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Pierson, Tim James

**A COMPARISON OF ATTITUDES TOWARD SOCIAL AND EDUCATIONAL
EXPERIENCES OF SENIORS IN THE COLLEGE OF NATURAL SCIENCE AND
LYMAN BRIGGS COLLEGE AT MICHIGAN STATE UNIVERSITY**

Michigan State University

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A COMPARISON OF ATTITUDES TOWARD SOCIAL AND
EDUCATIONAL EXPERIENCES OF SENIORS IN
THE COLLEGE OF NATURAL SCIENCE AND
LYMAN BRIGGS COLLEGE AT MICHIGAN
STATE UNIVERSITY

By

Tim James Pierson

A THESIS

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Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

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1983

ABSTRACT

A COMPARISON OF ATTITUDES TOWARD SOCIAL AND EDUCATIONAL EXPERIENCES OF SENIORS IN THE COLLEGE OF NATURAL SCIENCE AND LYMAN BRIGGS COLLEGE AT MICHIGAN STATE UNIVERSITY

By

Tim James Pierson

Purpose of the Study

The purpose of this study was to compare and contrast attitudes toward education and social experiences held by seniors in the College of Natural Science and Lyman Briggs College, fall term 1981, at Michigan State University. In addition, the investigator compared his findings with similar investigations; the results of attitudinal study of the senior class of 1971 at Michigan State University. Specifically, this study is designed to:

1. Compare and contrast the attitudes surveyed in 1982 of the Lyman Briggs and Natural Science seniors.
2. Determine the difference, if any, in the attitudes surveyed in 1981 with those reported in the 1971 Natural Science and Lyman Briggs seniors at Michigan State University.

Population and Sample

The sample selected for this study was drawn from 678 seniors in the College of Natural Science and 84 seniors in Lyman Briggs College enrolled full-time fall term 1981 at MSU.

Methodology

The survey developed for this investigation was mailed to fifty percent of the Natural Science seniors and each of seniors in Lyman Briggs. A 65 percent return was received from Lyman Briggs and 32 percent from Natural Science.

The Multivariate Analysis of Variance (MANOVA) was the statistical model chosen to test for significance and percentages were computed and presented in tables for comparison of the 1981 responses with those collected in 1971 for a similar investigation.

Major Findings

MANOVA results indicated the F-test was significant, suggesting a significant difference in Lyman Briggs and Natural Science seniors.

1. LBC seniors were significantly more satisfied with their college or department.
2. LBC seniors held significantly more favorable attitudes toward the University.

3. LBC students were significantly more involved in community and campus activities.
4. LBC students were significantly more satisfied with the faculty in their college.

These results support Nosow's 1971 conclusion that MSU has achieved its objective "to provide a small college experience at a major university" in Lyman Briggs Residential College.

ACKNOWLEDGMENTS

It is my sincere belief that this undertaking would not have been possible without the guidance, support and encouragement the author received throughout his doctoral program. The quality of support and guidance extended by Dr. Louis C. Stamakos, Chairperson of my doctoral program and dissertation was superb. A special thanks is also extended to Dr. Max Raines, Dr. Larry Lezotte, and Dr. Lawrence Foster for their support and willingness to work with the dissertation committee.

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A special thanks is also extended to the students, faculty, and staff in Lyman Briggs College whose special commitment to a personable and quality education provided the stimulus for this study.

To my parents and family, a warm and sincere thanks for their help and love throughout the years.

Lastly, special thanks to my son Traver Lee, who has been understanding, loving, and a source of continual joy.

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CHAPTER I
THE PROBLEM
INTRODUCTION

The residential college concept, not unlike many such innovations in American Higher Education, gained a great deal of prominence during the decade of the sixties. The post World War II years of the late fifties and sixties brought about tremendous growth and expansion to colleges and universities across the country. Surveys by the United States Office of Education indicate that the total college student population leaped from 3,610,007 in 1961-62 to 7,571,636 in 1968-69, more than doubling the enrollment during the first eight years of the decade (Gaff, 1970). The average number of students enrolled in an institution of higher learning increased from 1,828 in 1960 to 3,049 in 1968 and the number of institutions enrolling over 30,000 students increased from four to twenty-five in a decade (Grant, 1969). Accompanying this growth were faculty, staff and student concerns regarding increased classroom size, limited faculty/student interaction and a loss of the "sense of community." Student life on many of the larger campuses had become a very impersonal experience with television lectures, graduate assistants teaching lower division classes and the increased use of standardized tests.

Various kinds of administrative and instructional models were being employed in response to the concerns of this rapid expansion. Large institutions were facing the problem of how to live with bigness and how to counteract its usually negative consequences (Astin, 1977). Dressel (1971) saw the residential, inner or cluster college as holding at least the possibility of reshaping undergraduate education by redefining goals, by offering a different environment and by introducing new content and different methodologies (1979). Feldman and Newcomb (1969) also held this viewpoint, as they saw a need for adequate forms of horizontal organizations within the university. It was their belief that "size," in itself, of an institution devoted to higher education matters little, providing that its internal organization is appropriate to its size. That is, at any given horizontal level absolute size does not matter. They further suggest that given the condition of local autonomy "new forms or organization invite, or at least facilitate, significant educational innovation" (Feldman and Newcomb, 1969).

The issue of institutional size has been given a great deal of attention in studies assessing college impact and student satisfaction. All suggest a negative relationship between size and individual participation, involvement and satisfaction (Astin, 1977; Chickering, 1969; Feldman and Newcomb, 1969). In responding to this challenge for large

institutions, Astin (1969) saw it in the institution's ability to simulate smallness through cluster colleges. The intent of the reorganization being suggested was one that would create an environment, where students would receive the kind of attention and support typically offered in a small college, while at the same time enjoy the resources and opportunities available at a large university.

Michigan State University provides an excellent model exemplifying the kind of growth and expansion described earlier and its response to this growth. In the fall of 1967, the University's President, John A. Hannah, recognizing the need for change, appointed a committee to examine the status and needs of the University's undergraduate programs. The Committee's report describes some of the events and discussion that lead to the development of the residential college model at Michigan State.

Michigan State University was among the first of the large public universities to develop plans for the establishment of semi-autonomous residential colleges. In its 1959 report, the Committee on the Future of the University suggested that serious consideration be given to the possibility of a small liberal arts college in the midst of the larger University and several proposals for a college of this kind were drafted. However, it was not until November of 1964 that the Provost appointed a special ad hoc study committee to examine in detail the feasibility of a new and semi-autonomous college. The report of that committee was presented in February of 1965 to the EPC which, in due course, formally accepted the positive recommendations it contained.

In the report of the ad hoc committee, three major goals for the proposed semi-autonomous college were identified. They called for:

- a. a more successful integration of students into the social and intellectual life of a recognizable university unit;
- b. the merging of currently unmet curricular needs;
- c. the opportunity for curricular experimentation now limited by the demands of on-going institutional arrangements within the University.

Thus, curricular innovation and experimentation were to be encouraged within the context of a controlled environment which would reinforce the student's effort to develop meaningful relationships with other students, the faculty and ultimately, the University itself (Michigan State University, 1967).

Three residential colleges--Justin Morrill, Lyman Briggs and James Madison--were established, each developing specific objectives anchored upon the three major goals presented in this report. Throughout this study, the investigator will focus on College II; Lyman Briggs College.

Lyman Briggs College, which accepted its first class in the fall of 1967, was created for students interested in a broad liberal education in the biological sciences and mathematics. The College was established to provide a particular kind of environment for the science-oriented student at Michigan State University. The aims and commitments of the College provide a conceptual framework from which the College was established.

Aims and Objectives of Lyman Briggs College

Lyman Briggs College is committed to provide its students with an education in the sciences characterized by excellence and balanced by the inclusion of a usually large segment of the components

of a liberal education. The College plans to take full advantage of the potential student benefits inherent in a small residential college. It will be cognizant of the individual differences in the need of students and faculty members. It will provide for these in a way that is only possible in a community with which each member can identify and that each member can influence. In this respect it will be a collegiate community whose sole reason for being is the intellectual, ethical and social development of all its citizens. This community will offer students all the advantages of living and studying in a residential college with its increased opportunities for identification and interaction with the faculty, development of co-curricular activities related to educational goals and reinforced by frequent and informal communication with those of similar interests. It will simultaneously offer the wide resources of a major university for the selection of a variety of courses and a wide choice of cultural, social and athletic activities.

Lyman Briggs College will undertake a series of experimental innovations planned to increase the students' interests in serious intellectual inquiry into the sciences and mathematics, with an understanding of some of the logic and history of their development, the philosophy that pervades them, and the impact on the society that supports and is affected by them. Because Lyman Briggs College is designed to provide a liberal-science based undergraduate education, a core program required of all students will provide:

1. A sound foundation in the biological and physical sciences and mathematics.
2. A unique general education program arranged to focus attention on the relations between science and society and science and man.
3. Fields of concentrated study which seek to develop high levels of scholarship and the qualifications for useful citizenship, business, industry or government service (Analysis of Lyman Briggs College, Michigan State University, 1973).

The planning committee which designed Lyman Briggs College saw it as an "innovative and experimental" program.

Inherent with this charge is the need for continual and comprehensive assessment of the program's effectiveness. Sound assessment produces information necessary for making decisions regarding goal attainment, direction for improvement and ultimately, whether or not to continue the program. "When formal, planned evaluation is not present, individuals--administrators, faculty and students, whether involved in the program or viewing from the sidelines--make their own. And those who resist formal evaluation cannot reasonably object if the impressionistic evaluation of others are unfavorable" (Dressel, 1976).

Importance of the Study

The importance of this study is brought into sharper focus when examined in relationship to the fiscal crisis decreed by the Board of Trustees of Michigan State University in 1981. During the 1980-81 academic year, the University was forced by fiscal exigencies to carefully examine all of its programs to determine which were essential to the University's mission. Subsequent to this all-university examination, the residential colleges were among the first programs scheduled for elimination. After a great deal of discussion and close scrutiny, the colleges were spared with some modifications recommended for Lyman Briggs. The college status of Lyman Briggs was changed to a school within the College of Natural Science.

The program and administrative changes as a result of this action have not all been determined at the time of this writing. However, the significance of this study lies in the opportunity, perhaps the last, to examine student attitudes regarding their experience in the established residential college program. The 1982 Lyman Briggs seniors will be able to complete their programs as previously scheduled, but future changes in the program will present students with a different experience. The importance of the study being suggested is to be found in the contribution these findings could hold for determining the effectiveness of this particular residential college program and in planning its future.

Michigan State University, like many other institutions, will continue to be faced with difficult decisions during the 1980's decade of retrenchment. Astin (1979) warned that bad policy decisions come from a preoccupation with cost. Adequate program assessment can provide useful information in making these difficult decisions "educational" rather than financial decisions.

The timing of this study is also important since its object is to examine a "mature program." Trow (1969) suggests that the time to assess an innovation is when it is no longer an innovation; when it has become routinized and no longer can call forth special energies, resources and enthusiasm of an experiment. The Lyman Briggs program is well beyond the "newness" stage as little evaluation of this

kind has taken place since 1971 and 1975. The Office of Evaluation Services conducted a study of seniors at Michigan State in 1971 and their findings revealed significant differences in the residential college students' attitudes toward personal adjustment, intellectual growth and college experience when compared with their University counterparts (Nosow, 1975). The students surveyed in this study were those seniors in the first graduating class from Lyman Briggs College. The present study will provide interesting comparison data with the 1971 study and useful information on the program's present impact. The need and appropriateness of a study examining student satisfaction with their college experience is put in today's context by Astin (1977) as he asserts:

"Current discussions of accountability of the 'outputs' of higher education frequently overlook student satisfaction. This area covers the student's subjective experience during the college years and perceptions of the value of the educational experience. Given the considerable investment of time and energy that most students make in attending college, the student's perception of value should be given substantial weight. Indeed, it is difficult to argue that student satisfaction can be legitimately subordinated to any other educational outcome."

Purpose of the Study

The purpose of this study was to compare and contrast attitudes towards educational and social experiences held by seniors in the College of Natural Science and Lyman Briggs College, fall term 1981, at Michigan State University. In addition, the investigator compares his findings with

similar investigations; the results of attitudinal studies of the senior classes of 1971 at Michigan State University. More specifically, this study is designed to:

1. Determine present attitudes of the 1982 seniors in the colleges of Natural Science and Lyman Briggs.
2. Compare and contrast the attitudes surveyed in 1982 between those Lyman Briggs and Natural Science seniors.
3. Determine the difference, if any, in the attitudes surveyed in 1982 with those reported in the 1971 Natural Science and Lyman Briggs seniors at Michigan State University.

Hypotheses

The following hypotheses have been developed and stated in the null fashion:

1. No significant difference exists in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors.
2. No significant difference exists between 1982 seniors in Lyman Briggs and Natural Science in their attitudes toward their:
 - A. Satisfaction with college or major department.
 - B. General attitude toward M.S.U.
 - C. Attitudes toward Michigan State University professors.

- D. Involvement in community activities.
- E. Satisfaction with outcomes of their educational experience.
- F. Satisfaction with faculty in their college or department.
- G. Attitudes toward individual attention.
- H. Involvement in campus co-curricular activities.
- I. Attitude toward planning.
- J. Satisfaction with academic advisement.

The Multivariate analysis of variance was the statistical method employed to test for significance at the .05 level of confidence.

Definitions

Two critical terms used throughout the study are defined.

Lyman Briggs College Senior--as used in this study refers to those students at Michigan State University enrolled in Lyman Briggs College, fall term 1981 and have completed a minimum of 120 quarter credit hours.

College of Natural Science Senior--for the purposes of this study refers to those Michigan State University students who have enrolled in the College of Natural Science, fall term 1981 and have completed a minimum of 120 quarter credit hours.

Scope and Limitations of the Study

This study will examine attitudes toward educational and social experiences held by seniors in the colleges of Lyman Briggs and Natural Science at Michigan State University. Certain limitations should be identified to avoid inappropriate expectations and generalizations when interpreting the results of this study.

1. Lyman Briggs College was threatened with elimination because of a declared financial crisis at the University during the 1980-81 academic year. Many students, faculty and staff rallied in support to save the residential college program. This was an extremely difficult time for the entire University community, yet in many respects the crisis served as a catalyst for unifying the faculty, staff and students of program units threatened with elimination. The final recommendation by the Board of Trustees for the Lyman Briggs program was a change in its semi-autonomous college status to a school within the College of Natural Science. To what extent these events may have influenced student attitudes is an unknown variable. Efforts to assess this influence are addressed by a series of questions in the survey.
2. The Lyman Briggs College sample used in this investigation is the College's last class. Because the college status of the Lyman Briggs

program has been changed to a school within the College of Natural Science, the possibility does exist that the attitudes analyzed will not be representative of future Briggs' classes.

3. The findings of this study are applicable to Lyman Briggs College only and will therefore have limited, if any, value in the investigation of other residential college student populations on the Michigan State campus or in other universities.

Overview of the Thesis

Presented in this chapter were the introduction, importance of the study, purpose of the study, definitions, hypotheses and the scope and limitations of the study. Each area will be developed further in subsequent chapters.

Chapter II contains a description of Lyman Briggs College, a selected review of the literature, and a report on the findings of the 1971 study of Michigan State University senior classes.

Chapter III contains methodology including a description of the population, instrumentation, design and data collection, the hypotheses tested and the statistical methods employed.

Chapter IV is a presentation of the results and analysis of the data and findings. Included in this chapter is a comparison of the 1981 responses with those collected

in 1971 for a similar investigation.

The final chapter, Chapter V, contains a review of the study, presentation of major findings, conclusions, and recommendations for further study.

CHAPTER II

REVIEW OF LITERATURE

Chapter II contains three sections. First, a presentation of selected literature on student satisfaction and a discussion on factors leading to the development of the residential college programs; second, a description of Lyman Briggs College at Michigan State University; and third, a review of a study which compared Lyman Briggs College and Natural Science seniors at Michigan State University in 1971.

Student Satisfaction

Student satisfaction with the undergraduate experience is best identified with studies on the impact of the college experience upon undergraduate students. Astin (1977) addresses the question of why student satisfaction merits the attention of educational research. "Current discussions of accountability of the 'outputs' of higher education frequently overlook student satisfaction." According to Astin, "student satisfaction includes the student's subjective experience during the college years and perceptions of the value of the educational experience." Astin further adds that "given the time and energy that most students take in attending college, the perception of value

should be given considerable weight." Kuh (1981) identified student satisfaction as a measure of institutional quality. Kuh (1981) suggests that "if the 'quality' of an experience is to be estimated, those involved in the process must be afforded the opportunity to describe their experience, assess the quality thereof, and comment on the meaning of those experiences."

The student unrest and discontent of the sixties brought with it a great concern for student satisfaction. Prior to this period, there was a virtual absence of research on college student satisfaction (Bert, Starr, and Menne, 1972). Much of what we have learned about student satisfaction has resulted from research on the campus environment, attrition, and, as mentioned earlier, the impact of the college experience. Most notable of these studies was one reported by Kenneth A. Feldman and Theodore N. Newcomb (1969), The Impact of College on Students, where they examined four decades of research and findings on the effects of the college experience on students. Most pertinent to this investigation is their finding that the conditions leading to student satisfaction appear to have been most frequently provided in small, residential, four-year colleges.

Astin (1977) reported on the findings of over 200,000 students who were studied by the Cooperative Institutional Research Project (CIRP). His book, Four Critical Years, presents findings of the first ten years of this research.

Astin attempted to measure the relationship between the collegiate experience to the actual outcomes experienced by students. Astin's major findings serve as a structure to examine four factors found to contribute to student satisfaction: (1) student involvement, (2) student-faculty relationship, (3) institutional size, and (4) residency.

Student Involvement

Student involvement, one of the most significant factors contributing to student growth and development, is defined as: participation in extracurricular activities, independent research, and cultural and social activities. This involvement has had a positive effect on almost every student development variable, especially in self-confidence and personal and intellectual self-esteem (Astin, 1977; Feldman and Newcomb, 1968). The increase in self-confidence supports Chickering's (1969) findings that students seek to establish identity during the four collegiate years.

Student-Faculty Relationship

The literature consistently reveals the importance of the student-faculty relationship on student satisfaction with their college experience. Astin (1977) asserted that "student-faculty interaction has a stronger relationship to student satisfaction with the college experience than any other involvement variable or indeed any other student or institutional characteristic."

In George D. Kuh's (1981) report on Indices of Quality of the Undergraduate Experience, he recognizes as significant the informal interaction between students and faculty. He also asserts that the degree and kind of effort both students and faculty invest in their respective roles is a manifestation of institutional quality.

Feldman and Newcomb (1969) also found that faculty are particularly important in influencing occupational decisions and educational aspirations. Their research revealed that in over a dozen studies in which students were asked to name the important sources of influence on their vocational planning and decisions, faculty along with parents were ranked as extremely important.

In Astin's (1977) summary comments, he asserted that "students who interact frequently with faculty are more satisfied with all aspects of their institutional experience, including student friendship, variety of courses, intellectual environment, and even the administration of the institution. Finding ways to encourage greater personal contact between faculty and students may increase their satisfaction with their college experience.

