
STATE	UNRESTRICTED	7	
	RESTRICTED	8	
LOCAL	UNRESTRICTED	9	
	RESTRICTED	10	
PRIVATE GIFTS, GRANTS AND CONTRACTS	UNRESTRICTED	11	
	RESTRICTED	12	
ENDOWMENT INCOME	UNRESTRICTED	13	
	RESTRICTED	14	
SALES AND SERVICES OF EDUCATIONAL ACTIVITIES		15	
SALES AND SERVICES OF AUXILIARY ENTERPRISES		16	
SALES AND SERVICES OF HOSPITALS		17	
OTHER SOURCES		18	
INDEPENDENT OPERATIONS		19	
TOTAL CURRENT FUNDS REVENUES (sum of Lines 1 through 19)		20	$

PART B - CURRENT FUNDS EXPENDITURES AND MANDATORY TRANSFERS FOR FISCAL YEAR ENDING 1977

FUNCTION	LINE NO.	AMOUNT (whole dollars)
EDUCATIONAL AND GENERAL		
INSTRUCTION	1	$
RESEARCH	2	
PUBLIC SERVICE	3	
ACADEMIC SUPPORT →	4	
includes libraries of $		
STUDENT SERVICES	6	
INSTITUTIONAL SUPPORT	7	
OPERATION AND MAINTENANCE OF PLANT	8	
SCHOLARSHIPS AND FELLOWSHIPS		
AWARDS FROM UNRESTRICTED FUNDS	9	
AWARDS FROM RESTRICTED FUNDS	10	
EDUCATIONAL AND GENERAL MANDATORY TRANSFERS	11	
TOTAL EDUCATIONAL AND GENERAL EXPENDITURES AND MANDATORY TRANSFERS (sum of Lines 1 through 4, and Lines 6 through 11)	12	
AUXILIARY ENTERPRISES →	14	
includes mandatory transfers of → 13 $		
HOSPITALS →	16	
includes mandatory transfers of → 15 $		
INDEPENDENT OPERATIONS →	18	
includes mandatory transfers of → 17 $		
TOTAL CURRENT FUNDS EXPENDITURES AND MANDATORY TRANSFERS (sum of Lines 12, 14, 16, and 18)	19	$

PART C - PHYSICAL PLANT ASSETS FOR FISCAL YEAR ENDING 1977

TYPE OF ASSET (1)	LINE NO.	BOOK VALUE AT BEGINNING OF YEAR (2)	ADDITIONS DURING YEAR (3)	DEDUCTIONS DURING YEAR (4)	BOOK VALUE AT END OF YEAR (5)	CURRENT REPLACEMENT VALUE (6)
LAND	1	$	$	$	$	
BUILDINGS	2					$
EQUIPMENT	3					

PART D - INDEBTEDNESS ON PHYSICAL PLANT FOR FISCAL YEAR 1977			1. INSTITUTION CODE NUMBER
BALANCE AND TRANSACTION	LINE NO.	AMOUNT *(whole dollars only)*	
BALANCE OWED ON PRINCIPAL AT BEGINNING OF YEAR	1	$	
ADDITIONAL PRINCIPAL BORROWED DURING YEAR	2		
PAYMENTS MADE ON PRINCIPAL DURING THE YEAR	3		
BALANCE OWED ON PRINCIPAL AT END OF YEAR *(Line 1, plus Line 2, minus Line 3)*	4	$	
INTEREST PAYMENTS ON PHYSICAL PLANT INDEBTEDNESS	5	$	

PART E - DETAILS OF ENDOWMENT FOR FISCAL YEAR ENDING 1977

BALANCE AND TRANSACTION	LINE NO.	BOOK VALUE *(1)*	MARKET VALUE *(2)*
VALUE OF ENDOWMENT AT THE BEGINNING OF THE FISCAL YEAR	1	$	$
TOTAL ADDITIONS FOR THE FISCAL YEAR	2		
TOTAL WITHDRAWALS FOR THE FISCAL YEAR	3		
NET REALIZED GAINS/*(Losses)* ON SALE OF INVESTMENTS *(Book Value ONLY)*	4		
APPRECIATION/*(depreciation)* FOR THE YEAR *(Market Value ONLY)*	5		
VALUE OF ENDOWMENT AT THE END OF THE FISCAL YEAR	6		
ENDOWMENT YIELD (dividends, interest, rents, royalties, etc.)	7	AMOUNT ➡ $	

PART F - STATEMENT OF CHANGES IN FUND BALANCES FOR FISCAL YEAR ENDING 1977

	LINE NO.	CURRENT FUNDS		LOAN FUNDS *(3)*	ENDOWMENT FUNDS *(4)*	ANNUITY AND LIFE INCOME FUNDS *(5)*	PLANT FUNDS *(6)*
		UNRESTRICTED *(1)*	RESTRICTED *(2)*				
ADDITIONS	1	$	$	$	$	$	$
DEDUCTIONS	2						
TOTAL TRANSFERS INTO (OUT OF)	3						
SUMMARY							
NET INCREASE/ (DECREASE) FOR YEAR	4						
FUND BALANCE AT BEGINNING OF YEAR	5						
FUND BALANCE AT END OF YEAR	6						

INSTITUTION CODE NUMBER

PART G - TO BE COMPLETED BY PUBLIC INSTITUTIONS ONLY

ITEM	LINE NO.	AMOUNT (whole dollars only)
I. REVENUES (all funds - exclude interfund transfers) A. ALL PRIVATE GIFTS	1	$
B. EARNINGS ON INVESTMENTS	2	$
C. GROSS CHARGES FROM SALES AND SERVICES OF AGRICULTURAL EXTENSION SERVICES AND EXPERIMENT STATIONS	3	$
D. TWO-YEAR INSTITUTIONS ONLY - RECEIPTS FROM PROPERTY AND NONPROPERTY TAXES	4	$

E. INTERGOVERNMENTAL REVENUES (all funds)	LINE NO.	AUXILIARY ENTERPRISES (1)	HOSPITALS (Exclude Medicare) (2)	AGRICULTURAL EXTENSION/EXPERIMENT SERVICES (3)	EDUCATION AND OTHER (4)
1. RECEIVED DIRECTLY FROM FEDERAL GOVERNMENT	5				
2. FEDERAL FUNDS RECEIVED THROUGH STATE CHANNELS - INCLUDE MEDICAID	6				
II. EXPENDITURE (all funds - exclude interfund transfers) A. CURRENT EXPENDITURES 1. GROSS SALARIES AND WAGES	7				
2. OTHER CURRENT EXPENDITURE (exclude interest and scholarship - fellowship payments, and capital outlay expenditures)	8				
B. CAPITAL OUTLAY 1. CONSTRUCTION	9				
2. PURCHASE OF EQUIPMENT, LAND, AND BUILDINGS	10				

C. TOTAL INTEREST PAID FROM ALL FUNDS	11	$

III. EMPLOYEE BENEFITS EXHIBIT - EMPLOYER CONTRIBUTIONS TO: RETIREMENT PROGRAMS	LINE NO.	AMOUNT (whole dollars only)
A. FEDERAL SOCIAL SECURITY SYSTEM	12	$
B. STATE ADMINISTERED EMPLOYEE RETIREMENT SYSTEM	13	$
C. RETIREMENT SYSTEM ADMINISTERED BY LOCAL GOVERNMENT	14	$
D. FOR COMMERCIAL ANNUITY PLANS (Private Sector Retirement Plans)	15	$