Institutional Size

Astin found that large, coeducational public institutions tend to dilute the impacts of student involvement. Students enrolled in these institutions have more difficulty

getting involved in various activities. Chickering (1969) stated "it is no coincidence that colleges with clear salient objectives are most frequently small; if they have grown larger now, they established their institutional clarity while enrollments were less than 1000. For while small size is not a sufficient condition for clarity or purpose, the evidence suggests that it is a necessary one."

Taylor (1964) suggested that "people tend to disappear when huddled together in large members." Taylor further stated, "when students are superfluous they don't develop much or, to put it more elegantly, development varies inversely with redundancy . . . redundancy occurs when increases in the number of inhabitants of a setting leads to decreasing opportunities for participation, thus decreasing satisfaction for each individual."

Barker and Gump (1964) discussed "how the wholistic perspective of an individual's behavior carries particular force for the development of congruence. That is, when the totality of a student's behavior is visible to many others with whom he/she goes to class, parties, meals, etc. . . . it is difficult to talk one kind of life and live another."

Pace (1964) has found that the larger the school, the less likely are students to describe the atmosphere as friendly or cohesive with a feeling of group welfare and group loyalty that encompasses the college as a whole. This, too, suggested an increasing importance for sub units as the college becomes larger.

Eddy (1959) stated "that when the campus was small, homogenous and/or rested upon some particular strong tradition, standards (of students) were influenced most strongly by the total community. In the larger more diversified institutions, the students sought out a smaller group which served both as a focal point for their interests and a behavioral determinant. Sanford (1967) countered the issue of size by stating, "what troubles us however, is not size as such, but lack of coherence. Coherence depends not on size alone, but on leadership, internal structure, and educational style of the college. If education is to have the developmental influence that we hope for, it should be carried out in a community; a student must feel he knows of or could know nearly everyone else." As Newcomb (1962) has shown, "mutual familiarity is also necessary for the transfer of faculty values to student culture (from Sanford, 1967)." Feldman and Newcomb (1968) argue "that impact on students does not require the small intimate campus for maximum effect. What is needed is not smallness but an organizational structure that reduces bureaucracy and impersonality."

Astin (1977) summarized these viewpoints by stating that "large institutions face the problem of how to live with bigness and how to counteract its usually negative consequences."

Residency

Living in residence halls on campus, as opposed to commuting, was found to influence a number of variables: (1) Students are more likely to persist, (2) Men show an increase in G.P.A., and (3) Students are most likely to get involved in activities (Astin, 1977). These findings support Brown's (1972) postulate that the living unit is one of the most significant contributions to student growth and development.

Student satisfaction with any one type of housing is relative to a particular campus (Packwood, 1977). Clark (1968) touched on the complexities of the matter by stating, "If we did not know it before, we know it now--good scholars and good students can make a bad educational system. Everything depends on how they are put together." Various writers have recognized the need to bridge or link the academic and social experience of campus life.

A 1968 evaluation of Michigan State University Residence halls found that this housing program was failing to provide the necessary bridges:

1. a bridge between the academic aspects of a student's experience and the day-to-day living aspects of student life.
2. the potential bridge between the teaching and advising function, as both affect student satisfaction with their college experience.

This gap that Michigan State identified is very prevalent throughout the literature which Dressel (1971) refers to as

"fragmented heterogeneity" of the undergraduate experience. Plough (1979) supported this concern stating "indeed, many self-studies conducted by academic institutions address themselves to the issue of meaningful linkages between the academic program and student life." Plough further asserted that the "significant others" in fashioning such connections are the faculty.

Summary

Student satisfaction with the undergraduate experience was given little attention until the student unrest in the 1960's. Since that time, student satisfaction has been given a great deal more attention and is identified as a manifestation of institutional quality (Kuh, 1981). This review examined student satisfaction through studies dealing with "impact" of the college experience on students. Astin's, (1977); Feldman and Newcomb's, (1968) longitudinal studies served as a foundation for the inquiry. The aspects of an undergraduate's college experience found to contribute to satisfaction were: (1) student involvement in campus life, i.e., special academic programs, athletics and social, cultural, and recreational activities, (2) student-faculty relationships--found to be the most often identified factor in contributing to student satisfaction, (3) institutional size--found to have a significant impact on student opportunity to become involved and achieve in various activities with the small private residential colleges

having the most impact (Astin, 1977), (4) residency--the on-campus residence experience has shown to have significant impact upon student persistence, G.P.A., and involvement in campus activities.

Factors Leading to the Development of the Residential College

As discussed in Chapter I, the rapid growth and expansion of higher education in the late 1950's and '60's heightened the concerns of educators regarding the impact of the college experience on student development. This growth and expansion brought many undesirable changes to a large number of institutions. The rapid increase in enrollment in many colleges and universities resulted in an increase in class size, fewer opportunities for students to interact with faculty, overcrowded residence halls, and a seemingly depersonalized campus atmosphere. In 1968 the Hazen Foundation's Committee on the Student in Higher Education criticized higher education for not being more concerned with the total development of the student. The Foundation's report included these recommendations:

1. Higher Education should be aware of its power to influence personality development and take responsibility for it.
2. Big universities should be decentralized to avoid a mechanistic approach.
3. Faculty should shift commitments back to facilitating learning experiences, giving students personal meaning, commitment to the emotional development of their students.

Similar concerns were shared by Sanford (1967), Dressel (1971), Brown (1972), Astin (1977). In Sanford's Where Colleges Fail (1967), he expressed a critical need to help restore students to their rightful place "at the center of the college's activities." Sanford saw the primary aim of education to create a total educational environment for the development of the individual.

During this time of re-examination of the primary goals, objectives, and impact of higher education, writers such as Crookston (1962) and Brown (1972) stressed the need to reassert higher education's commitment to the development of the whole person. The rudiments of the Student Personnel Point of View (1949) could be found throughout the literature:

1. View encompasses the student as a whole person.
2. Concept of education is broadened to include the development of a well-rounded person--physically, socially, culturally, emotionally, and spiritually.
3. The student is thought of as a responsible participant in his own development.
4. His full and balanced maturity is viewed as a major goal of education (American Council on Education, 1949).

The Carnegie Commission in 1973 reported on The Purposes and the Performance of Higher Education in the U.S.--Approaching the Year 2000. According to the report, the main purposes of higher education in the U.S. were:

1. The provision of opportunities for intellectual, aesthetic, ethical, and skill development of students
2. Advancement of human capability in society at large
3. Enlargement of educational justice
4. Transmission and advancement of learning
5. The critical evaluation of society

The report reaffirmed the importance of the development of the whole person and went on to recommend that institutions needed to devote more attention to the quality of the environment affecting the developmental growth of the students. "It is frequently said that the proper concern of Higher Education is with the intellect only. But this notice that the intellect is somehow disembodied or separated from the rest of the personality, is not only unintelligent in that it favors no legitimate educational aim, it is actually perverse in its implications, in that it assumes that if one takes it upon himself to be a student, he cannot at the same time be a human being" (Sanford, 1970).

A number of writers expressed views of an expanded curriculum that would address the development of the whole person. The need to integrate the learning process was asserted by Wrenn in 1955 as he described the nature of student personnel work to include not only those processes and functions which emphasized the development of the whole person but also those that help build a curriculum, improve

methods of construction, and develop leadership programs designed to have an impact on the affective life of the student as well as the cognitive.

"The objectives in the cognitive and affective domain are not separable. Educated behavior always involve both affective and cognitive elements . . . value free intellectual changes is an unachievable by man and probably undesirable in any case" (Dressel, 1971).

The Living-Learning Concept

In the 1950's Riker and Greenleaf began to speak of the potential of dormitories to become centers for learning. Their concept stressed the importance of educating the "total person" and the importance of those learning experiences that occur outside the formal classroom" (Miser 1977).

Adams (1968) states that the purpose of living-learning residence halls is "to take fullest advantage of the student peer group influence to establish an environment of cultural influence that is conducive to the aims of the university." Centra (1968) found the living-learning centers were less impersonal, less of hotel-like environments. Pemberton (1968) and Williams and Reilly (1972) found living-learning centers made significant contributions to one of the primary goals of education enumerated in 1961 by Mueller: the preservation, transmission, and enrichment of the culture.

Several studies have compared student perceptions of living-learning residence halls with their perceptions of conventional halls. Rocky (1969) reported that students in living-learning halls were more satisfied with their majors and faculty than were students in conventional halls. Pemberton (1968) found students in living-learning units were significantly more satisfied with faculty when compared with non living-learning students.

In a study of coeducational living-learning halls at Michigan State University, Olson (1964) reported 59 percent of the students felt they had more out-of-class contacts with the instructors from the living-learning hall than other instructors, and about the same percentage felt they had more out-of-class discussions with other students concerning their residence hall classes than with students in other classes. Eighty-five percent of the residents liked living in a coeducational residence hall, and 95 percent of them said they would recommend the living-learning residence hall to new freshmen (Williamson and Biggs, 1975).

The success of the living-learning unit was dependent on the mechanism that linked students living in the residence hall to the classes. If students living together also take classes together, there are some exciting opportunities for discussion of class activities, and intellectual interaction might take place in a number of settings within the residence hall. Miser (1977) asserted

that this approach is one that takes advantage of the natural social interaction in a residence hall by adding some common educational experiences. Riker (1977) saw effective living-learning centers having three essential elements:

1. Programs, developed as a framework for student action and reaction in learning;
2. Staff, selected and organized to sustain the programs and guide the day-to-day activities of the housing unit; and
3. Physical Facilities, designed to meet the requirements of student programs and staff.

Most important are the people--students, faculty, and housing staff--whose interchange of ideas sparks minds into new creative action (Riker, 1977). The interchange of ideas was likewise stressed in the development of the T.H.E. project for the future of higher education (American Personnel Association, 1975). More specifically, the project cited the key to a successful student development program based on the extent to which there is both formal and informal collaboration between students, student affairs staff, and faculty. Dressel (1971) saw the residential, inner or cluster college as holding at least the possibility of a complete reshaping of undergraduate programs by defining goals, by offering a different environment, and by introducing new content and methodologies.

Residential Colleges--An Outgrowth of Living-Learning

Historical Perspective

Many large American universities have developed and experimented with different forms of horizontal organizations in the past two decades. The residential college concept is one form that gained significant popularity during this period. The concept of the residential college dates back seven centuries in Great Britain. Lord Redcliffe-Maud (1967) wrote that the first residential college was located at University College, Oxford in 1249. In the United States the residential college was developed in the 1920's at the Claremont Colleges and the Atlanta University Center (Gaff, 1970). Feber (1962) noted that "the 'community of scholars' was approximated in some private colleges and universities, but limited funds, a widely dispersed student population, and difficult transportation made cluster and residential colleges initially impractical."

Development of the Residential Colleges

As previously discussed, the early 1960's witnessed a tremendous increase in enrollments of colleges and universities. This growth was accompanied by a dramatic expansion of residential facilities spurred by generous federal and state subsidies. The contention that a student experience of living in a residence is a vital part of the

learning process was advanced by a number of authorities (Mueller, 1961; Riker, 1965; Adams, 1968; and others). In Miser's (1969) discussion of classes in residence halls, he suggested that "in order to create a successful educational environment in a residence hall, there must be a mechanism to link the student living in the residence halls to the classes being taught there." The "link" he hypothesized would enhance the opportunities for discussions of class activities and intellectual interaction, thus taking advantage of the natural social involvement of students living together. Such links or programs have variously been called residential colleges, cluster colleges, and sub colleges. These terms and others are often used interchangeably for the residential programs and do create some confusion. This is particularly true because of the unique approach each university has to these innovative and experimental programs.

Definition of the Residential College

For some clarity on the term "residential college," the following definitions serve to identify common elements:

1. Sanford (1960) "When we say residential college, I take this to mean that the teaching and curriculum are put into the college where students live."
2. McHenry (from Stickler, 1964) "We define the residential college as an educational unit of a university that combines, to a substantial extent the functions of an academic unit of administration with co-curricular aspects of undergraduate

student life--living, dining, social, athletic, and others."

3. Harden (1969) "The term 'residential college' will be used to describe a new collegiate program within an already existing university. The program will typically be under the direction of a Dean, enroll a relatively small number of students (500-1200), concern itself with the liberal arts or related academic majors, and will be located within a given residence hall or residence hall complex. The faculty will typically be on joint appointment with their parent department."
4. (Lamar Johnson's summary comments at the "Colloquium on Experimental Colleges," 1964) "Very simply, this is an educational institution which is trying to be a college."

Rationale for Residential Programs

David and Newell (1981) provide a framework in saying, "while they called themselves everything from experimental to innovative to interdisciplinary, they shared a common set of educational goals:

1. To help students learn how to learn.
2. To help students see the interrelatedness of different areas of knowledge.
3. To develop the whole person, teaching affective as well as cognitive skills, and providing a living-learning community where students were encouraged to apply lessons from the classroom to their personal lives and to the interaction with others.
4. To make students more aware and more critical of values, both their own and those of the larger society."

Perhaps Brown (1972) in his statements, summed it up best when he said, "many residential colleges have been based on the following assumptions about students and education:

(1) The psychosocial development of college students interacts with their cognitive development and thus their personal development cannot be separated from their personal development; (2) The press of different collegiate environments has a different impact on college students, and residence halls can develop special atmospheres which can influence their attitudes about learning; (3) Peer group influence has as much impact on student attitudes as does faculty or curriculum" (Brown, 1972).

The institutional environment most conducive to the integrated learning experience that Brown suggests here has been identified as the small private liberal arts institution (Astin, 1977; Feldman and Newcomb, 1969). Thus, the development of the residential and experimental colleges is the result of efforts to create an educational environment that meshes the learning experience.

Today's Residential College

The introduction of Davis and Newell's (1981) article, "Those Experimental Colleges of the 1960's: Where Are They Now That We Need Them?" may provide the clearest picture of today's residential college: "It is ironic that the experimental colleges and programs of the 1960's are largely invisible today, when we need more than ever what they are designed to provide." The literature is virtually scarce of the present status of the residential college programs. The current state of the economy and declining enrollments have brought about a financial strain at many state institutions where the residential colleges are most prevalent.

In 1981 Michigan State University experienced a financial crisis and eliminated a number of programs. Two of its three remaining residential colleges narrowly survived the crisis. Warren Martin (1982) comments on the survival of many of the innovative programs of the sixties in saying, ". . . those colleges created in the sixties or seventies for the purpose of innovations, or even those places that have become identified with the sixties' innovations, have of late found the going very hard." Martin further commented that the institutions which were able to incorporate innovations and have become broader, more inclusive colleges have been better able to sustain themselves.

When looking to the future, Davis and Newell (1981) expressed confidence in the experimental colleges in saying: "When we consider the extraordinary challenges that lie ahead for our society and for the world--problems of energy, food, population, war and peace--we conclude that the graduates of experimental colleges have precisely the attributes necessary to survive and thrive in the twenty-first century. In fact, when we begin educating people to live in the twenty-first century, instead of the nineteenth, experimental colleges will regain their popularity."

A Description of Lyman Briggs College

In Chapter I, the goals, aims and objectives of Lyman Briggs College were presented and briefly discussed. A closer examination of the dynamics of the college community and curricular options is necessary in order to understand the nature and uniqueness of this residential college. More specifically, the following aspects of Briggs College will be discussed:

1. The residence hall setting
2. The LBC community
3. The faculty
4. The LBC curriculum

The discussion of these areas will not only focus on a description of the Lyman Briggs program, but more so, will illuminate the distinctive features of this residential college program at Michigan State University.

The choice to enter Lyman Briggs College is open to any student accepted to the University, as there is no special admissions requirement or admissions procedure separate from that of the University. All University freshmen and transfer students (0-40 credits accumulated) are required to reside in a University residence hall. Those students who select Lyman Briggs College are placed in Holmes Hall; one of the coeducational living-learning centers on the Michigan State University campus. Holmes Hall has a normal capacity

of 1,254 students and Lyman Briggs students comprise approximately forty percent of its student population. During winter term 1981, Holmes Hall had a house count of 1,313 of which 559 (42.5 percent) were students enrolled in Lyman Briggs College. Lyman Briggs students are not segregated or designated to any particular floor in Holmes Hall, as incoming students are randomly assigned.

After the initial assignment, students are free to choose their own roommate and room depending on the availability of open space in the hall. This procedure is generally applicable to all students residing in the residence halls at Michigan State University. However, the differences for Lyman Briggs students are: (1) they are all assigned to Holmes Hall, and (2) the majority of friends and acquaintances of Briggs freshmen are students with whom they share residence as well as classes. It is not unusual for Briggs students to have at least three classes together in a given term.

Briggs students share an academic bonding along with the personal, social and recreative affiliation with each other. This kind of relationship is not typical at Michigan State University where more than 40,000 students are enrolled.

In 1971, the college underwent a year-long evaluation and self-appraisal; one of the consultants who evaluated the college characterized the Briggs community by stating:

There is ample evidence that the college has been strikingly successful in establishing a sense of community that cuts across the usual distinctions made between the 'academic' and the 'social' sides of college life. There is a strong sense of shared life, not only between students, faculty and administrators, but within each sub group; for example students are actively involved in each other's intellectual and social life (consultant Hodgkinson's report, Michigan State University, 1973).

In summarizing his report on the community that exists in Lyman Briggs College, Hodgkinson uses the phrase "collaborative milieu" to capture the spirit that underlies the interactive and humanizing character of the residential and educational community.

This "sense of community" and shared purpose is very much alive today and evident in the fact that Briggs students choose to remain in the residence hall longer than their university counterparts. Thirty percent of the seniors enrolled in Lyman Briggs College during winter term 1981 chose to live in Holmes Hall, whereas only thirteen percent of the university seniors chose to reside in a residence hall (figures obtained from the Registrar's office and Department of Residence Halls).

There are a number of key factors that influence Briggs upperclassmen to continue residing in the residence hall longer than their fellow university students. Three of these factors are: (1) a strong identity with the residential community, (2) the availability and accessibility of academic and support personnel and (3) the

residency requirement of students who are employed as Briggs Aides and Undergraduate Teaching Assistants.

Student Leadership

There are several opportunities for student leadership within Lyman Briggs College. Ten students serve the community needs as Briggs Aides. A description of the Briggs Aide program from the LBC Student Handbook (1980) describes their responsibilities:

Briggs Aides

The Briggs Aides program offers a special dimension to students in Lyman Briggs College. The Briggs Aides' primary function is to assist Briggs students in their course work. They are available to answer questions about specific course content and to aid in planning academic programs. To insure maximum availability, Briggs Aides are assigned to different floors in Holmes Hall and also maintain regular office hours at a central location.

The Briggs Aides perform other functions for Lyman Briggs College as they act as resource persons for the College. These functions vary from serving on a committee for the Dean to giving tours of the College to prospective students.

Briggs Aides are chosen from the student body of the College. To qualify as a Briggs Aide, a student must have a minimum 3.00 grade point average, 40 hours of completed course work, communication skills, and overall maturity.

Approximately forty upperclass Briggs students are employed each year as Undergraduate Teaching Assistants. The Undergraduate Teaching Assistants, under the supervision of a senior faculty member, teach many of the laboratory and recitation sections in Lyman Briggs College. Most TAs are

assigned a desk in an office and have regular office hours when they are available for assistance to students.