INSURANCE PROGRAMS		
E. DIRECT PENSION PAYMENTS (i.e., Annual Appropriations to Specific Former Employees)	16	$
F. HEALTH, HOSPITAL, AND/OR DISABILITY INSURANCE	17	$
G. LIFE INSURANCE	18	$
H. WORKMEN'S COMPENSATION	19	$
I. UNEMPLOYMENT COMPENSATION	20	$

IV. DEBT OUTSTANDING, ISSUED, AND RETIRED A. NONGUARANTEED LONG TERM DEBT	LINE NO.	AMOUNT (whole dollars only)
1. TOTAL OUTSTANDING AT BEGINNING OF FISCAL YEAR	21	$
2. TOTAL ISSUED DURING FISCAL YEAR	22	
3. TOTAL RETIRED DURING FISCAL YEAR	23	
4. TOTAL OUTSTANDING AT END OF FISCAL YEAR (line 21, plus line 22, minus line 23)	24	$
B. SHORT-TERM (interest-bearing) DEBT 1. AMOUNT OUTSTANDING AT BEGINNING OF FISCAL YEAR	25	$
2. AMOUNT OUTSTANDING AT END OF FISCAL YEAR	26	

V. CASH AND SECURITY HOLDINGS AT END OF FISCAL YEAR TYPE OF ASSET (1)	LINE NO.	AMOUNT AT END OF FISCAL YEAR: HELD IN SINKING FUNDS (see definitions) (2)	HELD IN BOND FUNDS (see definitions) (3)	HELD IN ALL OTHER FUNDS EXCEPT FOR ANY EMPLOYEE-RETIREMENT FUND (4)
A. CASH AND DEPOSITS	27	$	$	$
B. FEDERAL SECURITIES - U.S. TREASURY OBLIGATIONS	28			
C. FEDERAL AGENCY SECURITIES	29			
D. STATE AND LOCAL GOVERNMENT SECURITIES	30			
E. OTHER SECURITIES	31			

NOTE: Use attachments for comments, supplemental information, etc.

D.3. Mail Survey Forms

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85719

COLLEGE OF EDUCATION
OFFICE OF RESEARCH AND STUDY IN HIGHER EDUCATION

June 18, 1979

During the 1977-78 academic year your institution participated in a study conducted under the direction of Arthur M. Cohen of the Center for the Study of Community Colleges. That study was supported by the National Endowment for the Humanities. At this time we at the Center for the Study of Higher Education are conducting a follow-up study titled "The Current State of Humanities Education in Public Two-Year Colleges." The purpose of our study is to determine what relationships exist between the financial and enrollment conditions of public two-year colleges and the state of humanities education within them.

We request your voluntary participation in the completion of a brief questionaire. Realizing the burden questionaires have become, we have gone to considerable effort to reduce the information we need from your institution to a single post card form. Return of the postcard indicates willing participation in the study. We would appreciate your taking a few minutes to have a member of your staff complete our post card. Your provision of this additional information will increase the usefulness of the previous data a great deal.

The information we are collecting is for statistical purposes only. The confidentiality of individual responses is guaranteed. The only persons who can be granted access to individual responses are qualified researchers who will use the information for statistical purposes only. You have the freedom to withdraw from the study at any time without incurring any ill will.

Sincerely,

Raymond E. Schultz
Professor of Higher Education

Joseph L. Marks
Ph.D. Candidate

Enclosure

1415 N. FREMONT PHONE: (602) 884-2283

FICE CODE:

CONFIDENTIALITY OF INDIVIDUAL RESPONSES GUARANTEED

For Academic Year 1977-78

Total institutional educational and general budget = $_____.

Total institutional instructional budget = $_____.

Total humanities* operating budget = $_____.

	Fall: 1975	1977
Humanities* FT Faculty =	_____	_____.
Humanities* PT Faculty =	_____	_____.

Has the administrative organization of the humanities* within your institution changed since 1974-75? YES____. NO____.

THANK YOU FOR YOUR COOPERATION!

--Detach Here--

*DEFINITION OF HUMANITIES

(From National Endowment for Humanities)

Cultural Anthropology
not Physical Anthropology
Art Appreciation and History
not Studio Art
Foreign Languages and ESL
History
Literature
not English Composition
Interdisciplinary Humanities
Music History and Appreciation
not Performing Arts
Philosophy
Political Science
Religious Studies
Social Studies including Cultural Geography, Ethnic and Womens Studies
not Sociology, Psychology, Economics or Physical Geography

State of the Humanities Project
Center for the Study of Higher Education
University of Arizona
1415 N. Fremont
Tucson, Arizona 85719
(602) 626-2283

July 6, 1979

On June 18 we mailed a letter explaining our State of the Humanities project and post card questionaire to you. We are looking forward to your response which is an important element in our project. Please contact Joseph Marks at the Center for further information or clarification.

If you have returned our questionaire, please forgive us this reminder.

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85719

COLLEGE OF EDUCATION
CENTER FOR THE STUDY OF HIGHER EDUCATION

July 13, 1979

Since June 18 we have mailed to your office a letter explaining our State of the Humanities project, a post card questionaire, and a post card reminder. Since we have not heard from you we fear our materials may have become misplaced and take this opportunity to reacquaint you with our project.

Our purpose is to determine what relationships exist between the financial and enrollment conditions of public two-year colleges and the state of humanities education within them. In order to accomplish this we have defined seven indicators of financial and enrollment condition, six indicators of the impact of these conditions on the humanities, seventeen indicators of the response of the humanities to the conditions, and five control variables. A total of ninty three data elements per institution are required to arrive at the thirty five variables mentioned. All of the ninty three except the eight we request on our post card questionaire are available from other sources.

We have worked hard to minimize the data we require directly from you. We understand the burden information requests have become. Your provision of the eight elements will increase the usefulness of previous studies a great deal. We look forward to your response which is an important element in our study. An abstract of the results of our study will be provided at the completion of our study.

Please contact me if you have questions regarding our project or our request.

Sincerely,

Joseph L. Marks
Ph.D. Candidate

Enclosure

P.S. If you have returned our questionaire or otherwise responded to our request, please forgive us this repetition.

1415 N. FREMONT PHONE: (602) 626-2283

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85719

COLLEGE OF EDUCATION
CENTER FOR THE STUDY OF HIGHER EDUCATION

July 26, 1979

Dear President :

About one month ago you responded to our State of the Humanities project questionaire. We appreciated your prompt reply.

At this time there is a follow up question. The response we received feft blank our questions concerning the number of full-time and part-time humanities faculty (as defined on the card) during fall semester 1977 and 1975. As a substitute would it be possible for you to provide us the number of humanities sections during each of those semesters which were taught by full-time faculty and part-time faculty?

Thank you for your assistance. An abstract of our results will be made available at the completion of our study.

Sincerely,

Joseph L. Marks
Ph.D. Candidate

Enclosure

1415 N. FREMONT PHONE: (602) 626-2283

APPENDIX E

THE VARIABLES

Institution Condition Variables

Percent change in institutional FTE enrollment, 1971-1972 to 1976-1977.

Percent change in institutional total current funds expenditures 1971-1972 to 1976-1977 over HEPI change.

Percent change in the ratio, institutional instructional expenditures/ institutional educational and general expenditures, 1971-1972 to 1976-1977.

Percent change in total institutional expenditures per FTE student 1971-1972 to 1976-1977 over HEPI change.

Humanities Condition Variables

Change in humanities class enrollment as a percent of institutional headcount enrollment, 1975-1976 to 1977-1978.

Total humanities operating budget as a percent of total institutional instructional expenditures, 1978.

Change in humanities FTE faculty as a percent of institutional FTE faculty, 1975-1976 to 1977-1978.

Difference in the ratio of humanities full-time to part-time faculty 1975-1976 to 1977-1978 compared to the institutional ratios.

Difference in the ratio of humanities student to faculty 1975-1976 to 1977-1978 compared to the institutional ratios.

Humanities Responsiveness Variables*

The Introduction of New Products

Introduction of new humanities courses or programs (3 x 3 = 9).

College sponsorship of conferences dealing with some aspect of the humanities (2 x 3 = 6).

Extracurricular humanities activities (1 x 3 = 3).

The Introduction of New Production Methods

Increase in the proportion of part-time humanities faculty (1 x 3 = 3).

Faculty reported the desire for larger humanities classes (3), smaller classes (-3).

Humanities faculty reported the desire for fewer or no prerequisites (3), stricter prerequisites (-3).

The Opening of New Markets

Increase in humanities graduation requirements (4 x 8 = 32), decrease (-4 x 8 = -32).

Special efforts to attract new groups of students to humanities courses (3 x 3 = 9).

Special humanities classes or units instituted for occupational students (3 x 3 = 9).

The Employment of New Supplies of Productive Factors

Reception of grants to further the humanities (4 x 3 = 12).

Employment of new media in humanities courses (1 x 3 = 3).

The Reorganization of the Enterprise

The reorganization of the humanities disciplines within the institutional structure (2 x 3 = 6).

*Weighting formulae in parentheses.

APPENDIX F

SUB-SAMPLES

Name of Sub-Sample	N
Northeastern Region[a]	6
Middle States Region	16
Southern Region	41
Mid Western Region	34
Middle Plains Region	13
Western Region	32
Size 1-999	21
Size 1000-2499	43
Size 2500-6999	46
Size 7000 or More	32
Founded Before 1959	46
Founded Between 1960-1970	70
Founded After 1970	26
Comprehensive Emphasis	125
Non-Comprehensive Emphasis	17
Single Campus Organization	107
Not Single Campus Organization	35

[a]Appendix G lists the states comprising each region.

APPENDIX G

STATES COMPRISING REGIONAL CLASSIFICATION

Northeast

Connecticut
Maine
Massachusetts
New Hampshire
New York
Rhode Island
Vermont

Middle States

Delaware
District of Columbia
Maryland
New Jersey
Pennsylvania
West Virginia

South

Alabama
Arkansas
Florida
Georgia
Kentucky
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Texas
Virginia

Mid-West

Illinois
Indiana
Iowa
Michigan
Minnesota
Missouri
Nebraska
Ohio
Wisconsin

Mountain Plains

Colorado
Idaho
Kansas
Montana
North Dakota
Oklahoma
South Dakota
Utah
Wyoming

West

Alaska
Arizona
California
Hawaii
Nevada
New Mexico
Oregon
Washington

APPENDIX H

VARIABLE CONFIDENCE INTERVALS

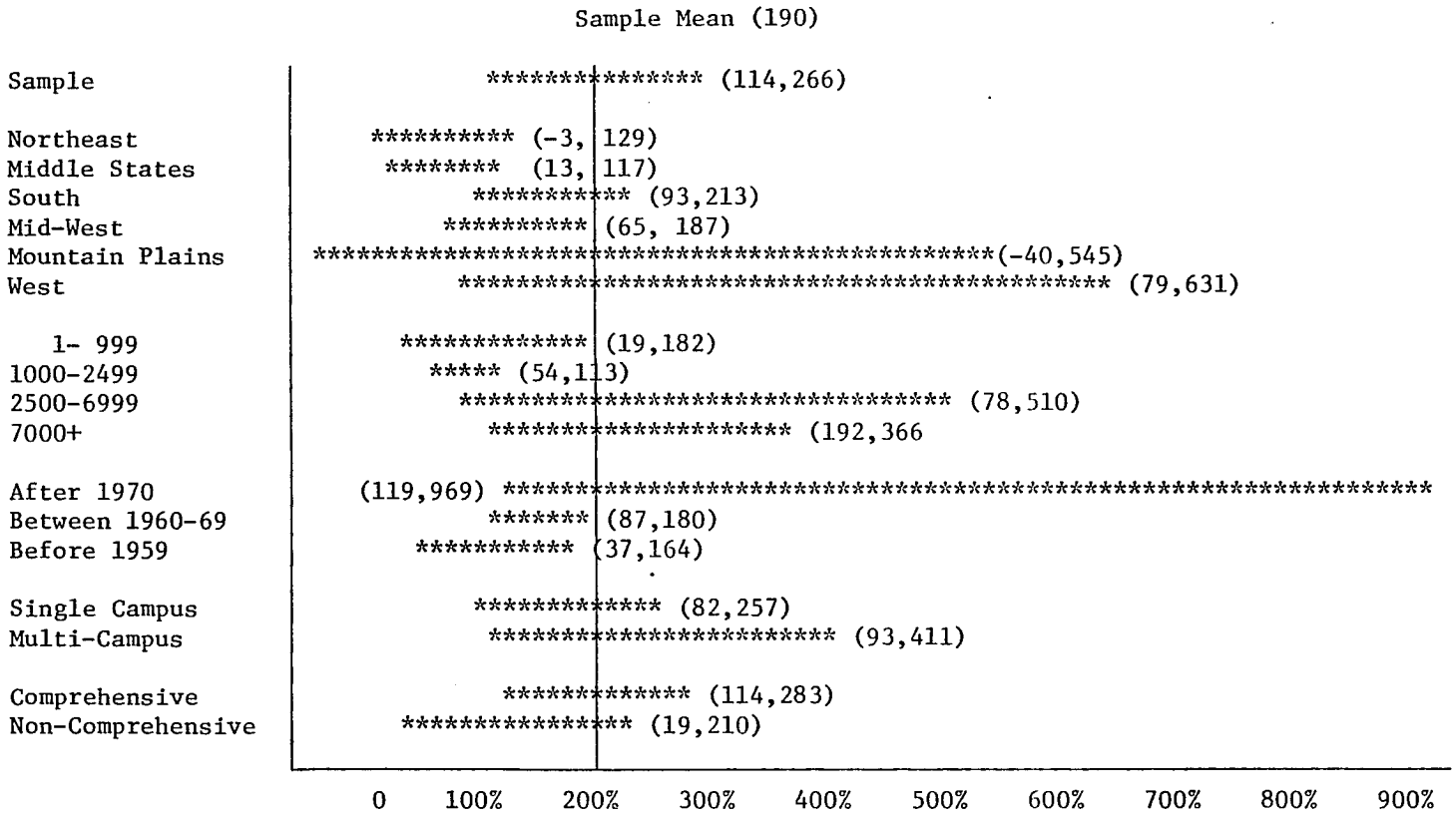

Figure H.1. Institutional FTE Enrollment Change: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