Holmes Hall, as all residence halls at Michigan State, employs resident assistants (RAs) to facilitate educational programs and coordinate floor activities. The RAs perform a wide variety of functions and serve as role models for the underclassmen. Together with the Briggs Aides and Undergraduate Teaching Assistants, these three groups of upperclassmen have a significant impact upon the younger students. Individuals holding these positions are academically successful, actively involved in the College and therefore tend to set the tone for this particular student community.

Students also have opportunities to get involved in academic governance within the College. The Student Advisor Council (SAC) and its full group of standing committees afford students a channel through which to express their views and exert their influence on College matters. The standing committees include: (1) Educational Policies, (2) Teacher Evaluation, (3) College Community Council, (4) Library and (5) the Co-curricular Affairs Committee. The committee structure offers students, faculty and staff the opportunity to interact; exchanging ideas and views on college policy and curriculum.

The Faculty

Lyman Briggs College has a small number (12-14) of full-time faculty. The faculty offers a variety of courses in various disciplines, supervises independent study, conducts individual research and advises students concerning academic and vocational matters. The remainder of the faculty divide their time between Lyman Briggs and various departments within the University. The part-time faculty members provide LBC with a rich source of talent coupled with diverse specialization and competencies in the traditional disciplines. In other words, the College is able to obtain the stability of a small core of full-time faculty and the benefits of a large pool of faculty talent from the University at large (LBC Student Handbook, 1979).

The relationship between Briggs and the part-time faculty member's home department is a product of careful negotiations with the home departments. The rapport that exists between faculty and these departments varies. Factors that influence this relationship are: (1) The relationship that exists between the particular department and Lyman Briggs, (2) The relationship the faculty member has with the department and (3) The political and/or financial climate of the University at the time of negotiations. Joint appointments and visiting faculty appointments are much easier to work out in good times rather than in times of retrenchment.

All of the full-time faculty maintain their offices in Holmes Hall, which enhances their accessibility to students. Students are able to confer with faculty members through interpersonal contact within and outside of the classroom. The consultant's report (1973) stated:

The faculty are visible and accessible; the faculty have close and continuing relations not only with the students who have been in their classes, but with students whom they have met while working on College committees and attending College functions. In fact, the faculty develop frequent contacts with students whom they have met through other students or faculty (Michigan State University 1973).

The student/faculty relationship in Lyman Briggs is a very distinguishing aspect of the residential community. This relationship is fostered from the beginning of freshman year, as the faculty are introduced and available for discussion at a "Meet Your College" program during Welcome Week, before classes actually begin. Student attendance for this program is large and seems to set the tone from the beginning, that in Lyman Briggs College every attempt will be made to see that student concerns and needs are a high priority among faculty and staff. Students are encouraged to seek assistance whenever they feel there is a need. Likewise, faculty and staff keep each other informed about individuals who may need special attention or to share a concern that may require some kind of follow-up.

Lyman Briggs College shares a unique relationship with the student affairs staff, as the Director and the Associate Director of Holmes Hall are also on the staff of Lyman

Briggs College. In addition to being the chief administrative officers in the residence hall, the Director and Associate Director are part of the general academic advisement team in Briggs. Some of their other responsibilities include: Advising the Student Advisory Council and the Co-curricular Committee, supervising the Briggs Aides, editing the weekly College newsletter and providing Lyman Briggs students with integrative opportunities in the academic, social, residential and personal aspects of their college experience. This is a unique feature of Lyman Briggs College, as no other residence hall staff share any kind of formal relationship with an academic unit on the Michigan State University campus. The relationship the college shares with the student affairs staff provides an on-going channel for information exchange and reliable avenue for the integration of faculty and staff efforts and resources.

Core Curriculum

Specific requirements for the core curriculum are met in various ways, depending upon the scores of the placement examinations administered during the Academic Orientation Program, and applicable advanced placement and College Level Examination Program credits. The core curriculum designates the LEVEL OF PROFICIENCY REQUIRED RATHER THAN A SPECIFIC NUMBER OF CREDIT HOURS. Substitutions in the curriculum may be made with the approval of the advisor and with the authorization of the Assistant Dean's Office. Students who have advanced placement must consult their advisers for program adjustments.

Suggested LBC course equivalents have been discussed with the appropriate departments and normally will be accepted. However, when students transfer from one program to another, the responsibility for evaluating previous work lies with the unit accepting the students into the program. Credit may not be earned in equivalent courses.

The College's Core Program is listed below:

<u>Course Area</u>	<u>Quarter Credits</u>
Mathematics	10-20
Computer Science	3
Chemistry	8-12
Physics	12
Biology	10
Science Studies	12
Social Science	12
Humanities	12
Third Culture Rhetoric	8
Senior Seminar	6
	<u>93-107</u>

(Lyman Briggs College Student Handbook, 1979)

Michigan State University requires that each undergraduate complete 180 quarter credit hours. Students who major in Lyman Briggs College may complete their requirements for graduation by selecting 32 credits in a field of concentration in either Physical Science, Biology, Environmental Science, Mathematics, Earth Science, Science Studies, General Science (only with teacher certification), Medical Technology or Computer Science. Fields of Concentration correspond to a major in other colleges within the University. Election of a Field of Concentration provides students with the maximum flexibility in terms of elective courses and allows a student, under the guidance of an academic adviser in Lyman Briggs, to build an academic program to meet the specific needs or interests that are not met by any other major.

Lyman Briggs students may also choose to complete a Coordinate Major or Interdepartmental Major. The requirements for completion of a Coordinate Major are offered in the departments of the College of Natural Science, a Computer Science major in the College of Engineering or a Medical Technology major through the School of Medical Technology.

Coordinate majors are possible in the following fields: Biological Science Interdepartmental, Earth Science Interdepartmental, General Science Interdepartmental (restricted to teaching candidates only), Botany and Plant Pathology, Chemical Physics, Chemistry, Entomology, Geology and Probability, Zoology, Computer Science, and Medical Technology. The selection of a coordinate major, if any, is normally made by the student during the freshman or sophomore year (Lyman Briggs College Student Handbook, 1979).

Required credits for a Coordinate Major may vary from 41-55 credits depending on the requirements of the particular department. The illustration below demonstrates the variance in credit distribution between the Field of Concentration and the Coordinate Major.

<u>Coordinate Major (B.S.)</u>		<u>Field of Concentration (B.S.)</u>	
Briggs Core Program	93-107*	Briggs Core Program	93-107*
Coordinate Major	41-55	Field of Concentration	32
Electives	18-46	Electives	41-55

* Specific requirements for the Core Curriculum are met in various ways, depending upon the scores of the placement examination administered during the Academic Orientation Program, Applicable Advanced Placement and College Level Examination Program Credits.

Again the key difference in the two major options is the degree of flexibility, the Field of Concentration giving the student and adviser more range or choice in course selection. The significant factor for students interested in the Lyman Briggs residential college is that the residential college offers a number of options and the program can accommodate students with a great variety of interests and needs. Approximately one-third of the freshman students who select Briggs College will actually graduate with a Lyman Briggs major. Many of these students who transfer out of the college do so to meet the specific requirements of their chosen Fields of Concentration. Such is the case with students majoring in engineering. Other students' academic interests change or they find that they are better served by another department or college. These students are, however, able to take advantage of the benefits of the Lyman Briggs program while meeting their general education requirements and are provided with guidance and support in locating a department or major which best fits their needs.

Those students who remain with Lyman Briggs College throughout their undergraduate program (approximately thirty-five percent) have varying degrees of exposure to the Briggs Core Curriculum. Some of the Coordinate Majors may require entry level chemistry or physics to be taken with their particular department. Such is the case for LBC students with a Coordinate Major in Chemistry and

Astrophysics. As students enter Lyman Briggs College, they are asked to indicate an area of preference. Thus, their program in Briggs will vary accordingly. In Chapter IV, the level of exposure of each Lyman Briggs College student to the Briggs Core Program was analyzed and assigned to either a high, medium or low exposure to the LBC Core Curriculum.

Related Studies

In 1971, the Office of Evaluation Services at Michigan State University under the direction of Sigmund Nosow, Clarence Nelson and Arvo Juola (1972), conducted a comparative study of the attitudes toward educational and social experiences of graduating residential college students and other graduating seniors at Michigan State University. In this investigation, a random sample of 2,200 undergraduate students was selected which consisted of 1,900 non-residential college students (fifty percent of one subpopulation) and 300 residential college students evenly distributed among the residential colleges on the Michigan State University campus. Responses were received from 927 seniors after the initial mailings and follow-up of a questionnaire. This return represents a 42.6 percent return rate of non-residential college students and thirty-seven percent return rate of the residential college seniors. Of these respondents, there were fifty-six respondents from Lyman Briggs and 105 from the College of Natural Science.

Table 2.1 illustrates the possible and actual number of respondents from the population.

Table 2.1 Summary of Respondents for the 1971 Investigation

	Possible Respondents	Actual Respondents	Percent
Non Residential College	1,900	810	42.6
Residential College	300	111	37.0
Natural Science		105	
Lyman Briggs	93	56	60.0

The instrument used in the investigation was developed by a research team and assisted by administrative personnel from each residential college.

For the purposes of this study, each residential college was matched with the university colleges having the most similar curricular content as that residential college. The comparison of Lyman Briggs and the College of Natural Science is the focus of this discussion.

The analysis utilized the Chi-Square statistic to test for statistical difference in the responses. The results of this study were presented in the .01, .02, and .05 level of significance. Findings were reported in the following five major areas:

1. Personal adjustment and well-being.
2. Intellectual growth and stimulation.
3. Attitudes toward university, college, and department.
4. Comparing one's experience in a college or major department with what one believes takes place elsewhere on campus.
5. Work, career, and future.

In the first area, Personal Adjustment and Well-Being, eighty percent of the Lyman Briggs seniors indicated that their college had given them a sense of identity with an academic community, while fifty-four percent of the Natural Science seniors felt a sense of identity with an academic community. Forty-eight percent of the Briggs respondents felt their college or major department had helped them become more sensitive to ethical issues, while 17.8 percent of the Natural Science seniors felt more sensitive to ethical issues. "Residential college students in this study expressed a much stronger social identification with other students than did students from related colleges (sixty-six percent as opposed to thirty percent)" (Nosow, 1974).

In the area of Intellectual Growth and Stimulation, Nosow reported seventy-five percent of the students in the residential colleges felt their college had provided them with an intellectually stimulating environment while only 56.3 percent of the non-residential college seniors indicated an intellectually stimulating environment. However, there was not a significant difference reported

between the feelings expressed by Lyman Briggs seniors and seniors in the College of Natural Science on their attitudes concerning intellectual growth and stimulation.

Attitudes toward University, College and Department

More than three-fourths of all students in the residential colleges felt their college was responsive to the needs of students, whereas the figure for the related college was only 45 percent (Nosow, 1975). Significant differences were reported between Lyman Briggs and Natural Science in attitudes of individual attention from faculty and staff, satisfaction with cocurricular activities and opportunities to participate in academic decision making. The following tables taken from the Office of Evaluation Services Report, Michigan State University (1972) illustrate these differences.

Table 2.2

"I feel that my college or major department treats me as though I am of some importance as an individual," by college.

College	Agree %	Undecided %	Disagree %
Lyman Briggs	90	6	8
Natural Science	40	23	37

Table 2.3 "I feel that my college or major department is responsive to needs of students," by college.

College	Agree %	Undecided %	Disagree %
Lyman Briggs	76	14	8
Natural Science	49	28	23

Table 2.4 "To what extent has your college or department afforded classroom opportunities to identify and interact with its faculty?" by college.

College	Very Much or Substantially %	Moderately %	Slightly or Not At All %
Lyman Briggs	81	14	8
Natural Science	27	31	41

Table 2.5 "To what extent has your college or department provided the opportunity for you to get individual attention, when needed, from faculty?" by college.

College	Very Much or Substantially %	Moderately %	Slightly or Not At All %
Lyman Briggs	82	14	8
Natural Science	51	31	17

Table 2.6 "To what extent did your college or major department afford you the opportunity to have informal contacts with faculty outside the classroom?" by college.

College	Very Much or Substantially %	Moderately %	Slightly or Not At All %
Lyman Briggs	71	20	9
Natural Science	25	28	47

Table 2.7 "To what extent has your college or department provided the opportunity for you to get individual attention when needed, from supportive staff, such as tutors, R.A.'s, secretaries, etc.?" by college.

College	Very Much or Substantially %	Moderately %	Slightly or Not At All %
Lyman Briggs	76	9	16
Natural Science	25	28	47

Table 2.8 "To what extent did your college and the residence hall provide an adequate program of cocurricular activities?" by college.

College	Very Much or Substantially %	Moderately %	Slightly or Not At All %
Lyman Briggs	58	29	13
Natural Science	39	34	27

Table 2.9 "I feel that my college or major department has given me the opportunity to participate in academic decision-making," by college.

College	Very Much or Substantially %	Moderately %	Slightly or Not At All %
Lyman Briggs	86	8	10
Natural Science	58	13	29

NOTE: All percentages are rounded to nearest whole number.

Comparing one's experiences in a college or major department with what one believes takes place elsewhere on campus

Results reported in the Office of Evaluation Services Report (1972) indicates residential college students expressed very positive feelings toward their college. Briggs seniors felt their professors were probably more tolerant than other department's faculty at the University. Sixty-six percent of the Lyman Briggs seniors "definitely" felt their college had provided them with closer contact with faculty while only five percent of the Natural Science seniors expressed this attitude. Similar differences were reported when the seniors were asked about the amount of contact with the faculty.

When asked if their college or major department, in contrast to other colleges or major departments, had provided them a broader education, the residential college seniors as a group showed strong differences. This feeling was expressed by the majority of the Lyman Briggs seniors. Briggs students also expressed a greater feeling of personal freedom than did the seniors in the College of Natural Science.

In the last area reported, Work, Career and, Future, Briggs seniors felt the curriculum had been more vocationally and career oriented, generally expressing greater satisfaction than the Natural Science seniors. However, little difference was expressed between other residential seniors and their matched college counterparts examined in this study. The residential college students expressed greater uncertainty about their career. The study indicated one-third of all seniors surveyed, expressed feelings of insecurity in their post college plans.

Summary of the 1971 Study

This study presented a comparison of attitudes toward educational and social experiences of Michigan State University residential college students with other M.S.U. college seniors. Nosow (1975) reported that generally residential college students respond more favorably than other students in those areas associated with personal adjustment and

well-being, and intellectual growth and stimulation. Eighty percent of the Lyman Briggs seniors indicated their college had given them a sense of identity with an academic community, while fifty-four percent of the Natural Science seniors indicated a sense of identity with an academic community. Significant difference between Lyman Briggs and Natural Science seniors were reported in satisfaction with formal and informal contact with faculty.

Overall, Nosow (1975) reported residential college students expressed greater satisfaction of personal and social needs of students in comparison with nonresidential college students.

Summary

The purpose of this study is to compare and contrast attitudes toward education and social experiences held by seniors in the Colleges of Natural Science and Lyman Briggs at Michigan State University. In addition, the investigator compares his findings with a similar investigation, the results of attitudinal studies of the senior classes of 1971 and 1975 at Michigan State University.

This chapter contains a review of selected literature on student satisfaction with their undergraduate experience. The review revealed several key factors that contribute to student satisfaction: (1) student involvement in campus life, i.e., special academic programs, athletics, social,

cultural, and recreational activities, (2) student-faculty relationships are the most often identified factor in contributing to student satisfaction, (3) institutional size has significant impact on student's opportunity to become involved and achieve in various activities, and (4) residency--the on-campus residence hall experience has shown a significant impact on the undergraduate experience.

Also reviewed in this chapter were the factors leading to the development of residential college programs, description of Lyman Briggs College, and a review of a similar study of Lyman Briggs/Natural Science in 1971. In Chapter III the discussion is directed toward the methods and design of the study.

CHAPTER III
METHODOLOGY
INTRODUCTION

The major purpose of this study was to compare and contrast attitudes towards educational and social experiences held by seniors in the College of Natural Science and Lyman Briggs College, fall term 1981, at Michigan State University. This chapter contains a description of the population and sample, the method of collecting the data, data preparation, organization and construction of the instrument developed, the statistical method employed and a restatement of the hypothesis.

Population and Sample

The population selected for this study consisted of the full-time seniors enrolled at Michigan State University, fall term of 1981, and who identified either Lyman Briggs or a department in the College of Natural Science as their major. October 8, 1981 figures from the M.S.U. Registrar's Office revealed 678 seniors in the College of Natural Science with 449 men and 229 women. Lyman Briggs College seniors totaled 84 with 48 men and 36 women.

The investigator drew a computerized random sample of seniors in the College of Natural Science enrolled full-time

for fall term 1981. Previous samples drawn from this population indicated a return rate of approximately 33%. Based on this information, a 50% sample was drawn from the seniors in the College of Natural Science, which provided an adequate cell size for comparison. This sample was obtained from the Registrar's Office by requesting address labels for every other senior enrolled in the College of Natural Science. Because of the relatively small size of the Lyman Briggs senior class, the entire population of Briggs seniors was surveyed.

Design and Collection of Data

The survey developed for this investigation, "Senior Expression," was mailed to 50% or 339 seniors in the College of Natural Science and 100% or 84 seniors in Lyman Briggs College on November 8, 1981 through campus mail to those students on campus and by U.S. mail to off-campus students. The instrument was accompanied by a mark sense data sheet (for identification, blue answer sheets were used for LBC and pink for the College of N.S.), a cover letter written on the instrument from the Dean of the College of Natural Science and the Director of Lyman Briggs, a cover letter from the investigator, a No. 2 pencil, and a stamped self-addressed envelope. After ten days, a follow-up letter* was sent to the non-respondents. By December 11, 1981, 32.4% of the students surveyed in the College of

* A sample letter appears in Appendix A

Natural Science had responded, while 65.4% of the students in Lyman Briggs had responded. Table 3.1 illustrates the possible and actual number of respondents whose answer sheets were usable.

Table 3.1 Possible and Actual Number of Respondents

	Possible Respondents	Usable Respondents	Percent
Type 1 Natural Science	339	110	32.4
Type 2 Lyman Briggs	84	55	65.4
Totals	423	165	39.0

Data Preparation

Answer sheets were taken to the Michigan State University's Scoring Office and each of the 165 student responses were punched into two data processing cards for use in the computer. The first card contained the respondents' student number and responses to questionnaire items 1-62. The second card contained responses to the questionnaire items 63-132 and the identification of the respondents: Type 1 College of Natural Science, Type 2 Lyman Briggs College.

Research Approval

This investigation was approved under the provisions of the National Research Act (Public Law 93-348). The University Committee on Research Involving Human Subjects, serves as the Institutional Review Board at Michigan State University.

On October 19, 1981, this research project was approved under the exemption which states: "Type (1) research conducted in established or commonly accepted settings, involving normal educational practices, such as (2) research on the effectiveness of or the comparison among institutional techniques, curricular or classroom management method." (See Appendix A for research approval request.)

Instrumentation

The survey developed for this investigation, "Senior Expression," drew items from the Senior Evaluation (1971), Michigan State University, and the Senior Viewpoint (1975), Michigan State University. Both instruments were developed by the Office of Evaluation Services at Michigan State University. The instrument adapted for this investigation was reviewed and analyzed by a team of faculty, staff and students for biases and face validity.

The instrument, "Senior Expression," consisted of 132 questions. In order to make the received data more meaningful, 77 of the 132 items were clustered into ten scales.

The development of the scales was initiated to make the data collected more manageable and analysis more meaningful. The scales were established by identifying items from the questionnaire that were related to the research questions formulated in the proposal. After clustering items under research questions, a factor analysis (varimax rotation) and reliability test were run to statistically analyze the make-up of the scales. The results indicated only two of the 77 items needed to be relocated to a different scale. The following reliability coefficients were computed for each scale.

1. Satisfaction with college or major department. Eleven items with a reliability of .89.
2. General attitudes toward Michigan State University. Seven items with a reliability of .51.
3. Attitudes toward M.S.U. professors. Nine items with a reliability of .83.
4. Involvement in community activities. Eight items with a reliability of .70.
5. Satisfaction with outcome of educational experience. Five items with a reliability of .70.
6. Satisfaction with faculty in college or major department. Nine items with a reliability of .85.
7. Attitude toward individual attention. Six items with a reliability of .48.
8. Involvement in campus co-curricular activities. Eleven items with a reliability of .77.

9. Attitudes toward planning. Four items with a reliability of .39.
10. Satisfaction with academic advisement. Six items with a reliability of .80.

The remaining 55 items on the questionnaire were treated independently and compared with the responses reported in the 1971 investigation where data was available. These results were computed to percentages and presented in the tables in Chapter IV.

Methods of Analysis Employed

For the purpose of analysis, two methods were employed to examine the data collected. The multivariate analysis of variance was the statistical model chosen to test for significance and percentages were computed and presented in tables for comparison of the 1981 responses with those collected in 1971 for a similar investigation.

The multivariate analysis of variance was selected to test the null hypothesis:

1. No significant difference exists in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors.
2. No significant difference exists between 1982 seniors in Lyman Briggs and Natural Science in the attitudes toward their:

- A. Satisfaction with college or major department.
- B. General attitudes toward M.S.U.
- C. Attitudes toward Michigan State University professors.
- D. Involvement in community activities.
- E. Satisfaction with outcomes of their educational experience.
- F. Satisfaction with faculty in their college or department.
- G. Attitudes toward individual attention.
- H. Involvement in campus co-curricular activities.
- I. Attitude toward planning.
- J. Satisfaction with academic advisement.

The .05 level of confidence was the criteria chosen for testing significance for the multivariate analysis. The particular level of confidence was selected based on the following criteria:

1. Previous investigation similar to this investigation had selected the .05 level of confidence.
2. The .05 level of confidence is generally chosen for educational research, Borg and Gall (1979).
3. Investigator's preference.

As stated earlier, the multivariate analysis of variance was selected to compare the results of data collected from the scales.

The multivariate analysis procedures may be applied to sets of measures that have been identified through cluster or factor analysis to have common components; Finn (1974). The multivariate approach was selected for this study because it allows the researcher to examine the data as a whole rather than each individual item. The MANOVA model also reduces the statistical error rate, Finn (1974).

Computer Program

The Statistical Package for the Social Sciences version 8.0 was the computer program employed. All data was run at the Michigan State University Computer Center.

Summary

The population selected for this study consisted of full-time seniors at Michigan State University during fall term 1981, who had identified either Lyman Briggs or the College of Natural Science as their major. Included among this group were 678 seniors in the College of Natural Science and 84 seniors in Lyman Briggs. A fifty percent random sample was drawn from the Natural Science seniors while one hundred percent of the Lyman Briggs seniors were surveyed.

The instrument developed for this investigation inquired about attitudes toward their educational and social experience while at Michigan State University. Usable data was collected on 165 respondents. The multivariate analysis

of variance model was employed to analyze the data.

The following chapter will present the findings and interpretation of the results of this investigation.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The purpose of this chapter is to report the analysis of the information collected as described in Chapter III. The hypotheses formulated for this investigation are restated and the results of the statistical analysis presented. The Multivariate Analysis of Variance (MANOVA) was employed to test the hypotheses. The MANOVA model was selected for the analysis because (1) it allows the investigator to analyze data which has more than one dependent variable, allowing the investigator to examine the data as a whole rather than examining each variable, and (2) the model helps control for the overall Type I error. The .05 level of confidence was established as the critical level for testing the hypotheses.

In the second section of the chapter, the 1981 responses are compared with those collected in 1971. Percentages were computed and are presented in tables for comparison. A summary of these findings is included.

MANOVA Results

As indicated, the data gathered in this research project was collected on two specific groups of seniors

enrolled fall term at Michigan State University--those who were enrolled in Lyman Briggs College and those who were enrolled in the College of Natural Science.

The instrument used in the study, "Senior Expression," consisted of 132 questions. Seventy-seven of the 132 items were clustered into ten scales in order to make the data received more manageable and meaningful. The following section reports the results of the Multivariate Analysis of Variance test of the ten scales.

Hypothesis I

No significant difference exists in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors.

The results of the MANOVA analysis indicate the value of the overall F-Test is 13.69, with degrees of freedom of 10, 150. The F-Test is significant at the .05 level of confidence.

The overall F-Test is significant at the .05 level of confidence, indicating a significant difference in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors. Therefore, the null hypothesis I is not accepted.

Table 4.1 Presentation of the results of the Multivariate Analysis of Variance of difference across all ten scales.

	Approximate F	Hypothesis D.F.	Error D.F.	Significance of F
OVERALL	13.69	10.00	150.00	.00001 *

* Significant at the .05 level of confidence.

The significance of the overall F at the .05 level of confidence allowed further testing of the univariates (each individual scale). Each one of the univariates was tested at the .005 level of confidence in order to maintain an overall F Type I error at .05. The univariates are stated in hypothesis II, A through J.

Hypothesis II

No significant difference exists between the 1982 seniors in Lyman Briggs and Natural Science in their attitude toward:

- A. Satisfaction with college or major department.
- B. General attitudes toward M.S.U.
- C. Attitudes toward Michigan State University professors.

- D. Involvement in community activities.
- E. Satisfaction with outcomes of their educational experience.
- F. Satisfaction with faculty in their college or department.
- G. Attitudes toward individual attention.
- H. Involvement in campus cocurricular activities.
- I. Attitude toward planning.
- J. Satisfaction with academic advisement

Satisfaction with College or Major Department

- A. The Multivariate Analysis Test was used to determine whether a difference exists between the attitudes of Lyman Briggs and Natural Science seniors toward satisfaction with their college or major department. Eleven items on the questionnaire provided data pertaining to this hypothesis (see Appendix B for complete description of each scale). The analysis included a computation of the value of the F-Test at 46.82 with 150 degrees of freedom and a standard deviation of 7.363. The mean which indicates the direction and magnitude of the difference shows LBC seniors have responded more favorably to their college or department when compared to Natural Science seniors. Table 4.2 presents the outcome of the results for hypothesis II A.

Table 4.2 Multivariate Analysis of Variance results for Scale I: Satisfaction with college or major department.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	29.905	7.363	46.82*
2. L.B.C.	55	21.418	7.656	

* Significant at the .005 level of confidence.

General Attitudes toward Michigan State University

B. Hypothesis II B, Scale 2, was constructed to determine differences in general attitudes of Natural Science and Lyman Briggs seniors toward Michigan State University. Seven items contributed to the make-up of this scale. The Multivariate Analysis of Variance revealed an F Value of 4.75 with 150 degrees of freedom which is significant at the .005 level of confidence. Table 4.3 shows the results of the data analysis of hypothesis II B.

Table 4.3 MANOVA results for Scale 2: General Attitudes toward Michigan State University.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	18.5	3.88	4.79*
2. L.B.C.	55	17.127	3.52	

* Significant at the .005 level of confidence.

The data presented indicates there is not a significant difference in the general attitudes toward Michigan State University held by seniors in Lyman Briggs College and the College of Natural Science. Therefore, the null is accepted. The mean indicates the direction and magnitude of the difference revealing that Lyman Briggs seniors did respond more favorably than those seniors in Natural Science.

Attitudes toward Michigan State University Professors

C. Hypothesis II C, Scale 3, was concerned with differences in attitudes toward Michigan State University professors. Nine items from the questionnaire contributed to the development of this scale. The MANOVA Test revealed an F Value of .425 with 150 degrees of freedom which is not significant at the established level of confidence. Therefore, the null is accepted. The mean indicates very little difference in the attitudes of the Natural Science and Lyman Briggs seniors toward their Michigan State University professors. Table 4.4 presents the results of the analysis for hypothesis II C.

Table 4.4 MANOVA results for Scale 3: Attitudes toward M.S.U. professors.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	22.301	4.818	.42*
2. L.B.C.	55	23.854	5.590	

* Not significant at the .005 level of confidence.

Involvement in Community Activities

D. Hypothesis II D, Scale 4, was constructed to examine the difference in the seniors' involvement in community activities. Eight items from the questionnaire contributed to the make-up of this scale. The Multivariate Analysis of Variance Test indicated the value of F was 29.18 with 150 degrees of freedom, which reveals a significant difference at the .005 level of confidence. Therefore, the null hypothesis II D is not accepted. The mean, which indicates the direction and magnitude of the difference, suggests the Lyman Briggs seniors were significantly more involved in community activities when compared to Natural Science seniors responding to the questionnaire. Table 4.5 illustrates results of the MANOVA tests.

Table 4.5 MANOVA results for Scale 4: Involvement in community activities.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	9.047	2.351	29.18*
2. L.B.C.	55	11.472	3.276	

* Significant at the .005 level of confidence.

Satisfaction with Outcomes of their Educational Experience

E. Hypothesis II E, Scale 5, was designed to examine the difference in the seniors' satisfaction with outcomes of their educational experience. Five items contributed to the make-up of the scale (please refer to Appendix B for complete description of Scale 5).

The MANOVA tests revealed an F Value of 4.33 with 150 degrees of freedom. These results indicate there is not a significant difference in Lyman Briggs and Natural Science seniors' attitudes toward their education outcomes; therefore, the null is accepted.

The mean suggests there is some difference in their satisfaction with outcomes of their educational experiences. Briggs students indicated "considerable" progress toward desired outcome, while the Natural

Science seniors indicated "moderate" progress. Table 4.6 illustrates the results of the MANOVA tests for hypothesis II E.

4.6 MANOVA results for Scale 5: Satisfaction with outcomes of educational experience.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	11.462	3.222	4.33*
2. L.B.C.	55	10.381	2.92	

* Not significant at the .005 level of confidence.

Satisfaction with Faculty in their College or Department

F. Hypothesis II F, Scale 6, was constructed to determine the difference in the degree of satisfaction with the faculty within their college or department. Nine items from the questionnaire contributed to the make-up of this scale (see Appendix B for complete description of Scale 6).

The results of the MANOVA Test reveal an F Value of 66.77 with 150 degrees of freedom. These values indicate a significant difference between the Lyman Briggs and the Natural Science seniors' satisfaction with the faculty within their college or major department. Therefore, the null hypothesis II F is not accepted.

Table 4.7 illustrates the results for the MANOVA Test for Scale 6.

Table 4.7 MANOVA results for Scale 6: Satisfaction with faculty in college or department

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	26.216	5.396	66.79*
2. L.B.C.	55	18.945	5.271	

* Significant at the .005 level of confidence.

The mean indicates the magnitude and direction of the difference, indicating Lyman Briggs seniors were "very much to substantially" satisfied, while Natural Science seniors were "substantially to moderately" satisfied.

Attitudes toward Individual Attention

G. Hypothesis II G, Scale 7, was concerned with attitudes toward individualized assistance or attention. The scale contained six items from the questionnaire (see Appendix B for complete description of Scale 7). The results of the MANOVA Test reveal the F Value at 1.58 with 150 degrees of freedom. These values indicate that no significant difference was found in the Lyman Briggs and Natural Science seniors' attitudes regarding

individualized assistance. Table 4.8 illustrates the MANOVA findings for hypothesis II G.

Table 4.8 MANOVA results for Scale 7: Attitudes toward individualized assistance.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	9.216	1.723	1.58*
2. L.B.C.	55	9.672	2.867	

* Not significant at the .005 level of confidence.

The mean indicates very little difference in attitudes toward individualized assistance. The null hypothesis II G is therefore accepted.

Involvement in Campus Cocurricular Activities

H. Hypothesis II H, Scale 8, was constructed to determine the difference in the Lyman Briggs and Natural Science seniors' involvement in campus cocurricular activities. Eleven items on the questionnaire contributed to the make-up of this scale (see Appendix B for complete description of Scale 8).

The results of the MANOVA Test reveal an F Value of 57.74 with 150 degrees of freedom. These results

indicate there is a significant difference in the involvement of Lyman Briggs and Natural Science seniors in campus cocurricular activities. Therefore, the null hypothesis, suggesting no difference exists, is not accepted. Table 4.9 illustrates the results of the MANOVA Test for significance of hypothesis II H.

Table 4.9 MANOVA results for Scale 8: Involvement in campus cocurricular activities.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	15.235	3,016	57.74*
2. L.B.C.	55	19.781	4.524	

* Significant at the .005 level of confidence.

The mean reveals Lyman Briggs seniors indicated they were significantly more involved in campus cocurricular activities than the Natural Science seniors.

Attitude toward Planning

I. Hypothesis II I, Scale 9, was concerned with determining if a difference existed in their attitudes toward planning. Four items contributed to the construction of the scale (see Appendix B for complete description of Scale 9).

The results of the MANOVA Tests reveal an F Value of 5.33 with 150 degrees of freedom. These values indicate no significant difference exists between the attitudes of Lyman Briggs and Natural Science seniors. The results of the MANOVA Tests are illustrated in Table 4.10 at the established level of confidence, .005.

Table 4.10 MANOVA results for Scale 9: Attitudes toward planning.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	10.500	1.908	5.33*
2. L.B.C.	55	11.200	1.648	

* No significant difference at .005 level of confidence.

Although not significant, the mean indicates some difference in attitudes toward planning. Because the difference is not significant, the hypothesis II I is accepted in the null form.

Satisfaction with Academic Advisement

J. Hypothesis II J, Scale 10, was concerned with student satisfaction with academic advisement. Six items from the questionnaire contributed to the make-up of this scale (see Appendix B for complete description of Scale 10).

The results of the MANOVA Tests indicate an F Value of 21.15 with 150 degrees of freedom. These values suggest That there is a significant difference in Lyman Briggs and Natural Science seniors' satisfaction with academic advisement. Therefore, the null hypothesis II J is not accepted. Table 4.11 illustrates these results of the MANOVA Tests of significance.

Table 4.11 MANOVA results for Scale 10: Satisfaction with academic advisement.

Type	N	Mean	Standard Deviation	F Value
1. N.S.	106	16.358	3.724	21.15*
2. L.B.C.	55	13.436	4.008	

* Significant at the .005 level of confidence.

The mean suggests Lyman Briggs seniors were significantly more satisfied with academic advisement than the seniors in Natural Science.

Summary of the MANOVA Results

Prior to discussing the comparison of this investigation with the responses gathered in 1971, it seems appropriate to summarize the results of the Multivariate Analysis of Variance employed to test for significance. The results of the MANOVA were as follows:

1. The overall F-test was significant at the .05 level of confidence, indicating a significant difference in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors.
2. Significant differences at the .005 level of confidence were in five of the ten scales:
 - A. In the first scale, Lyman Briggs students were found to be significantly more satisfied with their college or major department when compared to Natural Science seniors.
 - B. When asked about their general attitudes toward Michigan State University, Briggs seniors responded more favorably when compared to Natural Science seniors; however, the difference was not significant.
 - C. In the third scale, "General Attitudes toward M.S.U. Professors," no significant difference was found.
 - D. The fourth scale indicated that Lyman Briggs seniors were significantly more involved in community activities when compared to Natural Science seniors.
 - E. The fifth scale, "Satisfaction with Outcomes of Educational Experiences," revealed that Lyman Briggs seniors were more satisfied with the outcomes of their educational experiences when compared to Natural Science seniors; however, the difference was not significant.

- F. Scale six, "Satisfaction with Faculty in their College or Department," revealed findings that indicated Lyman Briggs seniors were significantly more satisfied with the faculty in their college or major department when compared to Natural Science seniors.
- G. The seventh scale was concerned with attitudes toward individualized assistance or attention. No significant difference was revealed in the two groups on this scale.
- H. The eighth scale revealed that the Lyman Briggs seniors were significantly more involved in campus cocurricular activities when compared to Natural Science seniors.
- I. The ninth scale was concerned with attitudes toward planning. No significant difference was revealed in this scale.
- J. The last scale was concerned with their satisfaction with the academic advisement they received. This scale revealed that the Lyman Briggs seniors were significantly more satisfied with the academic advisement they had received.

Comparison of the 1982 Responses with the Response Gathered
in 1971

The following section is a presentation and comparison of the 1981 responses with the responses reported from the 1971 study reviewed in Chapter II. Responses of the 1975 investigation, also reviewed in Chapter II, are presented where the difference in the Lyman Briggs responses in 1971 and 1982 is greater than ten percent in either direction. Items that reveal a difference of greater than ten percent are discussed. A difference of greater than ten percent was chosen because of the relatively small size of the population.

Comparisons between the 1982 and 1971 studies are made and discussed in the following cluster areas:

- (1) Satisfaction with college of major department.
- (2) General attitudes toward Michigan State University.
- (3) Satisfaction with educational outcomes.
- (4) Satisfaction with college or major department in contrast to other colleges or major departments.
- (5) Involvement in campus cocurricular activities.

Comparisons were made only on items where information was available from the 1971 study. Tables in Appendix C present the percentages of positive responses for all available information on the studies reviewed in Chapter II.

1. Satisfaction with College or Major Department

The following items composed the cluster under the heading, "Satisfaction with College or Major Department."

- KEY:
1. Strongly agree
 2. Agree
 3. Undecided
 4. Disagree
 5. Strongly disagree

I feel that my college or major department:

8. has given me a sense of identity with an academic community.
9. has provided an opportunity for being part of a meaningful social group.
10. has given me the opportunity to participate in academic decision-making.
11. is responsive to the needs of students.
12. treats me as though I am of some importance as an individual.
13. has provided an intellectually stimulating environment.
14. has helped me to develop life goals, values and standards.
15. has helped me become more sensitive to ethical issues.
16. has provided the opportunity for me to get individual attention, when needed, from faculty.

17. has afforded me an adequate choice of electives apart from the specialized requirements from my major.
18. has afforded me a program of studies relevant to the problems of society.

Table 4.12 Percentage of positive responses and percentage of change for the 1971 and 1982 studies.

<u>Item</u>	<u>Year</u>				<u>% of Change</u>	
	1982		1971		NS	LBC
College or Major Department Provided	NS	% LBC	NS	% LBC		
8. Identity with academic community	52	83	50	74	+ 2	+ 9
9. Meaningful social group	29	66	21	63	+ 8	+ 3
10. Academic decision-making	35	75	57	82	-22	- 7
11. Responsive to need of students	54	83	49	77	+ 5	+ 6
12. Important as an individual	47	92	35	88	+12	+ 4
13. Intellectual Environment	78	87	67	71	+11	+16
14. Help in life goal	38	64	20	37	+18	+27
15. Sensitive to ethical issues	45	85	16	49	+29	+36
16. Individual attention from faculty	81	94	53	80	+28	+14
17. Adequate electives	72	76	60	59	+12	+17
18. Relevant to society	45	83	22	26	+23	+57

NS = Natural Science
LBC = Lyman Briggs College

The 1982 Lyman Briggs seniors responded more favorably to ten of the eleven items in this cluster when compared to their responses in 1971. The Natural Science seniors'

response was very similar, as both groups' scores decreased on the same item, i.e., participation in academic decision-making. Table 4.12 illustrates the percentage of change for Lyman Briggs and Natural Science since 1971 in the cluster area of "Satisfaction with College or Major Department."