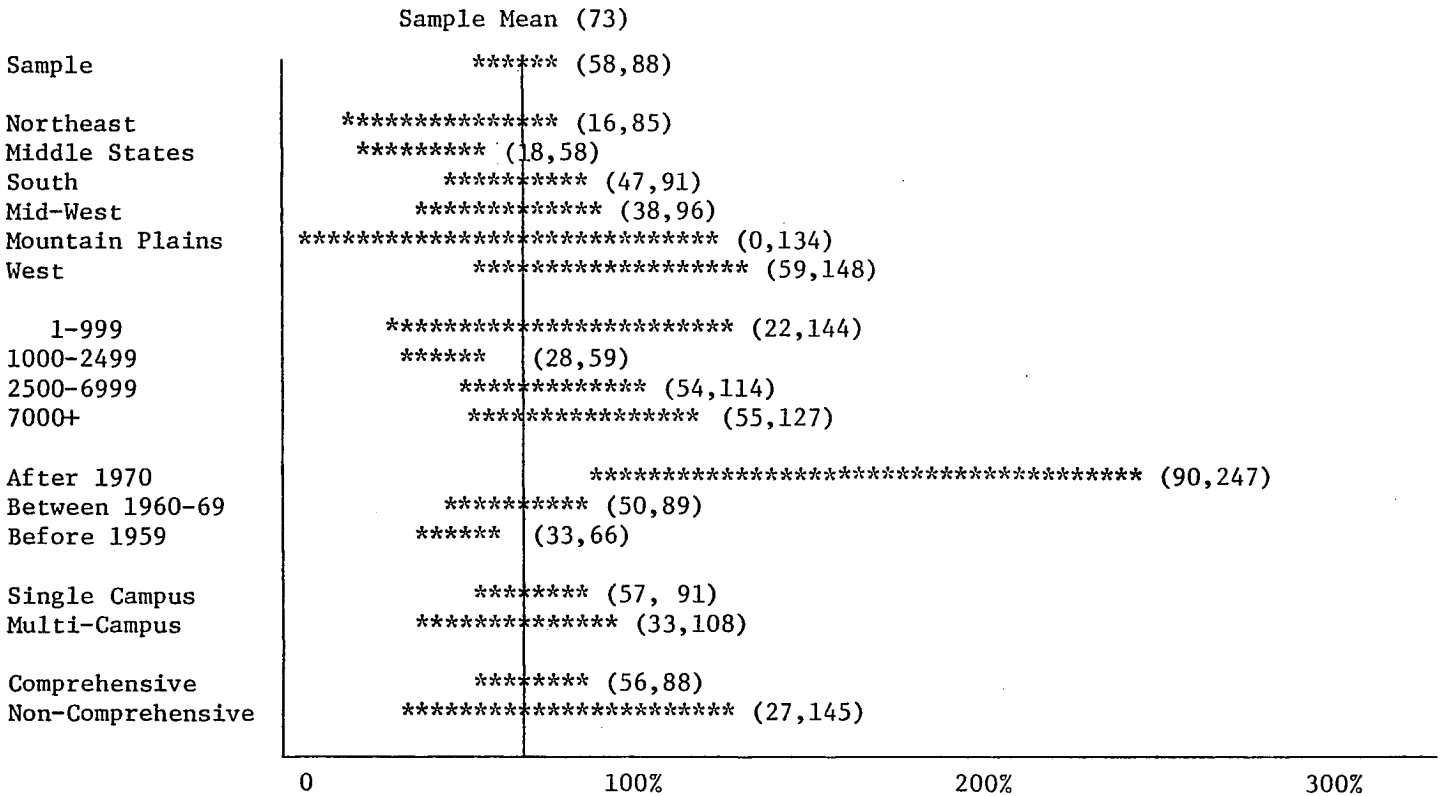

Figure H.2. Institutional Total Current Funds Expenditure Change Over Inflation: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

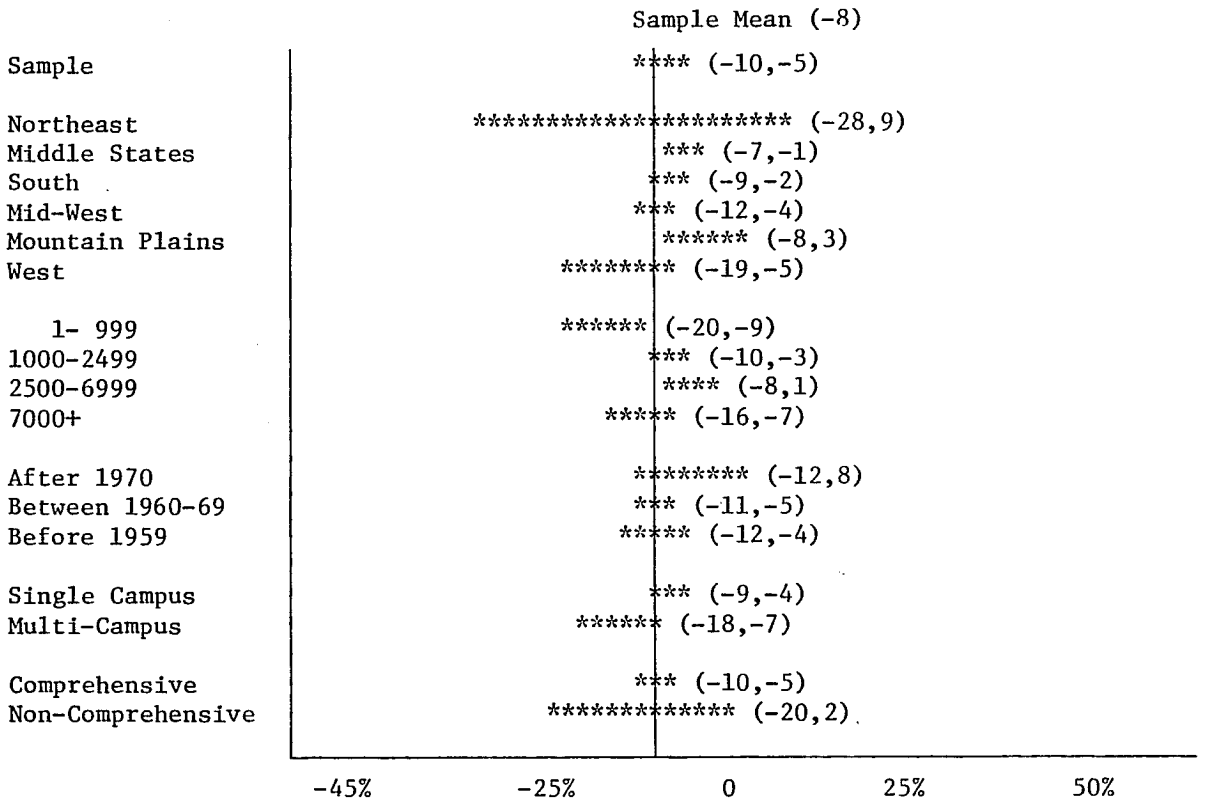

Figure H.3. Institutional Instructional Expenditure Proportion Change: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