The greatest percentage of increase (fifty-seven) for the 1982 Lyman Briggs seniors was on item 18 concerning relevancy of their studies to society's problems. Eighty-three percent of the Lyman Briggs seniors agreed or strongly agreed that their college provided them with a program of studies relevant to society's problems. The 1975 study's results on this question indicate that satisfaction has increased for both groups. Eighty-five percent of the 1982 LBC seniors felt their college had helped them become more sensitive to ethical issues. This finding represented a thirty-six percent increase over 1971 figures.

When comparing the results of the 1971 and 1975 studies on item 15, "My college or major department has helped me become more sensitive to ethical issues," the figures show an increase for both groups. Eighty-five percent of the 1982 Lyman Briggs seniors felt their college had helped them become more sensitive to ethical issues compared with forty-five percent for Natural Science.

The most favorable response from both groups in 1982 was in the area of individual attention from faculty. Ninety-four percent of the 1981 Lyman Briggs seniors agreed

or strongly agreed that their college provided them the opportunity to get individual attention from faculty when needed, a fourteen percent increase over the 1971 results. The 1982 Natural Science seniors responses to this question also increased over 1971, with eighty-one percent responding favorably.

Both the 1982 Lyman Briggs and Natural Science seniors had large increases on item 14, "My college or major department has helped me to develop life goals, values and standards." Lyman Briggs responses increased twenty-seven percent over 1971, and Natural Science responses increased by eighteen percent. These increases were also shown in the 1975 responses for both groups.

Eighty-seven percent of the 1982 Lyman Briggs seniors felt they had been provided an intellectually stimulating environment. This finding represents a sixteen percent increase over 1971 and is very similar to the results reported in 1975. The responses of the seniors in Natural Science indicated an eleven percent increase in 1982, as seventy-eight percent felt their college or major department provided an intellectually stimulating environment.

This cluster revealed increases for both groups in 1982 except for item 10, "My college or major department has given me the opportunity to participate in academic decision-making." Lyman Briggs decreased by seven percent, and Natural Science decreased by twenty-two percent on this item.

2. General Attitudes toward Michigan State University

There were seven items that contributed to this cluster area, "General Attitudes toward Michigan State University." This is the manner in which they appeared on the questionnaire.

- KEY:
1. Strongly agree
 2. Agree
 3. Undecided
 4. Disagree
 5. Strongly disagree

19. I feel that I have received a good education at MSU.
20. I feel prepared for a job related to my field of study.
21. I feel that my experience at MSU has been socially rewarding.
22. I am sorry that I came to MSU rather than to another school.
23. In retrospect, I wish I had selected a different major.
24. I feel prepared for graduate or professional education.

* * * * *

25. Do you feel that your education makes you competitive in the present job market?

1. Definitely yes
2. Probably yes
3. Perhaps
4. No, I do not

Two items, "Preparation for graduate or professional school," and "MSU has been a socially rewarding experience," showed a positive increase of greater than ten percent since 1971 for the 1982 Lyman Briggs seniors (see table 4.13). For the remaining items: (1) I feel I have received a good education at MSU, (2) I feel prepared for a job related to my field of study, (3) I am sorry that I came to MSU rather than to another school, (4) I wish I had selected a different major, and (5) Do you feel that your education makes you competitive in the present job market?--there was less than a ten percent change for Lyman Briggs over the ten-year period.

Table 4.13 General Attitudes toward MSU: A comparison of positive responses and percentages of change between the 1971 and 1982 studies.

<u>Item</u> College or Major Department Provided	<u>Year</u>				<u>% of Change</u>	
	1982		1971		NS	LBC
	NS	% LBC	NS	% LBC		
19. Received a good education	82	83	80	75	+ 2	+ 8
20. Prepared for a job	52	55	69	63	-17	- 8
21. Socially rewarding experience	55	85	80	73	-25	+12
22. Sorry I came to MSU	76	74	78	65	- 2	+ 9
23. Wish I selected different major	16	23	28	20	-12	+ 3
24. Prepared for graduate school	48	81	69	63	-21	+18

NS = Natural Science
LBC = Lyman Briggs College

The increase in item 24, "I feel prepared for graduate or professional school," was the greatest at eighteen percent for 1982 Lyman Briggs seniors, compared with a decrease in change for the 1982 Natural Science seniors. When comparing 1982 responses with those reported in 1975 on item 24, "I feel prepared for graduate or professional school," Lyman Briggs increased three percent, and Natural Science decreased thirty-two percent. Eighty-five percent of the 1982 LBC seniors felt they had a socially rewarding experience, an increase of twelve percent since 1971 and ten percent since 1975. Fifty-five percent of 1982 Natural Science seniors felt they had a socially rewarding experience at MSU. This represented more than a twenty

percent decrease when compared with figures reported in 1975 and 1971.

3. Satisfaction with Education Outcomes

Five items contributed to the make-up of cluster 3, "Satisfaction with Education Outcomes." These items appeared on the questionnaire in this manner.

KEY: 1. Dramatic progress--one of my most conspicuous outcomes

2. Considerable progress

3. Moderate progress

4. Some Progress

5. No Progress

46. Acquiring a broad cultural background.

47. Developing the ability to think critically and to understand the uses and limitations of knowledge.

48. Understanding different world views, cultures and ways of life.

49. Social development--gaining skill in relating to other people.

50. Personal development--understanding myself, my abilities and limitations, and my place in society.

Since 1971, the Lyman Briggs seniors' response to satisfaction with their educational progress increased by more than ten percent in each of the five items that

contributed to this cluster. Natural Science seniors' satisfaction increased eleven percent on 47, developing the ability to think critically since 1971. Refer to Table 4.14 for changes on each item for this cluster, "Satisfaction with Educational Outcomes."

Table 4.14 Satisfaction with Education Outcomes: A comparison of positive responses and percentage of change between the 1971 and 1982 studies.

Item Educational Progress	Year				% of Change	
	1982		1971		NS	LBC
	NS	% LBC	NS	% LBC		
46. Broad cultural education	43	66	46	40	- 3	+26
47. Develop ability to think critically	81	81	70	69	+11	+12
48. Understanding of world views	51	68	51	43	0	+25
49. Social development	68	72	62	59	+ 6	+13
50. Personal development	75	81	66	65	+ 9	+16

NS = Natural Science
LBC = Lyman Briggs College

The greatest increase in satisfaction for the 1982 Lyman Briggs seniors was reflected in their response to receiving a broad cultural background, an increase of twenty-six percent since 1971. Natural Science seniors' response to acquiring a broad cultural education reveals a decline of three percent since 1971 and fourteen percent since 1975. Both Natural Science and Lyman Briggs seniors

felt they had developed a better understanding of themselves--Lyman Briggs increasing sixteen percent and Natural Science, nine percent since 1971. Similar increases on this item were revealed in the 1975 study for both Lyman Briggs and Natural Science.

When asked about their ability to think critically, eighty-one percent of Lyman Briggs and Natural Science seniors felt they had developed this skill, an increase of eleven percent for both Lyman Briggs and Natural Science since 1971. This increase was revealed in the 1975 study for Natural Science while Lyman Briggs increased ten percent since 1975.

Seventy-two percent of the 1982 LBC seniors felt they had made progress in their social development, an increase of twelve percent over the 1971 study. Natural Science increased six percent since 1971, as sixty-eight percent responded favorably to their attainment of social skills. The 1975 figures reveal a similar increase over 1971 for both groups.

4. Satisfaction with College or Major Department in Contrast to Other Colleges or Major Departments

The following seven items contributed to the making-up of this cluster, "Satisfaction with College or Major Department in Contrast with Other Colleges or Major Departments."

1. Definitely
2. Probably
3. Uncertain
4. Not at all

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with:

75. closer contact with faculty.
76. more individualized attention.
77. more specialized training.
78. broader training.
79. less competition.
80. more personal freedom.
81. more tolerant faculty.

The 1982 Lyman Briggs seniors increased by greater than ten percent in three of these items: (1) closer contact with faculty, (2) received specialized training, and (3) received broader training. Results from the 1975 investigation was not available for cluster. Table 4.15 illustrates the comparison of the 1971 with the 1982 responses for this cluster.

Table 4.15 Satisfaction with My College or Major Department in Contrast to Other College or Major Departments: A comparison of positive responses and percentages of change between the 1971 and 1982 studies.

<u>Item</u> My College or Major Department in Contrast to Others	<u>Year</u>				<u>% of Change</u>	
	1982		1971		NS	LBC
	NS	% LBC	NS	% LBC		
75. Closer contact with faculty	16	77	5	59	+11	+18
76. Individualized attention	8	64	3	61	+ 5	+ 3
77. Specialized training	16	36	26	10	-10	+26
78. Broader training	9	40	7	29	+ 2	+11
80. Personal freedom	14	25	9	18	+ 5	+ 7
81. Tolerant faculty	26	5	6	20	- 1	+ 6

NS = Natural Science
LBC = Lyman Briggs College

The item with the greatest increase for the 1982 Lyman Briggs seniors was on receiving specialized training. Thirty-six percent of the LBC seniors felt their college had provided them more specialized training, an increase of twenty-six percent over the 1971 study. Natural Science had a ten percent decrease from 1971, as sixteen percent felt they had received more specialized training. Seventy-seven percent of the 1982 Lyman Briggs seniors felt their college had afforded them closer contact with faculty compared with sixteen percent of the Natural Science seniors. This finding represented an increase of eighteen percent for Lyman Briggs and an eleven percent increase for Natural Science over 1971 responses.

When asked if they had received broader training, forty percent of the 1982 LBC seniors responded favorably compared with nine percent of the Natural Science seniors. This finding represented an increase of eleven percent for Lyman Briggs and a two percent increase for Natural Science when compared with the 1971 results. This cluster revealed an upward trend in positive responses for both groups; Lyman Briggs had increases on all five items and Natural Science on four items.

5. Involvement in Campus Cocurricular Activities

Nine items contributed to the make-up of this cluster, "Involvement in Campus Cocurricular Activities." The following is the manner in which they appeared on the questionnaire.

- KEY:
1. Did not participate at all
 2. Participated, but not frequently
 3. Participated often or regularly
90. Activities sponsored by a religious organization.
 91. Student government.
 92. Department or college academic governance.
 93. Literary, oratorical or dramatic activities.
 94. Intramural athletics.
 95. Musical, dance or other fine arts activities.
 96. Workshops, lectures or organized discussions not related to class assignment.

97. Special interest clubs (photography, sailing, etc.).
98. Volunteer programs (tutoring, aid to the blind, MSU Volunteers-Service Learning).

Results from the 1971 study were not available for this cluster, thus the finding and discussion will pertain to changes in Lyman Briggs over the last ten years. Information was available from the 1975 study and is included in the discussion. Table 4.16 presents percentages of Lyman Briggs student involvement in cocurricular activities.

Table 4.16 Involvement in Campus Cocurricular Activities: A comparison of positive responses and percentages of change for Lyman Briggs between the 1971 and 1982 studies.

Item	Year		% and Direction of Change
	1982 LBC %	1971 LBC %	
90. Religious organi- zation	13	8	+ 5
91. Student govern- ment	30	16	+14
92. Academic govern- ance	21	14	+ 7
93. Literary, dramatic	13	4	+ 9
94. Intramural athletics	40	24	+16
95. Musical, dance, fine arts	36	8	+28
96. Workshops and lectures	38	18	+20
97. Special interest clubs	28	10	+18
98. Volunteer programs	36	18	+18

NS = Natural Science
LBC = Lyman Briggs College

Responses to this cluster revealed that the 1982 Lyman Briggs seniors participated more frequently than the 1971 LBC seniors in all nine areas included in this cluster. Examination of these items revealed six had an increase of greater than ten percent. The six are as follows: (1) student government, (2) intramural athletics, (3) musical, dance or other fine arts activities, (4) workshops, lectures or organized discussions not related to class assignments, (5) special interest clubs and (6) volunteer programs. In addition, it is noted that the 1982 data revealed an increase of involvement in each activity over the 1975 results.

A thirty-six percent response in fine arts activities represented a twenty-eight percent increase of 1971; the greatest increase in this cluster. Participation in workshops, lectures, or organized discussions not related to class assignment was found to reflect the second highest percentage of participation, an increase of thirty-eight and twenty percent, respectively.

Eighteen percent more of the 1982 LBC seniors participated in special interest clubs and volunteer programs than the 1971 LBC seniors. Forty percent of the 1982 LBC seniors indicated they participated in intramural athletics (which was the most popular activity for the 1982 LBC seniors). This represented an increase of sixteen percent over their involvement in intramural athletics in 1971.

Summary

For the purpose of comparison, the 1971 and 1982 results were presented in percentages of positive responses to items from the questionnaire in five cluster areas. These clusters were identified as:

- (1) Satisfaction with college or major department.
- (2) General attitudes toward MSU.
- (3) Satisfaction with educational outcomes.
- (4) Satisfaction with college or major department in contrast to other colleges or major departments.
- (5) Involvement in campus cocurricular activities.

Items that revealed a ten percent or greater difference in either direction for Lyman Briggs were discussed for each cluster. Results of the 1975 investigation were included in the discussions of the items with differences greater than ten percent.

In the cluster, "Satisfaction with College or Major Department," six of the eleven items revealed differences of greater than ten percent for the 1982 LBC seniors. These items included: My college or major department has provided me (1) an intellectually stimulating environment, (2) help with life goals, (3) more sensitivity to ethical issues, (4) individual attention with faculty, (5) an adequate choice of electives, (6) a program relevant to society's problems. Natural Science seniors expressed an increase in their satisfaction on all of these items as well.

In cluster number 2, "General Attitudes toward MSU," Lyman Briggs seniors' greatest percentage of increase was in social development and preparation for graduate or professional school. Findings regarding these items revealed the greatest amount of decrease in satisfaction for the Natural Science seniors.

In 1971, the seniors in Natural Science responded more favorably to each item in the cluster, "Progress toward Educational Outcomes." The 1982 results reveal a substantial decrease in satisfaction for Natural Science in their progress toward educational outcomes compared with substantial increase (greater than ten percent) for Lyman Briggs on each item.

The greatest degree of change for LBC seniors was in the development of a broad cultural background, personal development and understanding different world views.

When contrasting their college or major department with other colleges or major departments, Lyman Briggs seniors' satisfaction, again, increased on all items. The greatest degree of change was in closer contact with faculty and being provided with more specialized training. These items both represent increases in the differences between the two groups since 1971.

Information was only available for Lyman Briggs on involvement in cocurricular activities. The LBC seniors showed increases greater than ten percent in six areas, the

largest increases being in the fine arts, workshops and lectures, special interest groups, volunteer programs and student government.

CHAPTER V
SUMMARY, CONCLUSIONS AND IMPLICATIONS
FOR FUTURE RESEARCH

This chapter contains a summary of the study, an interpretation of the findings, conclusions, and recommendation for further research.

Introduction

The decades of the fifties and sixties were witness to tremendous growth and expansion to colleges and universities across the country. Surveys by the United States Office of Education indicate that the total college student population leaped from 3,610,007 in 1961-62 to 7,571,636 in 1968-69, more than doubling the enrollment during the first eight years of the decade (Gaff, 1970).

Accompanying this growth were faculty, staff, and student concerns regarding increased classroom size, limited faculty-student interaction and a loss of the "sense of community." Student life on many of the large campuses had become a very impersonal experience with television lectures, graduate assistants teaching lower division classes, and the increased use of standardized tests.

Various kinds of administrative and instructional models were being employed in response to these concerns. Large institutions were facing the problem of how to live with bigness and how to counteract its usually negative consequences (Astin, 1978).

In many respects, Michigan State University exemplified the kind of growth and expansion described. Among the institution's response to counteract some of the ill effects of this growth was the creation of living-learning centers within several residence halls and the development of three semi-autonomous residential colleges. This investigation has focused on Lyman Briggs College, one of the two remaining residential colleges.

Purpose of the Study

The purpose of this study was to compare and contrast attitudes toward educational and social experiences held by seniors in the College of Natural Science and Lyman Briggs College, fall term 1981, at Michigan State University. In addition, the investigator compared his findings with similar investigations; the results of attitudinal studies of the senior classes of 1971 and 1975 at Michigan State University. More specifically, this study is designed to:

1. Determine present attitudes of the 1982 seniors in the colleges of Natural Science and Lyman Briggs.

2. Compare and contrast the attitudes surveyed in 1982 between those of Lyman Briggs and Natural Science seniors.
3. Determine the difference, if any, in the attitudes surveyed in 1982 with those reported in the 1971 Natural Science and Lyman Briggs seniors at Michigan State University.

Population and Sample

The population selected for this study consisted of the full-time seniors enrolled at Michigan State University, fall term of 1981, and who identified either Lyman Briggs or a department in the College of Natural Science as their major. October 8, 1981 figures from the MSU Registrar's Office revealed 678 seniors in the College of Natural Science with 449 men and 229 women. Lyman Briggs College seniors totaled 84 with 48 men and 36 women.

The investigator drew a computerized random sample of seniors in the College of Natural Science enrolled full-time for fall term 1981. Previous samples drawn from this population indicated a return rate of approximately 33%. Based on this information, a 50% sample was drawn from the seniors in the College of Natural Science, which provided an adequate cell size for comparison. This sample was obtained from the Registrar's Office by requesting address labels for every other senior enrolled in the College of Natural

Science. Because of the relatively small size of the Lyman Briggs senior class, the entire population of Briggs seniors was surveyed.

Methodology

The survey developed for this investigation, "Senior Expression," was mailed to 50% or 339 seniors in the college of Natural Science and 100% or 84 seniors in Lyman Briggs College during fall term 1981 at Michigan State University. A return rate of 32.4% of the students surveyed in the College of Natural Science was received, while 65.4% of the seniors in Lyman Briggs returned their responses to the survey.

The instrument, "Senior Expression," consisted of 132 questions. In order to make the data received more meaningful, 77 of the 132 items were clustered into ten scales. The remaining 55 items were treated independently and compared with responses reported in the 1971 investigation where data was available.

For the purpose of analysis, two methods were employed to examine the data collected. The Multivariate Analysis of Variance (MANOVA) was the statistical model chosen to test for significance and percentages were computed and presented in tables for comparison of the 1981 responses with those collected in 1971 for a similar investigation.

The Multivariate Analysis of Variance was selected to test the null hypotheses:

1. No significant difference exists in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors.
2. No significant difference exists between 1982 seniors in Lyman Briggs and Natural Science in their attitudes toward:
 - A. Satisfaction with college or major department.
 - B. General attitudes toward Michigan State University.
 - C. Attitudes toward Michigan State University professors.
 - D. Involvement in community activities.
 - E. Satisfaction with outcomes of their educational experiences.
 - F. Satisfaction with faculty in their college or department.
 - G. Attitudes toward individual attention.
 - H. Involvement in campus cocurricular activities.
 - I. Attitudes toward planning.
 - J. Satisfaction with academic advisement.

The .05 level of confidence was the criteria chosen for testing significance for the Multivariate Analysis. Each one of the univariates (each individual scale) was tested at the .005 level of confidence in order to maintain a Type I error at .05.

Findings

This investigation compared attitudes toward educational and social experiences held by seniors in the colleges of Natural Science and Lyman Briggs at Michigan State University. In addition, the 1982 findings were compared with the results reported from a similar study conducted in 1971. Two basic hypotheses were used to analyze the data collected. Stated in the null form these are:

1. No significant difference exists in the attitudes surveyed between the 1982 Lyman Briggs and College of Natural Science seniors.
2. No significant difference exists between the attitudes surveyed in 1982 and those reported in 1971 of the Lyman Briggs and College of Natural Science seniors.

MANOVA Results

The results of the Multivariate Analysis of Variance indicated there was a significant difference in the attitudes surveyed between the 1982 Lyman Briggs and Natural Science seniors. Therefore, the null hypothesis was not accepted. More specifically, these differences were indicated in the testing of the ten scales developed. Five of these ten scales revealed a significant difference at the .005 level of confidence.

Satisfaction with College or Major Department

In the first scale, Lyman Briggs students were found to be significantly more satisfied with their college or major department when compared with the Natural Science seniors.

General Attitudes toward Michigan State University

When asked to respond to their general attitudes toward the university, the residential college seniors in Lyman Briggs were more favorable when compared with Natural Science; however, the difference was not significant.

General Attitudes toward MSU Professors

This scale revealed no significant difference between the two groups.

Involvement in Community Activities

Results of the MANOVA indicated that Lyman Briggs seniors were significantly more involved in community activities when compared with Natural Science seniors.

Satisfaction of Outcomes of Educational Experiences

The results of the MANOVA indicated that the residential college seniors were more satisfied with the outcomes of their educational experiences when compared with the university seniors in the College of Natural Science; however, the difference was not significant.

Satisfaction with Faculty in their College or Department

The results of the MANOVA again indicated a significant difference in attitudes. The response by the residential college seniors in Lyman Briggs was significantly more favorable than Natural Science seniors regarding their attitudes toward faculty in their college or department.

Attitudes toward Individualized Attention or Assistance

No significant difference was revealed by the MANOVA test. Lyman Briggs seniors and those seniors responding in the College of Natural Science responded similarly toward their desire for individualized attention.

Involvement in Campus Cocurricular Activities

The MANOVA test results on this scale revealed a significant difference. Lyman Briggs seniors were found to be significantly more involved in campus cocurricular activities when compared with their university counterparts in the College of Natural Science.

Attitude toward Planning

No significant difference was revealed by the MANOVA tests. The residential college seniors and the university seniors in Natural Science responded similarly in their attitudes toward planning.

Satisfaction with Academic Advisement

The MANOVA results indicated a significant difference in the two group's satisfaction with academic advisement. This scale revealed that the Lyman Briggs seniors were significantly more satisfied with the academic advisement they had received when compared with the seniors in the College of Natural Science.

Comparison of the 1982 Findings with the Findings Reported in 1971

For the purpose of comparing the 1982 and 1971 groups of students, the findings were clustered into five areas and the results were presented in percentages of positive responses. The results of these comparisons are listed and discussed:

- (1) Satisfaction with college or major department.
- (2) General attitudes toward Michigan State University.
- (3) Satisfaction with educational outcomes.
- (4) Satisfaction with college or major department in contrast to other colleges or major departments.
- (5) Involvement in campus cocurricular activities.

Items that revealed a ten percent or greater difference in either direction for Lyman Briggs were discussed for each cluster. Results of the 1975 investigation were included in the discussion of the items with a difference greater than ten percent.

In the cluster, "Satisfaction with College or Major Department," the seniors in both groups responded more favorably to ten of the eleven items. Six of the eleven items reveal a difference of greater than ten percent for the 1982 LBC seniors. The greatest percentage increase (57%) for the 1982 Lyman Briggs seniors was on item 18 concerning relevancy of their studies to society's problems. Ninety-two percent of the 1982 LBC seniors felt they were important as an individual in their college or department compared with 47 percent of the Natural Science seniors. Eighty-five percent of the residential seniors felt their college was sensitive to ethical issues compared with 45% of their university counterparts. In general, both groups showed an increase in satisfaction, with the residential college seniors maintaining the similar substantial edge in favorable responses as found in 1971.

In cluster 2, "General Attitudes toward MSU," Lyman Briggs seniors' greatest percentage of increase was social development and preparation for a graduate or professional school. The Natural Science seniors, on the other hand, revealed a decrease in their level of satisfaction in both of these areas. In general, the residential college seniors revealed an increase in their satisfaction toward MSU while their university counterparts' satisfaction decreased substantially on five out of the six items in this cluster.

In the third cluster, "Progress toward Educational Outcomes," LBC seniors' responses were substantially more

favorable (greater than ten percent) on all items in the cluster, while the Natural Science seniors' responses showed a greater than ten percent increase on one item. The greatest increase in satisfaction for the 1982 residential college seniors (26%) was reflected in their response to receiving a broad cultural background. Overall, this cluster reveals a substantial change since 1971. The 1971 Natural Science seniors expressed a greater degree of satisfaction when compared with LBC seniors, whereas the 1982 LBC seniors expressed a substantial increase in satisfaction when compared with their 1971 response.

In cluster 4, "Satisfaction with College or Major Department in Contrast to Other Colleges or Major Departments," again, LBC seniors' satisfaction increased on all items. The greatest degree of change was in closer contact with faculty and being provided with more specialized training. Overall, student response to this cluster represented a substantial difference between the two groups in 1971 and that difference has increased in 1982.

In the fifth cluster, "Participation in Cocurricular Activities," information was not available for the 1971 Natural Science seniors. However, the 1982 LBC seniors' responses showed increases on all nine items in the cluster when compared with the 1971 responses. Substantial increases were shown on six of the nine items with the largest increase (28%) depicted by participation in music, dance, and fine arts.

Discussion

The findings presented in this investigation clearly suggest that there was a difference in the expressed level of satisfaction of the 1982 Lyman Briggs seniors when compared with their university counterparts in Natural Science. This residential college was created to offer students: (1) an opportunity to interact on a regular basis with their professors, (2) personalized attention from faculty and staff, (3) increased opportunities for involvement in the governance of the college, (4) increased opportunities for involvement in a myriad of cocurricular activities, (5) an opportunity to integrate their total campus experience, and (6) an environment where one has a sense of identity with an academic community. On these accounts, the 1982 Lyman Briggs seniors expressed a high degree of satisfaction with their college experience. These findings are very consistent with the current literature on student satisfaction (Feldman and Newcomb, 1968; Brown, 1972; Astin, 1977).

Student/Faculty Relations

Student/faculty relationships have been identified as a critical element that contributes to student satisfaction and, hence, academic success (Astin, 1978; Brown, 1972; Feldman and Newcomb, 1968; and many others). An interesting finding revealed in this investigation was shown in Scale 3,

which revealed no significant difference in the residential college seniors' and their university counterparts' attitudes toward Michigan State University professors. However, in Scale 6, "Satisfaction with Faculty in your College or Department," the residential college seniors were found to be significantly more satisfied. The relationship between the student and professor in Lyman Briggs College is one that typically has had three or four years to develop and mature. On the other hand, university students typically begin to interact with their major professors once they have declared their major after their sophomore year.

Residency

At the time of this investigation, more than seventeen percent of the LBC seniors surveyed were still residing in Holmes Hall where all faculty and administrative offices of the college are housed. Fifty-seven percent of the LBC seniors surveyed indicated they had lived in MSU residence halls three years or more compared with twenty-eight percent of the Natural Science seniors. Twenty-three percent of the Natural Science seniors never lived in a Michigan State University residence hall compared with only eight percent of the LBC seniors. These results support Astin's (1978) finding that students residing on campus were more likely to express satisfaction with their undergraduate experience.

Involvement

Astin (1977) suggested that students who resided on campus were more likely to become involved in campus activities. The residential college students in this study were found to be significantly more involved in community and campus activities when compared with their university counterparts. Student involvement indicated by the 1982 Lyman Briggs seniors was spread over several and varied kinds of activities: forty percent were involved in intramural athletics; thirty-eight percent participated in workshops and lectures; thirty-six percent participated in musicals, dance, and fine arts; thirty-six percent participated in volunteer programs; and fifty-one percent indicated they participated in student or academic governance.

With this level of involvement, students in the residential college contributed a great deal to their own and each other's educational experience. Brown (1971) asserted that this kind of influence is an immensely powerful force affecting how students see themselves and others. Adams (1967) saw the peer group influence as "that special ingredient in the environment for learning, most certain to be enhanced, if there is an overlap between the membership of the formal college unit and the living unit."

Academic Advisement

In Axelrod's (1973) report on Lyman Briggs College, he found that academic advisement had a much more central role in the residential college than in a conventional college setting. This variable was again reinforced in the 1982 study as the LBC seniors were significantly more satisfied with their academic advisement than the Natural Science seniors. In many instances, academic advisement encourages and supports students at critical times in their undergraduate experience. Often the student's advisor in the residential college is a professor who is in the student's expressed academic interest. The relationship between academic advisor and student thus has the potential to influence the student's development and college experience at an early age.

Individualized Attention

An interesting attitude was revealed in Scale 7, "Attitude toward Individualized Attention." In this scale, no significant difference in the two groups was expressed. The residential college seniors were not unique in their expressed desire for a personalized college experience.

Feldman and Newcomb (1968) may have best summarized the results of these findings by stating, "The conditions for campus-wide impacts appear to have most frequently been provided in small, residential, four-year colleges. The

conditions probably include relative homogeneity of both faculty and student body together with opportunity for continuing interaction, not exclusively formal, among students and between students and faculty."

Michigan State University Financial Crisis

Winter term 1981 the Board of Trustees at Michigan State University declared the University to be in a financial crisis. A special committee was appointed by the president to recommend programs or services that could be considered for elimination. Lyman Briggs residential college was one of the programs under consideration. During the subsequent months many students, faculty, and staff rallied in support of the residential program. Three items on the questionnaire inquired about the student's knowledge and involvement in the crisis. Greater than 90% of both Lyman Briggs seniors responded that they had actively supported a program scheduled for elimination compared with 31% of the Natural Science seniors. There was no attempt to measure this impact or influence on the respondent's choices for this investigation. However, the researcher determined this factor should be reported.

Conclusions

1. The residential college experience of the 1982 Lyman Briggs seniors had a positive impact on their expressed attitudes toward their undergraduate experience. The residential college seniors expressed greater satisfaction toward the university, their college, professors within their college, and about the academic advisement they had received when compared to their university counterparts in Natural Science.
2. The residential college experience of the 1982 Lyman Briggs seniors afforded them more opportunities to interact with faculty in their college or department, thus, positively affecting their satisfaction with those faculty/student relationships. Astin (1977) stated that student/faculty interaction has a stronger relationship to student satisfaction with the college experience than any other variable or, indeed, any other student or institutional characteristic.
3. The residential college experience of the 1982 Lyman Briggs seniors positively affected their attitudes toward their college or department. The residential college experience allowed the LBC seniors to feel a strong sense of identity with the college. The LBC seniors felt their college treated them as though they were important as an

individual while providing opportunities to be a part of a meaningful social group. Academically, the residential college experience, as strongly expressed by LBC seniors, was intellectually stimulating, relevant to society's problems, and sensitive to ethical issues.

4. The residential college experience of the 1982 LBC seniors afforded them more opportunities to participate in campus and community activities. The residential college seniors were more active in community service, academic governance, and in student government activities when compared with their university counterparts in Natural Science. The residential college seniors were also more involved in positions of responsibility and more actively involved in building or improving upon a piece of laboratory equipment. Student involvement of this nature has been found to be one of the most significant factors contributing to student growth and development (Feldman and Newcomb, 1968; Astin, 1977).
5. The residential college experience of the 1982 Lyman Briggs seniors positively affected their expressed satisfaction with the academic advisement they had received. The residential college seniors expressed satisfaction about the guidance they had received and in their advisor's

sensitivity toward their personal as well as academic concerns.

6. The results of this investigation support Nosow's 1975 findings that: 1) residential college seniors had a stronger sense of identity with their college or department, 2) the residential college students expressed a much stronger social identification with fellow students when compared to their university counterparts, 3) the residential college seniors felt that their college or major department provided them with an intellectually stimulating environment, and 4) the residential college students had substantial opportunities for informal contact with faculty. This study presents evidence to support Nosow's 1975 conclusion that Michigan State University achieved its objective "to provide a small college experience at a major university," as expressed in the attitude survey in this study.

Implications for Further Research

In this study, the investigator sought to answer some specific questions regarding the residential college experience in Lyman Briggs College. Answers to those questions were presented in this document. The following suggestions for further research were formulated during various stages of this investigation:

- I. To gain another perspective on the college experience, alumni are thought to be the richest source of information about college quality (Boulding, 1975; and Freedman, 1962). Bowen (1977) advocated alumni studies. He believes that important outcomes of the college experience cannot be documented at commencement because of the impacts or changes will not manifest until some years later. Thus, longitudinal studies of graduates would be beneficial. Pace (1974) suggested that such studies should be concerned with the impact of the undergraduate experience on their: 1) attitudes toward social and political issues, 2) attitudes toward benefits of their educational experience, and 3) present involvement in community service.
- II. Given the kind of impact faculty have been found to have on student satisfaction, faculty views and their assessment of the residential college experience would provide different but complementary information. Exploring faculty's attitudes and perceptions toward the interaction and quality of relationship they experience in the residential setting would provide valuable information. Does the residential teaching experience allow faculty sufficient time for research and other professional activities?

Assessing their professional satisfaction in this setting and its effects on student satisfaction should provide very useful information.

III. In this study, attitudes of students were elicited concerning their satisfaction with selected aspects of their undergraduate experience. An environmental assessment of Lyman Briggs College would provide another perspective of some of the differences that exist between the university and residential college experience at Michigan State University. Rudolf H. Moos's book Evaluation of Educational Environments, 1979, provides a comprehensive discussion and framework to approach an environmental assessment. Moos concludes " . . . the influence of environment may vary, but all authors agree that the social ecological setting in which students function can affect their attitudes and moods, their behavior and performance, and their self concept and general sense of well-being."

IV. An interview study of residential college students would provide more in-depth information than can be obtained from surveys or other instruments. After administering the survey for this investigation, several students wanted to make contact with the investigator to express their views stimulated by the questionnaire. Follow-up interviews would allow the investigator and

students the ability to focus in on significant relationships and experiences that were most critical during the student's undergraduate experience. This method also opens the door to gain insights unanticipated by the investigator.

- V. A study of this nature should be replicated but focused upon James Madison Residential College and the College of Social Science at Michigan State University. Studying these colleges would provide a broader insight to the impact of the residential college experience at Michigan State University. With the recent changes in the Lyman Briggs program to a department in the College of Natural Science, a study of James Madison College would provide useful data for comparison and future decisions affecting the residential programs.

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APPENDICES

APPENDIX A

**CORRESPONDENCE FOR RESEARCH APPROVAL AND
LETTER TO 1982 LYMAN BRIGGS AND
NATURAL SCIENCE SENIORS**

October 18, 1981

To: Dr. Henery E. Bredeck, Chairman of the UCRHS
From: Tim J. Pierson, Doctoral Candidate-Education
Re: Exemption Request

The study which I have proposed is a follow-up study in the College of Natural Science and Lyman Briggs School. Earlier investigations were done in 1971 and 1975 of these two populations by the Office of Evaluation Services at Michigan State when the Office did a sample survey of all MSU seniors.

After reviewing the criteria for an exemption status project, it appeared that this study may comply with the established criteria for an exemption. Specifically, "Exemption is claimed as type (1) Research conducted in established or commonly accepted settings, involving normal educational practices, such as (ii) research on the effectiveness of or the comparison among instructional techniques, curricular or classroom management methods."

Enclosed along with this request please find: (1) a copy of the application and proposal to my dissertation committee, (2) a copy of the information regularly requested for a URIHS review.

Should any additional information or clarification be required please feel free to contact me. (353-6480 E-33 Holmes Hall)

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
235 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824

October 19, 1981

Mr. Tim J. Pierson
Lyman Briggs
E-33 Holmes Hall

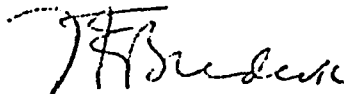
Dear Mr. Pierson:

Your request of October 18 for exemption from UCRIHS review of your proposed project entitled, "A Comparison of Attitudes Toward Educational and Social Experiences Held by Seniors in the Colleges of Natural Science and Lyman Briggs at Michigan State University" has been received.

I concur with your evaluation that the project is a category 3 exemption and approval is herewith granted for conduct of the project.

Thank you for bringing the study to my attention. If I can be of future help, please do not hesitate to let me know.

Sincerely,



Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

November 9, 1981

Dear Senior, Natural Science or Lyman Briggs:

I would like to take a few minutes of your time to inform you of the survey that you have just received. The survey deals with your attitudes or viewpoints toward your educational and social experience while in attendance here at Michigan State University. The survey attempts to find those aspects of your undergraduate experience you found particularly satisfying or dissatisfying. More specifically the questions will assess your views of the kind of instruction you have received, i.e. has the faculty in general been effective and responsive to your needs? Other questions will deal with aspects of your College and other kinds of cocurricular activities you were involved in.

What will the information be used for? Good question! It will serve a couple of benefits. 1) As the College of Natural Science and Lyman Briggs join forces we have input from you regarding your view and attitudes toward your college experience. 2) Knowing your views can assist Lyman Briggs and Natural Science in serving your needs better. 3) It is a project that I have taken on as my dissertation and you can assist me in fulfilling the requirements of my graduate work.

Finally, I would like to encourage you to assist us in this project. The survey takes approximately 25 minutes, the information collected is strictly confidential, and gives you an opportunity to express your feeling about your experience here at M.S.U. Thanks for your time. I know we can count on your cooperation.

Sincerely,

Tim J. Pierson
Doctoral Candidate

November 19, 1981

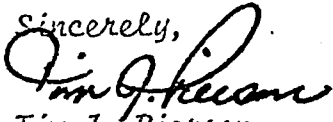
Dear Lyman Briggs Senior,

A week ago you should have received a questionnaire regarding your educational and social experiences while a student here at Michigan State University. As of yet we have not received your answer sheet. Because of the relatively small class size in Lyman Briggs, it is extremely important that each one of you return your input. I am asking that you return it before you leave for Thanksgiving break.

If you have misplaced your copy and need another please call 353-6480 or stop by E-35 Holmes Hall and we will see that you get another copy.

If you have already sent your response in, we sincerely appreciate your time and concern.

Sincerely,



Tim J. Pierson
Director of Student Affairs
Lyman Briggs School

APPENDIX B

**DESCRIPTION OF TEN SCALES DEVELOPED
FROM THE QUESTIONNAIRE**

Scale 1. Satisfaction with College or Major Department

Questions 8-18 are concerned with experience you have had in your college or major department. (By this is meant the college that will grant your degree, Lyman Briggs or Natural Science.) For questions 8-18 select a response from the following key.