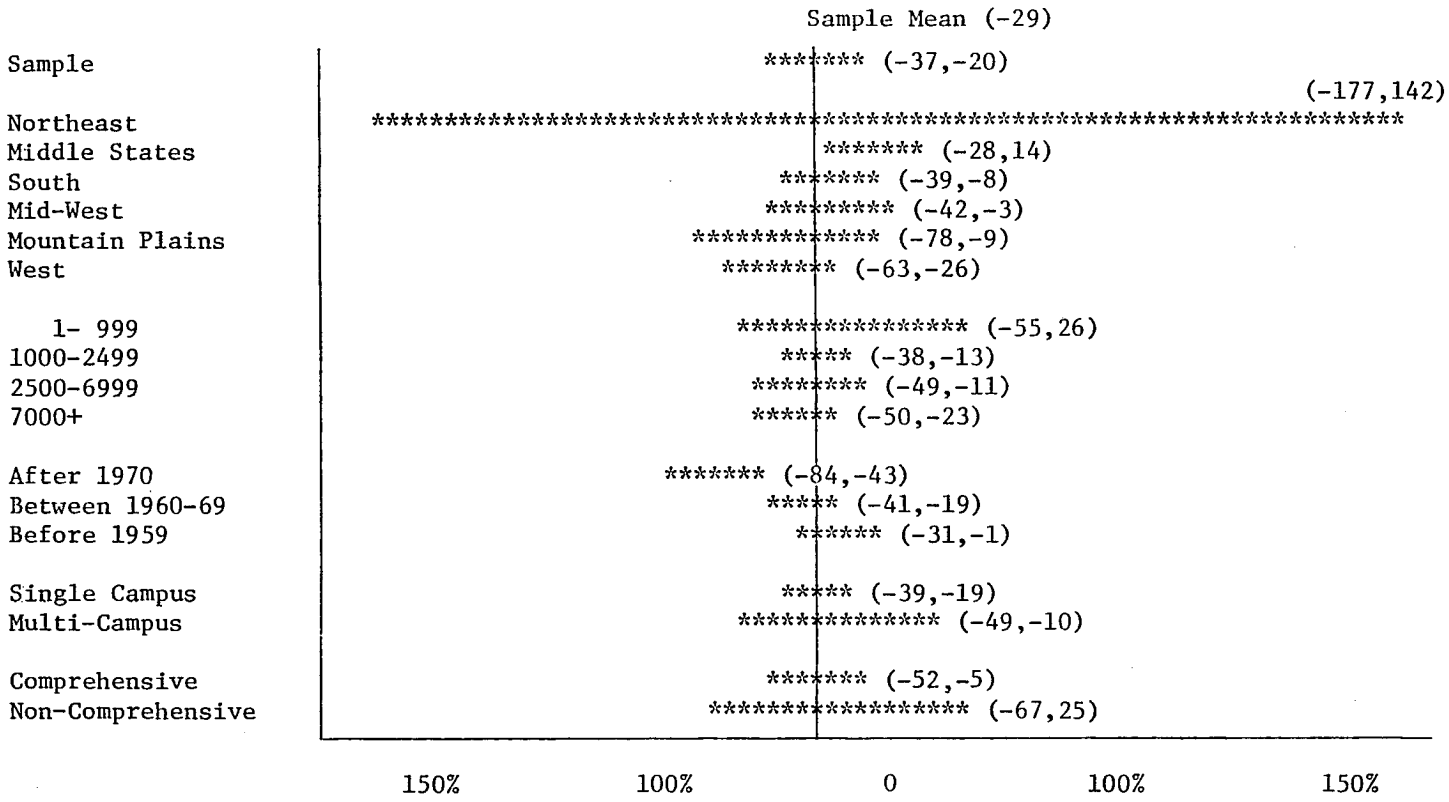

Figure H.4. Institutional Total Expenditures per FTE Student Change Adjusted for Inflation: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

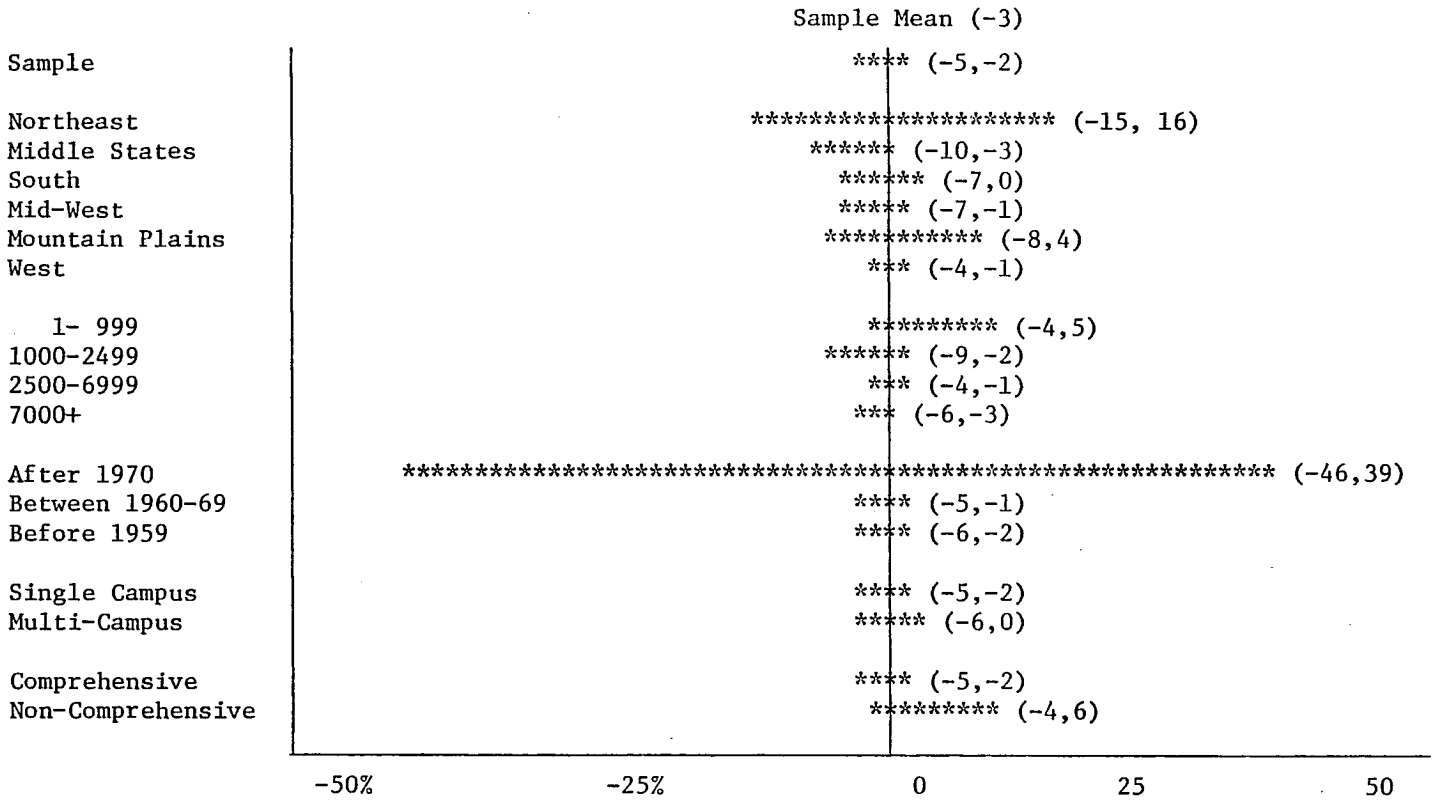

Figure H.5. Humanities Enrollment Proportion Change: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