- KEY:
1. Strongly agree
 2. Agree
 3. Undecided
 4. Disagree
 5. Strongly disagree

I feel that my college or major department--

8. has given me a sense of identity with an academic community.
9. has provided an opportunity for being part of a meaningful social group.
10. has given me the opportunity to participate in academic decision-making.
11. is responsive to the needs of students.
12. treats me as though I am of some importance as an individual.
13. has provided an intellectually stimulating environment.
14. has helped me to develop life goals, values and standards.
15. has helped me become more sensitive to ethical issues.
16. has provided the opportunity for me to get individual attention, when needed, from faculty.

17. has afforded me an adequate choice of electives apart from the specialized requirements for my major.
18. has afforded me a program of studies relevant to the problems of society.

Scale 2. General Attitudes toward Michigan State University

For questions 19-25 select a response from the following key.

- KEY:
1. Strongly agree
 2. Agree
 3. Undecided
 4. Disagree
 5. Strongly disagree

19. I feel that I have received a good education at MSU.
20. I feel prepared for a job related to my field of study.
21. I feel that my experience at MSU has been socially rewarding.
22. I am sorry that I came to MSU rather than to another school.
23. In retrospect, I wish I had selected a different major.
24. I feel prepared for graduate or professional education.

* * * * *

25. Do you feel that your education makes you competitive in the present job market?

1. Definitely yes
2. Probably yes
3. Perhaps
4. No, I do not

Scale 3. Attitudes toward MSU Professors

For items 26-35 please select a response from the following key.

- KEY:
1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree

Generally speaking, I found my MSU professors--

26. were interested in teaching.
27. made relevant assignments.
28. were thorough in their evaluation.
29. were fair in their grading.
30. inspired me to learn.
31. were available for help when I needed it.
32. were sensitive to needs of individual students.
33. used effective teaching methods.
34. outside my major, had a broad perspective which served many majors.

Scale 4. Involvement in Community Activities

Items 35-46 list experience of "out-of-class accomplishments you may have had while in college. Read each of these and indicate the extent of your experience in each area by using the following key.

KEY: 1. None--have not had the experience.

2. Had the experience one time or for a year or less.

3. Had the experience two times or more or for more than a year.

35. Helped organize and conduct an opinion or information poll (e.g., Gallup or Roger-type) at school or in the community.

36. Built or improved upon a piece of scientific equipment or laboratory apparatus on my own (not as part of a course requirement).

37. Was a primary organizer of a student or community service group.

38. Elected to one or more student offices.

41. Worked as a volunteer aide in a hospital, clinic, or home.

42. Worked as a volunteer on a school or civic improvement project.

43. Attended meetings of one or more local civic groups.

44. Had contact with a local official about some community problem.

Scale 5. Satisfaction with Outcomes of Educational Experience

Questions 46-57 list possible outcomes of a college education. Indicate the amount of progress you feel you have made toward each of these outcomes during your four years at MSU. For questions 47-51 please select a response from the following key.

- KEY: 1. Dramatic progress--one of my most conspicuous outcomes
2. Considerable progress
3. Moderate progress
4. Some progress
5. No progress

46. Acquiring a broad cultural background.
47. Developing the ability to think critically and to understand the uses and limitations of knowledge.
48. Understanding different world views, cultures and ways of life.
49. Social development--gaining skill in relating to other people.
50. Personal development--understanding myself, my abilities and limitations, and my place in society.

Scale 6. Satisfaction with Faculty in College or Department

For questions 51-55 please select a response from the following key.

- KEY:
1. Very much
 2. Substantially
 3. Moderately
 4. Slightly
 5. Not at all, or not applicable

52. Did your college or major department afford you the opportunity to have informal contacts with faculty outside the classroom?

54. Were faculty members of your college or department receptive to differing views?

For items 75-81 please select a response from the following key:

- KEY:
1. Definitely
 2. Probably
 3. Uncertain
 4. Not at all

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with:

75. closer contact with faculty.
76. more individualized attention.
77. more specialized training.

- 78. broader training.
- 79. less competition.
- 80. more personal freedom.
- 81. more tolerant faculty.

Scale 7. Attitudes toward Individualized Attention

Items 82-89. How important do you feel each of the following instructional activities should be?

- KEY:
- 1. Very important
 - 2. Of some importance
 - 3. Not important

- 82. Much student-to-student interaction in class.
- 85. The course should be presented on an individual or audio-tutorial basis.
- 86. The professor should have time for students outside of class.
- 87. I'd like to be known well enough to be called by my first name in class.
- 88. Individualized help should be provided for students having academic difficulty.
- 89. Special honors programs should be available for students of exceptionally high ability.

Scale 8. Involvement in Campus Cocurricular Activities

- KEY: 1. Did not participate at all
 2. Participated, but not frequently
 3. Participated often or regularly

90. Activities sponsored by a religious organization.
 91. Student government.
 92. Department or college academic governance.
 93. Literary, oratorical, or dramatic activities.
 94. Intramural athletics.
 95. Musical, dance or other fine arts activities.
 96. Workshops, lectures or organized discussions not related to class assignments.
 97. Special interest clubs (photography, sailing, etc.)
 98. Volunteer programs (tutoring, aid to the blind, MSU Volunteers-Service Learning).

* * * * *

- KEY: 1. None--have not had the experience.
 2. Had the experience one time or for a year or less.
 3. Had the experience two times or more or for more than a year.
39. Served on a student-faculty committee or group.
 40. Elected president of a "special interest" student club.

Scale 9. Attitudes toward Planning

For items 102-111 indicate how you feel about the statement in each item.

- KEY:
1. Strongly agree
 2. Agree
 3. Disagree
 4. Strongly disagree

102. I would rather decide things when they come up than try to plan ahead.

104. There's not much use for me to plan ahead because there's usually something that upsets my plans.

106. For the well-prepared student, there is rarely if ever a thing as an unfair test.

110. When I make careful plans, I am almost certain that I can make them work.

Scale 110. Satisfaction with Academic Advisement

Items 115-120. Consider the assistance you received from your ACADEMIC ADVISOR.

- KEY:
1. Very helpful
 2. Helpful
 3. Not much help
 4. Not relevant--no experience

116. The help and guidance you received as a freshman and/or sophomore.

- 117. The help and guidance you received from college academic affairs office.
- 118. My advisor's attitude toward my personal problems.
- 119. My advisor's knowledge of MSU resources.
- 120. My advisor's help in selecting courses.

For questions 51-55 please select a response from the following key.

- KEY:
- 1. Very much
 - 2. Substantially
 - 3. Moderately
 - 4. Slightly
 - 5. Not at all, or not applicable

- 53. Was the individual academic advising in your college or major department helpful to you?

APPENDIX C

TABLE COMPARISONS OF THE 1982 AND 1971
FINDING. RESULTS ARE REPORTED IN
PERCENTAGE OF POSITIVE RESPONSES.

Table 8.

I feel that my college or major department has given me a sense of identity with an academic community.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	52	22	26
	Lyman Briggs	83	8	10
1975	Natural Science	66	10	24
	Lyman Briggs	78	3	20
1971	Natural Science	50	16	34
	Lyman Briggs	74	10	16

Table 9.

I feel that my college or major department has provided an opportunity for being part of a meaningful social group.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	29	27	44
	Lyman Briggs	66	15	19
1975	Natural Science	33	22	36
	Lyman Briggs	51	34	14
1971	Natural Science	21	16	63
	Lyman Briggs	63	18	20

Table 10.

I feel that my college or major department has given me the opportunity to participate in academic decision-making.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	35	22	44
	Lyman Briggs	75	17	8
1975	Natural Science	43	22	36
	Lyman Briggs	60	11	29
1971	Natural Science	57	13	30
	Lyman Briggs	82	6	12

Table 11.

I feel that my college or major department is responsive to the needs of students.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	54	26	20
	Lyman Briggs	83	13	4
1975	Natural Science	48	29	22
	Lyman Briggs	68	17	14
1971	Natural Science	49	31	21
	Lyman Briggs	77	10	8

Table 12.

I feel that my college or major department treats me as though I am of some importance as an individual.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	47	26	30
	Lyman Briggs	92	0	8
1975	Natural Science	52	15	32
	Lyman Briggs	80	3	17
1971	Natural Science	35	26	39
	Lyman Briggs	88	4	8

Table 13.

I feel that my college or major department has provided an intellectually stimulating environment.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	78	13	9
	Lyman Briggs	87	8	6
1975	Natural Science	67	12	11
	Lyman Briggs	86	14	-
1971	Natural Science	67	14	19
	Lyman Briggs	71	18	12

Table 14.

I feel that my college or major department has helped me to develop life goals, values and standards.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	38	19	43
	Lyman Briggs	64	21	15
1975	Natural Science	52	22	27
	Lyman Briggs	58	17	25
1971	Natural Science	20	24	56
	Lyman Briggs	37	24	39

Table 15.

I feel that my college or major department has helped me become more sensitive to ethical issues.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	45	23	33
	Lyman Briggs	85	6	9
1975	Natural Science	23	22	45
	Lyman Briggs	52	19	28
1971	Natural Science	16	22	62
	Lyman Briggs	49	28	24

Table 16.

I feel that my college or major department has provided the opportunity for me to get individual attention, when needed, from faculty.

Year	College	Strongly Agree/	Undecided	Disagree/
		Agree		Strongly Disagree
		%	%	%
1982	Natural Science	5	15	81
	Lyman Briggs	2	4	94
1975	Natural Science	77	20	3
	Lyman Briggs	92	-	-
1971	Natural Science	53	29	18
	Lyman Briggs	80	14	6

Table 17.

I feel that my college or major department has afforded me an adequate choice of electives apart from the specialized requirements for my major.

Year	College	Strongly Agree/	Undecided	Disagree/
		Agree		Strongly Disagree
		%	%	%
1982	Natural Science	72	14	15
	Lyman Briggs	76	9	15
1975	Natural Science	70	21	10
	Lyman Briggs	80	16	3
1971	Natural Science	60	20	20
	Lyman Briggs	57	16	27

Table 18.

I feel that my college or major department has afforded me a program of studies relevant to the problems of society.

Year	College	Strongly Agree/ Agree %	Agree/ Agree	Undecided %	Disagree/ Strongly Disagree %		
1982	Natural Science	45		35	20		
	Lyman Briggs	83		13	4		
1975	Natural Science	38		36	26		
	Lyman Briggs	66		19	14		
1971	Natural Science	22		27	51		
	Lyman Briggs	26	+	35	35	=	<u>96</u>

Table 19.

I feel that I have received a good education at MSU.

Year	College	Strongly Agree/ Agree %	Agree/ Agree	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	82		8	18
	Lyman Briggs	83		8	9
1975	Natural Science	97		8	5
	Lyman Briggs	92		3	6
1971	Natural Science	80		16	4
	Lyman Briggs	75		16	10

Table 20.

I feel prepared for a job related to my field of study.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	52	26	23
	Lyman Briggs	55	32	11
1975	Natural Science	64	12	24
	Lyman Briggs	52	14	34
1971	Natural Science	69	18	13
	Lyman Briggs	63	16	22

Table 21.

I feel that my experience at MSU has been socially rewarding.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	75	15	10
	Lyman Briggs	85	9	6
1975	Natural Science	78	11	11
	Lyman Briggs	75	17	9
1971	Natural Science	80	14	6
	Lyman Briggs	73	16	12

Table 22.

I am sorry that I came to MSU rather than to another school.

Year	College	Strongly Agree/	Undecided	Disagree/
		Agree		Strongly Disagree
		%	%	%
1982	Natural Science	14	10	76
	Lyman Briggs	13	13	74
1975	Natural Science	7	10	83
	Lyman Briggs	3	14	84
1971	Natural Science	5	17	78
	Lyman Briggs	12	24	65

Table 23.

In retrospect, I wish I had selected a different major.

Year	College	Strongly Agree/	Undecided	Disagree/
		Agree		Strongly Disagree
		%	%	%
1982	Natural Science	16	13	71
	Lyman Briggs	23	14	63
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science	28	14	58
	Lyman Briggs	20	26	55

Table 24.

I feel prepared for graduate or professional education.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	66	17	26
	Lyman Briggs	81	11	8
1975	Natural Science	80	11	8
	Lyman Briggs	78	14	9
1971	Natural Science	69	18	13
	Lyman Briggs	63	16	22

Table 25.

Do you feel that your education makes you competitive in the present job market?

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	62	24	14
	Lyman Briggs	77	15	8
1975	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 26.

Generally speaking, I found my MSU professors were interested in teaching.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	73	12	15
	Lyman Briggs	76	15	10
1975	Natural Science	76	5	10
	Lyman Briggs	81	14	6
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 27.

Generally speaking, I found my MSU professors made relevant assignments.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	80	15	6
	Lyman Briggs	79	13	8
1975	Natural Science	66	33	-
	Lyman Briggs	78	22	-
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 28.

Generally speaking, I found my MSU professors were thorough in their evaluation.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	66	34	22
	Lyman Briggs	47	32	21
1975	Natural Science	53	31	17
	Lyman Briggs	31	43	26
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 29.

Generally speaking, I found my MSU professors were fair in their grading.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	76	17	8
	Lyman Briggs	66	23	11
1975	Natural Science	71	17	12
	Lyman Briggs	67	25	8
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 30.

Generally speaking, I found my MSU professors inspired me to learn.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	40	27	33
	Lyman Briggs	53	26	21
1975	Natural Science	56	22	21
	Lyman Briggs	42	25	33
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 31.

Generally speaking, I found my MSU professors were available for help when I needed it.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	78	15	8
	Lyman Briggs	66	19	5
1975	Natural Science	80	14	6
	Lyman Briggs	78	19	3
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 32.

Generally speaking, I found my MSU professors were sensitive to needs of individual students.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science Lyman Briggs	46 59	20 17	33 25
1975	Natural Science Lyman Briggs	53 31	24 36	23 33
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 33.

Generally speaking, I found my MSU professors used effective teaching methods.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science Lyman Briggs	59 49	19 32	21 19
1975	Natural Science Lyman Briggs	61 64	20 22	18 14
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 34.

Generally speaking, I found my MSU professors, outside my major, had a broad perspective which served many majors.

Year	College	Strongly Agree/ Agree %	Undecided %	Disagree/ Strongly Disagree %
1982	Natural Science	45	35	19
	Lyman Briggs	40	39	21
1975	Natural Science	50	31	19
	Lyman Briggs	55	25	20
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 35.

I helped organize and conduct an opinion or information poll (e.g., Gallup or Roger-type) at school or in the community.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	92	6	3
	Lyman Briggs	83	11	6
1975	Natural Science	89	8	3
	Lyman Briggs	89	8	3
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 36.

I built or improved upon a piece of scientific equipment or laboratory apparatus on my own (not as part of a course requirement).

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	85	6	8
	Lyman Briggs	74	8	19
1975	Natural Science	79	14	7
	Lyman Briggs	72	14	14
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 37.

I was a primary organizer of a student or community service group.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	80	13	7
	Lyman Briggs	51	15	34
1975	Natural Science	72	15	13
	Lyman Briggs	75	14	11
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 38.

I was elected to one or more student offices.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	83	11	6
	Lyman Briggs	49	19	32
1975	Natural Science	73	14	14
	Lyman Briggs	75	8	17
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 39.

I served on a student-faculty committee or group.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	92	6	3
	Lyman Briggs	62	19	19
1975	Natural Science	86	9	5
	Lyman Briggs	75	14	11
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 40.

I was elected president of a special interest student club.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	97	1	2
	Lyman Briggs	77	19	4
1975	Natural Science	89	8	3
	Lyman Briggs	92	6	3
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 41.

I worked as a volunteer aide in a hospital, clinic, or home.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	66	21	13
	Lyman Briggs	45	21	34
1975	Natural Science	72	13	15
	Lyman Briggs	75	11	14
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 42.

I worked as a volunteer on a school or civic improvement project.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	80	10	10
	Lyman Briggs	47	26	26
1975	Natural Science	74	14	13
	Lyman Briggs	72	22	6
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 43.

I attended meetings of one or more local civic groups.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	74	13	13
	Lyman Briggs	66	17	17
1975	Natural Science	74	13	13
	Lyman Briggs	81	11	8
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 44.

I had contact with a local official about some community problem.

Year	College	None %	One Time %	Two Times or More %
1982	Natural Science	85	11	5
	Lyman Briggs	68	21	11
1975	Natural Science	74	18	8
	Lyman Briggs	83	11	6
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 46.

I acquired a broad cultural background.

Year	College	Dramatic Progress/ Considerable %	Moderate Progress/ Some Progress %	No Progress %
1982	Natural Science	43	47	-
	Lyman Briggs	66	34	-
1975	Natural Science	57	43	1
	Lyman Briggs	52	44	3
1971	Natural Science	46	28	27
	Lyman Briggs	39	35	26

Table 47.

I developed the ability to think critically and to understand the uses and limitations of knowledge.

Year	College	Dramatic Progress/ Considerable %	Moderate Progress/ Some Progress %	No Progress %
1982	Natural Science	81	19	-
	Lyman Briggs	81	19	-
1975	Natural Science	80	19	-
	Lyman Briggs	71	19	-
1971	Natural Science	70	22	19
	Lyman Briggs	69	22	10

Table 48.

I developed an understanding for different world views, cultures and ways of life.

Year	College	Dramatic Progress/ Considerable %	Moderate Progress/ Some Progress %	No Progress %
1982	Natural Science	51	45	5
	Lyman Briggs	68	42	-
1975	Natural Science	58	42	-
	Lyman Briggs	69	28	3
1971	Natural Science	51	33	15
	Lyman Briggs	43	43	14

Table 49.

Social development--gaining skill in relating to other people.

Year	College	Dramatic Progress/ Considerable %	Moderate Progress/ Some Progress %	No Progress %
1982	Natural Science	68	28	5
	Lyman Briggs	72	26	2
1975	Natural Science	73	27	-
	Lyman Briggs	69	28	3
1971	Natural Science	62	24	14
	Lyman Briggs	59	28	14

Table 50.

Personal development--understanding myself, my abilities and limitations, and my place in society.

Year	College	Dramatic Progress/ Considerable %	Moderate Progress/ Some Progress %	No Progress %
1982	Natural Science	75	23	2
	Lyman Briggs	81	19	-
1975	Natural Science	75	23	2
	Lyman Briggs	84	14	1
1971	Natural Science	66	17	17
	Lyman Briggs	65	22	14

Table 51.

To what extent did your experience in a residence hall positively contribute to your total education at MSU?

Year	College	Very Much/ Substantially %	Moderately/ Slightly %	Not Not	At All, or Applicable %
1982	Natural Science	28	40		32
	Lyman Briggs	36	42		23
1975	Natural Science	45	40		14
	Lyman Briggs	58	39		6
1971	Natural Science	50	27		23
	Lyman Briggs	51	20		29

Table 52.

To what extent did your college or major department afford you the opportunity to have informal contacts with faculty outside the classroom?