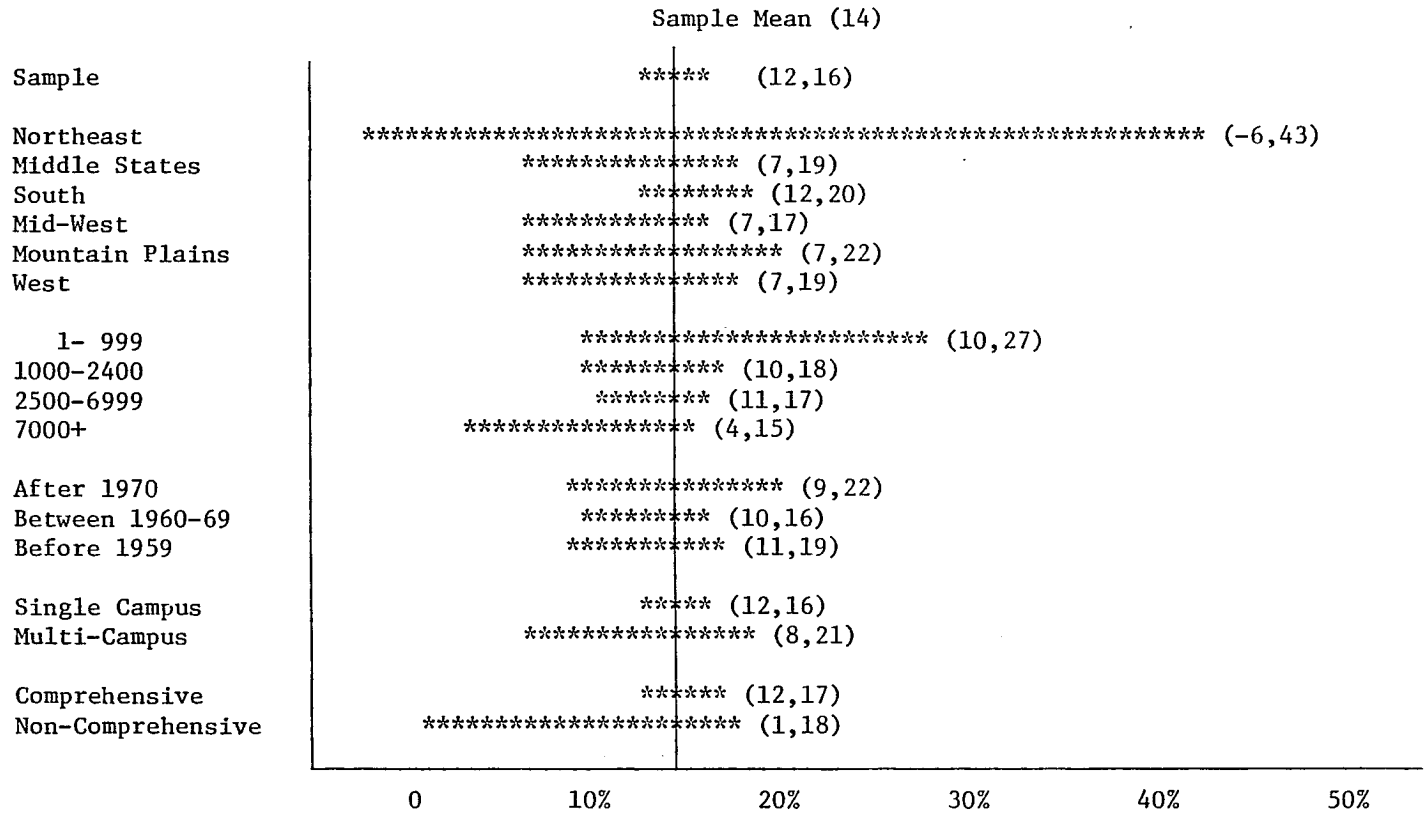

Figure H.6. Humanities Budget Proportion: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

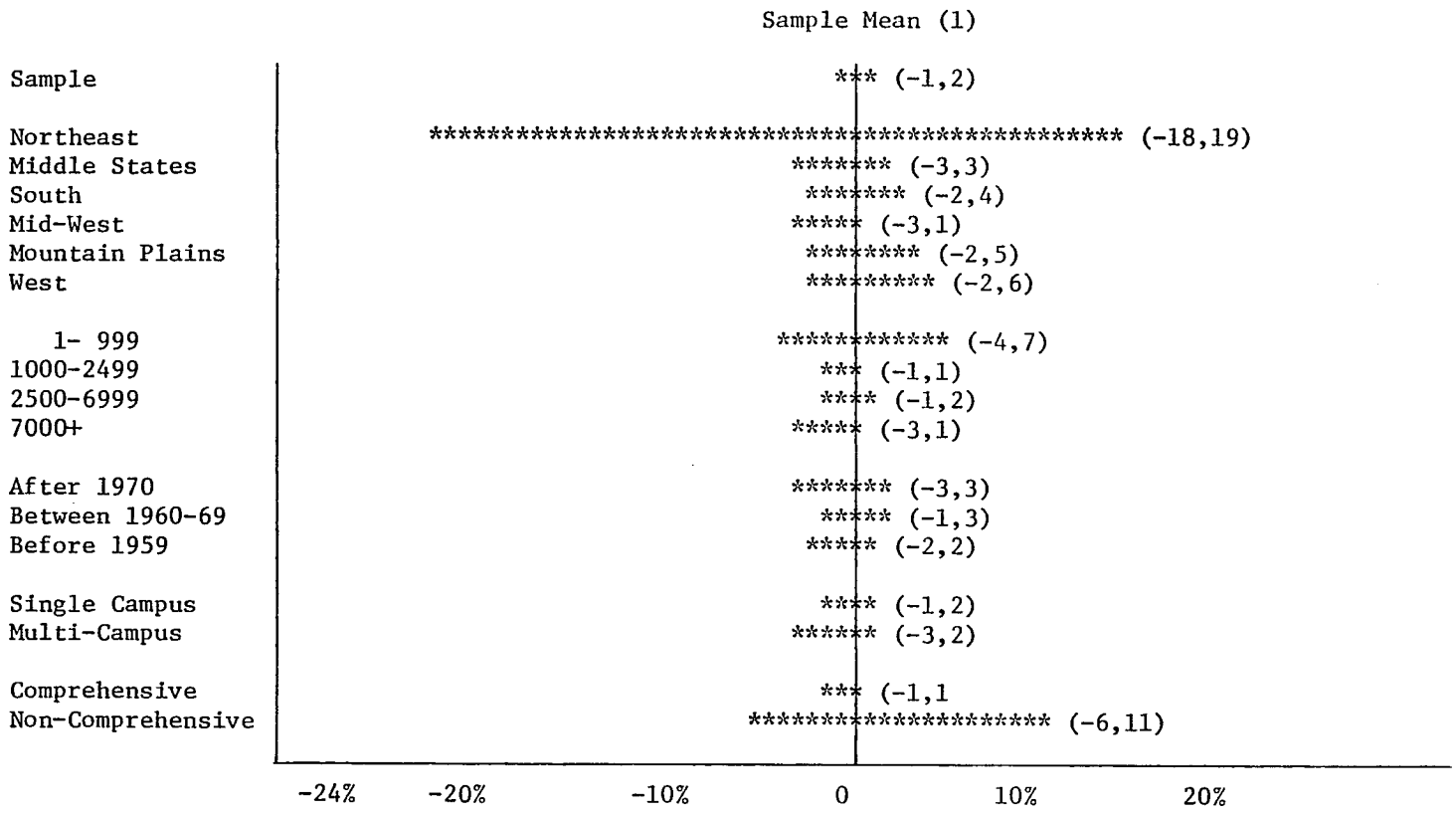

Figure H.7. Humanities FTE Faculty Proportion Change: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

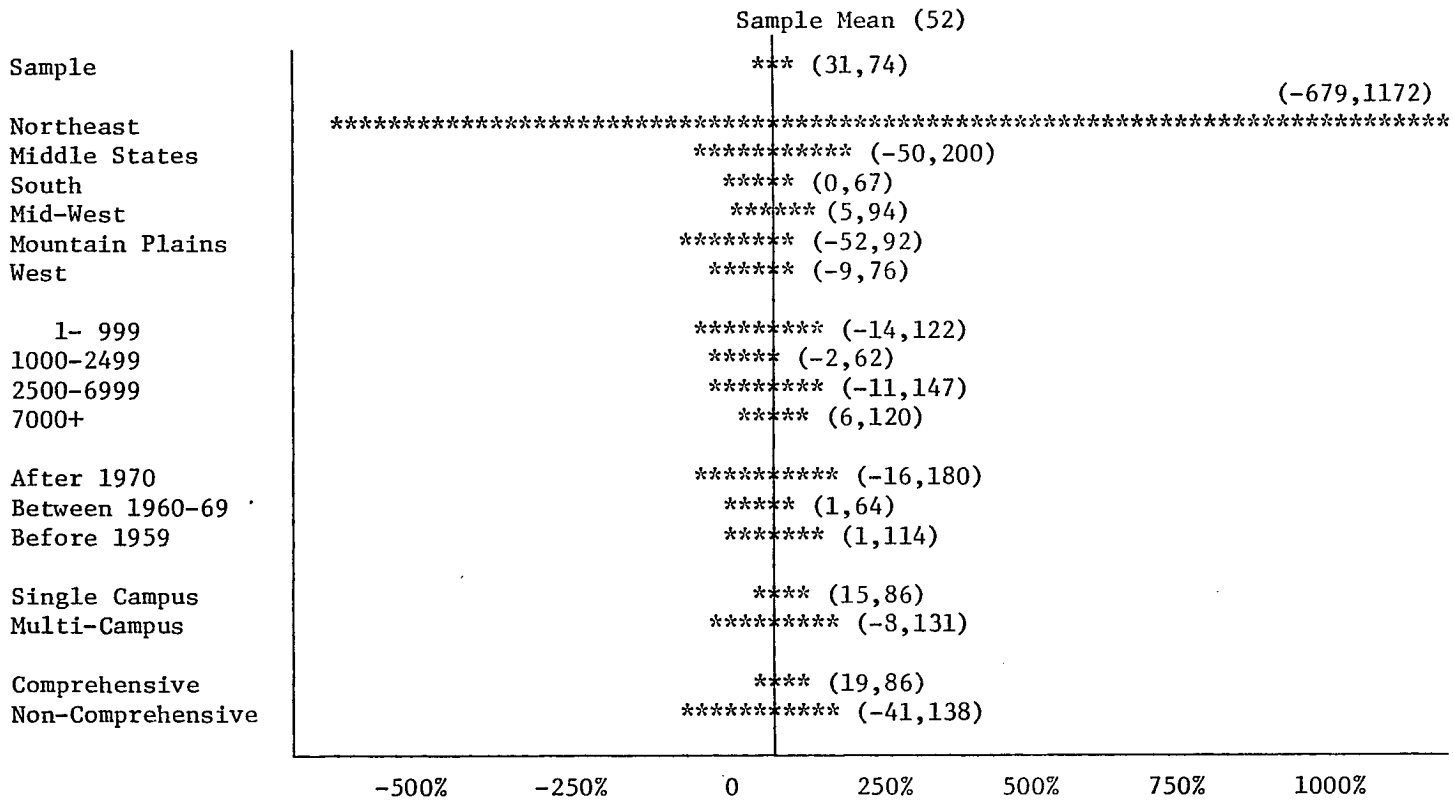

Figure H.8. Humanities FT/PT Faculty Ratio Comparison Change: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

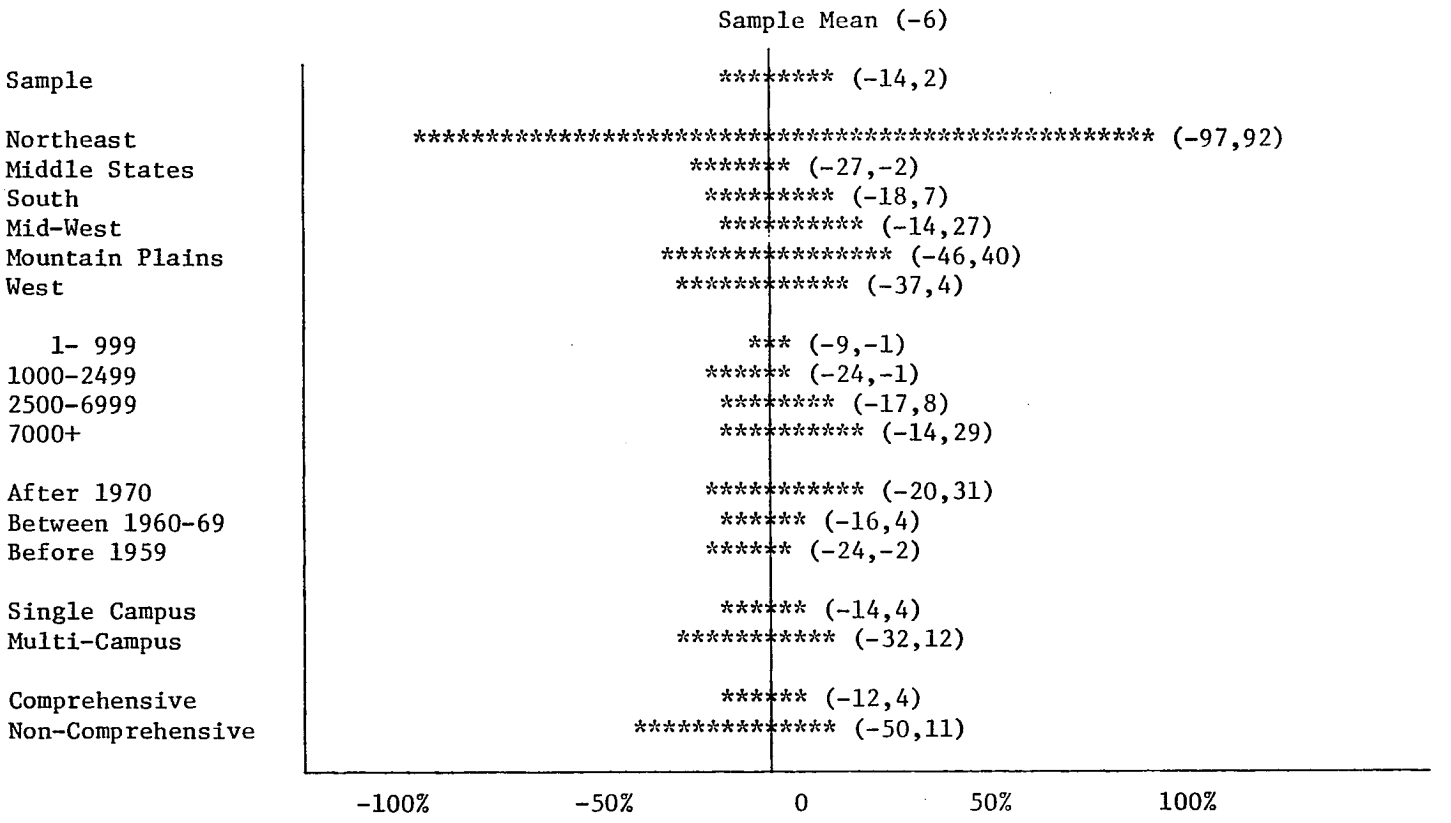

Figure H.9. Humanities S/F Ratio Comparison Change: Ninety-Five Percent Confidence Intervals. -- See Chapter 2 for variable description.

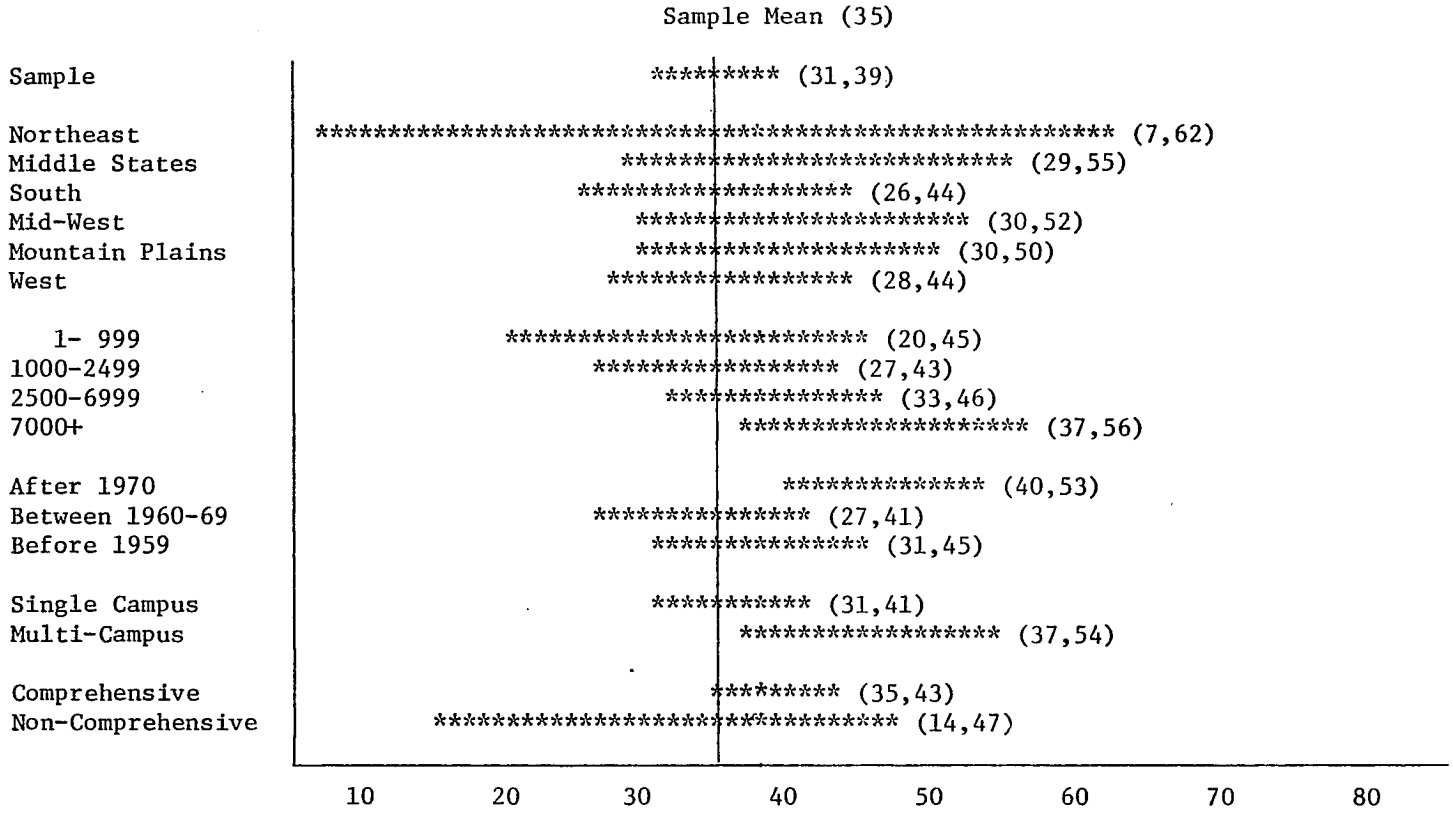

Figure H.10. Humanities Responsiveness: Ninety-Five Percent Confidence Intervals. -- See Chapter Chapter 2 for variable description.

APPENDIX I

CHARACTERISTICS OF THE DISTRIBUTIONS OF THE VALUES OF THE VARIABLES. -- NATIONWIDE SAMPLE

	Variable	Kurtosis[a]	Skewness[b]
Institutional Conditions	Enrollment Trend	6.539	42.265
	Expenditure Trend	2.517	5.983
	Instructional Expenditure Trend	.014	.834
	Expenditures Per Student Trend	.354	2.147
Humanities Conditions	Enrollment Trend	- .113	.552
	Budget Proportion	1.125	.50
	Faculty Trend	2.308	.442
	FT/PT Faculty Ratio Trend	3.635	10.362
	S/F Ratio Trend	- .055	1.863
	Responsiveness	- .427	115.900

[a] A normal distribution has a kurtosis of zero. Positive values indicate a distribution peaked more than normal. A negative value indicates a distribution flatter than normal (Nie and Associates 1975, p. 185).

[b] A normal distribution has a shewness of zero. Positive values indicate clustering to the left (extreme values to the right). Negative values indicate clustering to the right (extreme values to the left)(Nie and Associates 1975, pp. 184-185).

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