Year	College	Very Much/ Substantially %	Moderately/ Slightly %	Not Not	At All, or Applicable %
1982	Natural Science	24	55		21
	Lyman Briggs	76	21		4
1975	Natural Science	30	36		24
	Lyman Briggs	78	20		3
1971	Natural Science	26	27		48
	Lyman Briggs	67	26		8

Table 53.

To what extent was the individual academic advising in your college or major department helpful to you?

Year	College	Very Much/ Substantially %	Moderately/ Slightly %	Not Not	At All, or Applicable %
1982	Natural Science	32	46		22
	Lyman Briggs	62	28		9
1975	Natural Science	25	54		20
	Lyman Briggs	43	49		9
1971	Natural Science	34	19		47
	Lyman Briggs	43	28		29

Table 54.

To what extent were faculty members of your college or department receptive to differing views?

Year	College	Very Much/ Substantially %	Moderately/ Slightly %	Not Not	At All, or Applicable %
1982	Natural Science	24	60		16
	Lyman Briggs	56	39		6
1975	Natural Science	26	56		18
	Lyman Briggs	42	56		3
1971	Natural Science	34	49		17
	Lyman Briggs	69	29		2

Table 55.

To what extent have fellow students provided a positive influence on your educational achievements?

Year	College	Very Much/ Substantially %	Moderately/ Slightly %	Not Not %	At All, or Applicable %
1982	Natural Science	53	43		5
	Lyman Briggs	64	36		-
1975	Natural Science	59	36		4
	Lyman Briggs	55	33		11
1971	Natural Science	57	23		20
	Lyman Briggs	63	22		16

Table 56.

Regarding your participation in a social fraternity or sorority, during your MSU career, you--

Year	College	Never Joined/ Never Joined Considered %	Pledged/ Pledged In- itiated %	Pledged, Cont. Membership %
1982	Natural Science	89	6	6
	Lyman Briggs	87	2	11
1975	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 57.

Students should be permitted to sit as voting members on the MSU Board of Trustees.

Year	College	Yes %	No %	No Opinion %
1982	Natural Science	64	15	22
	Lyman Briggs	62	26	11
1975	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 58.

Classes discussing more contemporary issues.

Year	College	Desirable/ Good %	Undesirable %	No Basis %
1982	Natural Science	81	3	7
	Lyman Briggs	92	2	6
1975	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 59.

Student representation on administrative committees
(academic council, departments, etc.)

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	85	2	13
	Lyman Briggs	87	-	13
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 60.

Student involvement in evaluating faculty members.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	88	-	2
	Lyman Briggs	86	2	2
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 61.

Reduction in the number of required courses and increase in number of electives permitted.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	82	15	3
	Lyman Briggs	85	9	6
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 62.

Provision in class to pursue individual interests.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	89	4	7
	Lyman Briggs	93	4	4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 63.

Students developing areas of concentration apart from one department (e.g., ecology, environmental or interdisciplinary programs).

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	88	3	9
	Lyman Briggs	91	-	9
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 64.

Using individualized programmed learning, such as audio-tutorial methods or programmed tests.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	50	35	15
	Lyman Briggs	43	45	11
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 65.

Assigning grades on pass-no grade, or credit-no credit basis.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	59	28	13
	Lyman Briggs	57	28	15
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 66.

Using television as an instructional medium.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	33	58	9
	Lyman Briggs	28	70	2
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 67.

Field work outside of the classroom being used as a complement to the regular class.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	83	2	6
	Lyman Briggs	93	-	8
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 68.

Provision being made for life-long or adult education.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	73	3	25
	Lyman Briggs	79	-	21
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 69.

Relaxing university regulations governing student behavior.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	78	15	7
	Lyman Briggs	77	19	4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 70.

Student involvement in how classes are to be conducted.

Year	College	Desirable/		No Basis
		Good %	Undesirable %	
1982	Natural Science	80	9	6
	Lyman Briggs	94	4	2
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 71.

Many classes, outside of specialized areas, considering general widespread issues (pollution, ecology, consumerism, etc.).

Year	College	Desirable/ Good %	Undesirable %	No Basis %
1982	Natural Science Lyman Briggs	86 85	5 4	9 11
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 72.

Providing opportunities to do independent study for credit.

Year	College	Desirable/ Good %	Undesirable %	No Basis %
1982	Natural Science Lyman Briggs	93 91	3 2	5 8
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 74.

Do you feel that you now have an adequate religious faith or personal philosophy which serves as a guide for your personal conduct?

Year	College	Yes %	No %	Undecided %
1982	Natural Science Lyman Briggs	89 87	7 4	4 9
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 75.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with closer contact with faculty.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	16 77	20 17	40 4	24 2
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	5 59	22 29	46 8	27 4

Table 76.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with more individualized attention.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	8 64	24 25	42 8	25 4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	3 61	14 29	53 8	30 2

Table 77.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with more specialized training.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	16 36	37 36	28 25	18 4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	26 10	37 27	27 33	11 29 (2. omits)

Table 78.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with broader training.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	9 40	33 25	38 25	20 6
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	7 29	28 47	40 22	26 3

Table 79.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with less competition.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	7 2	9 12	27	
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	0	20	14	65

Table 80.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with more personal freedom.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	14 25	24 40	40 28	23 8
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	9 18	28 39	41 37	23 4 (2% omits)

Table 81.

I believe that my college or major department, in contrast to other colleges or major departments on campus, provided me with more tolerant faculty.

Year	College	Definitely %	Probably %	Uncertain %	Not At All %
1982	Natural Science Lyman Briggs	5 26	32 41	42 26	22 8
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE			
1971	Natural Science Lyman Briggs	6 20	21 53	52 25	21 2

Table 82.

Much student-to-student interaction in class.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science	33	59	7
	Lyman Briggs	42	55	4
1975	Natural Science			
	Lyman Briggs			
1971	Natural Science			
	Lyman Briggs			

Table 83.

The professor should determine what work is to be done in the course.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science	67	31	2
	Lyman Briggs	43	57	-
1975	Natural Science			
	Lyman Briggs			
1971	Natural Science			
	Lyman Briggs			

Table 84.

The students should determine what work is to be done in the course.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science Lyman Briggs	4 2	62 75	35 23
1975	Natural Science Lyman Briggs			
1971	Natural Science Lyman Briggs			

Table 85.

The course should be presented on an individual or audio-tutorial basis.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science Lyman Briggs	13 4	36 42	52 54
1975	Natural Science Lyman Briggs			
1971	Natural Science Lyman Briggs			

Table 86.

The professor should have time for students outside of class.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science	94	6	-
	Lyman Briggs	93	8	-
1975	Natural Science			
	Lyman Briggs			
1971	Natural Science			
	Lyman Briggs			

Table 87.

I'd like to be known well enough to be called by my first name in class.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science	58	27	15
	Lyman Briggs	55	43	2
1975	Natural Science			
	Lyman Briggs			
1971	Natural Science			
	Lyman Briggs			

Table 88.

Individualized help should be provided for students having academic difficulty.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science	83	17	-
	Lyman Briggs	77	23	-
1975	Natural Science			
	Lyman Briggs			
1971	Natural Science			
	Lyman Briggs			

Table 89.

Special honors programs should be available for students of exceptionally high ability.

Year	College	Very Important %	Of Some Importance %	Not Important %
1982	Natural Science	71	26	4
	Lyman Briggs	70	26	4
1975	Natural Science			
	Lyman Briggs			
1971	Natural Science			
	Lyman Briggs			

Table 90.

Activities sponsored by a religious organization.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	66	25	10
	Lyman Briggs	66	21	13
1975	Natural Science	65	26	8
	Lyman Briggs	75	14	11
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	DATA NOT AVAILABLE		

Table 91.

Participated in student government.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	79	15	6
	Lyman Briggs	47	23	30
1975	Natural Science	78	15	7
	Lyman Briggs	78	14	8
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	51	31	16

Table 92.

Department or college academic governance.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	91	7	2
	Lyman Briggs	59	21	21
1975	Natural Science	85	8	7
	Lyman Briggs	75	14	11
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	63	22	14

Table 93.

Literary, oratorical, or dramatic activities.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	82	16	3
	Lyman Briggs	64	23	13
1975	Natural Science	86	12	2
	Lyman Briggs	83	11	6
1971	Natural Science			
	Lyman Briggs	86	10	4

Table 94.

Intramural athletics.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	31	37	24
	Lyman Briggs	21	40	40
1975	Natural Science	37	33	30
	Lyman Briggs	28	39	33
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	39	37	25

Table 95.

Musical, dance or other fine arts activities.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	62	19	19
	Lyman Briggs	32	32	36
1975	Natural Science	60	25	15
	Lyman Briggs	53	22	25
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	59	33	8

Table 96.

Workshops, lectures or organized discussions not related to class assignments.

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	36	52	12
	Lyman Briggs	11	51	38
1975	Natural Science	35	50	14
	Lyman Briggs	25	58	17
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	18	63	18

Table 97.

Special interest clubs (photography, sailing, etc.).

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science	58	22	20
	Lyman Briggs	40	32	28
1975	Natural Science	60	26	14
	Lyman Briggs	64	28	8
1971	Natural Science	DATA NOT AVAILABLE		
	Lyman Briggs	51	35	10

Table 98.

Volunteer programs (tutoring, aid to the blind, MSU Volunteers-Service Learning).

Year	College	Did Not Participate %	Participated But Not Frequently %	Participated Often or Regularly %
1982	Natural Science Lyman Briggs	67 45	16 19	16 36
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	63	18	18

Table 99.

How well informed do you presently consider yourself to be in regard to national and international affairs?

Year	College	Very Well Informed %	Fairly Well %	Not Very Well Informed/ Uninformed %
1982	Natural Science Lyman Briggs	30 23	46 49	24 28
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 100.

Were the placement examinations (Mathematics, Arithmetic, Reading) helpful in placing you into proper entrance levels in these areas?

Year	College	Yes %	No %	Not Applicable %
1982	Natural Science Lyman Briggs	51 55	25 88	24 8
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 101.

Have your major reasons for attending MSU been realized up to this time?

Year	College	Definitely Yes/Mostly	Probably %	Uncertain %	No %
		Yes %			
1982	Natural Science Lyman Briggs	75 84	8 4	4 2	13 9
1975	Natural Science Lyman Briggs	74 63	6 11	1 17	13 8
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE			

Table 102.

I would rather decide things when they come up than try to plan ahead.

Year	College	Strongly Agree/ Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	25 11	51 70	25 19
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 103.

Competition encourages excellence.

Year	College	Strongly Agree/Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	57 59	31 32	12 8
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 104.

There's not much use for me to plan ahead because there's usually something that upsets my plans.

Year	College	Strongly Agree/ Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	17 13	58 70	26 16
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 105.

I nearly always feel pretty sure of myself and maintain my composure when people disagree with me.

Year	College	Strongly Agree/Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	91 85	8 11	1 4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 106.

For the well-prepared student, there is rarely if ever such a thing as an unfair test.

Year	College	Strongly Agree/ Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	31 12	38 42	31 46
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 107.

Exam questions often tend to be so unrelated to course work that studying is really useless.

Year	College	Strongly Agree/Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	7 14	55 67	38 19
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 108.

Becoming a success is a matter of diligent work; luck has little or nothing to do with it.

Year	College	Strongly Agree/ Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	66 49	27 47	7 4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 109.

Leadership positions tend to be held by capable people who deserve being chosen.

Year	College	Strongly Agree/Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	46 42	38 40	16 19
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 110.

When I make careful plans I am almost certain that I can make them work.

Year	College	Strongly Agree/ Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	94 88	7 11	- -
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 111.

Women should have complete equality with men in social, political and economic matters.

Year	College	Strongly Agree/Agree %	Disagree %	Strongly Disagree %
1982	Natural Science Lyman Briggs	93 98	6 2	1 -
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 115.

The help and guidance you received as a junior and/or senior.

Year	College	Very Helpful/ Helpful %	Not Much Help %	Not Relevant- No Experience %
1982	Natural Science Lyman Briggs	49 75	40 23	11 2
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 116.

The help and guidance you received as a freshman and/or sophomore.

Year	College	Very Helpful/ Helpful %	Not Much Help %	Not Relevant- No Experience %
1982	Natural Science Lyman Briggs	27 59	46 36	26 4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 117.

The help and guidance you received from college academic affairs office.

Year	College	Very Helpful/ Helpful %	Not Much Help %	Not Relevant- No Experience %
1982	Natural Science Lyman Briggs	16 31	27 31	56 39
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 118.

My advisor's attitude toward my personal problems.

Year	College	Very Helpful/ Helpful %	Not Much Help %	Not Relevant- No Experience %
1982	Natural Science Lyman Briggs	39 56	30 14	31 31
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 119.

My advisor's knowledge of MSU resources.

Year	College	Very Helpful/ Helpful %	Not Much Help %	Not Relevant- No Experience %
1982	Natural Science Lyman Briggs	59 79	29 17	12 4
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

Table 120.

My advisor's help in selecting courses.

Year	College	Very Helpful/ Helpful %	Not Much Help %	Not Relevant- No Experience %
1982	Natural Science Lyman Briggs	55 73	35 25	10 2
1975	Natural Science Lyman Briggs	DATA NOT AVAILABLE		
1971	Natural Science Lyman Briggs	DATA NOT AVAILABLE		

APPENDIX D

THE INSTRUMENT "SENIOR EXPRESSION"

November 9, 1981

SENIOR EXPRESSION

Dear Lyman Briggs and Natural Science Senior,

As we continue to work at improving our programs and services to you, it is essential to know your views and assessment of the educational experience you have had as a student in our college. The questionnaire we are asking you to complete and return basically asks for this kind of information. We encourage your cooperation and assistance in this effort.

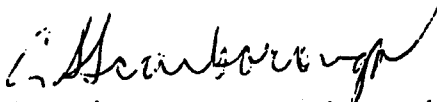
The survey takes approximately 25 minutes to complete, the information collected is strictly confidential and gives you an opportunity to express your views about your experience here at Michigan State University.

We strongly encourage your support

Sincerely,



Dr. Richard U. Byerrum
Dean, College of Natural Science



Dr. Charles S. Scarborough
Director, Lyman Briggs School

DIRECTIONS

1. You have been provided with a return address stamp envelope, an answer sheet, and a scoring pencil (yours to keep).
2. Please take the answer sheet and print in the appropriate blocks your name (last name first) and your student number. Please use the pencil provided.
3. Next code your name and student number by marking the appropriate spaces corresponding to the letters of your name and numbers in your student number.
4. Your responses will never be identified by individual, only by group.
5. Please begin with question #1 on the five choice answer sheet.
6. When complete, please single fold the answer sheet and enclose in the pre-addressed stamped envelope and place in the mail (U.S. or campus).

Please indicate response on answer sheet.

- KEY: 1. Strongly agree
2. Agree
3. Undecided
4. Disagree
5. Strongly disagree

1. Please indicate:
 1. Male
 2. Female
2. Are you in Honors College?
 1. Yes
 2. No
3. Where are you now living?
 1. Off-Campus Housing
 2. Fraternity or Sorority House
 3. Holmes Hall
 4. Other MSU Residence Hall
 5. Other
4. How many terms have you lived in a MSU resident Hall (including this term)?
 1. 9 or more
 2. 6-8 terms
 3. 3-5 terms
 4. Less than three
 5. Did not live in an MSU Residence Hall
5. What is your marital status?
 1. Single
 2. Married
 3. Divorced
 4. Widowed
6. When do you plan to graduate?
 1. Fall '81
 2. Winter '82
 3. Spring '82
 4. Summer '82
 5. Don't know
7. If you find yourself getting into academic difficulty, where do you go first for help? (mark only one)
 1. Instructor
 2. Academic Advisor
 3. Residence Hall Staff Member
 4. Classmate
 5. Friend

I feel that my college or major department--

8. has given me a sense of identity with an academic community.
9. has provided an opportunity for being part of a meaningful social group.
10. has given me the opportunity to participate in academic decision-making.
11. is responsive to the needs of students.
12. treats me as though I am of some importance as an individual.
13. has provided an intellectually stimulating environment.
14. has helped me to develop life goals, values and standards.
15. has helped me become more sensitive to ethical issues.
16. has provided the opportunity for me to get individual attention, when needed, from faculty.
17. has afforded me an adequate choice of electives apart from the specialized requirements for my major.
18. has afforded me a program of studies relevant to the problems of society.

GENERAL ATTITUDES ABOUT MSU

For questions 19-25 select a response from the following key.

- KEY: 1. Strongly agree
2. Agree
3. Undecided
4. Disagree
5. Strongly disagree

Questions 8-18 are concerned with experience you have had in your college or major department. (By this is meant the college that will grant your degree, Lyman Briggs or Natural Science). For questions 8-18 select a response from the following key.

19. I feel that I have received a good education at MSU.

- 20. I feel prepared for a job related to my field of study.
- 21. I feel that my experience at MSU has been socially rewarding.
- 22. I am sorry that I came to MSU rather than to another school.
- 23. In retrospect, I wish I had selected a different major.
- 24. I feel prepared for graduate or professional education.

* * * * *

- 25. Do you feel that your education makes you competitive in the present job market?

- 1. Definitely yes
- 2. Probably yes
- 3. Perhaps
- 4. No, I do not

For items 26-35 please select a response from the following key.

- KEY: 1. Strongly agree
 2. Agree
 3. Uncertain
 4. Disagree
 5. Strongly disagree

Generally speaking, I found my MSU professors--

- 26. were interested in teaching.
- 27. made relevant assignments.
- 28. were thorough in their evaluation.
- 29. were fair in their grading.
- 30. inspired me to learn.
- 31. were available for help when I needed it.
- 32. were sensitive to needs of individual students.
- 33. used effective teaching methods.
- 34. outside my major, had a broad perspective which served many majors.

Items 35-46 list experiences of "out-of-class" accomplishments you may have had while in college. Read each of these and indicate the extent of your experience in each area by using the following key.

- KEY: 1. None-have not had the experience.
 2. Had the experience one time or for a year of less.
 3. Had the experience two times or more or for more than a year.

- 35. Helped organize and conduct an opinion or information poll (e.g., Gallup, or Roper-type) at school or in the community
- 36. Built or improved upon a piece of scientific equipment or laboratory apparatus on my own (not as part of a course requirement)
- 37. Was a primary organizer of a student or community service group.
- 38. Elected to one or more student offices.
- 39. Served on a student-faculty committee or group.
- 40. Elected president of a "special interest" student club.
- 41. Worked as a volunteer aide in a hospital, clinic, or home.
- 42. Worked as a volunteer on a school or civic improvement project.
- 43. Attended meetings of one or more local civic groups.
- 44. Had contact with a local official about some community problem.

* * * * *

- 45. What recommendations would you make for the General Education Program at MSU?
 - 1. It is pretty good as it is now.
 - 2. It should have wider range of general education courses to choose from.
 - 3. It should enable students to concentrate more in an area of their own interest.
 - 4. Students should be able to develop their own program with regard to meeting the general education requirements.

Questions 46-57 list possible outcomes of a college education. Indicate the amount of progress you feel you have made toward each of these outcomes during your four years at MSU. For questions 47-51 please select a response from the following key.

- KEY: 1. Dramatic progress--one of my most conspicuous outcomes
2. Considerable progress
3. Moderate progress
4. Some progress
5. No progress

46. Acquiring a broad cultural background.
47. Developing the ability to think critically and to understand the uses & limitations of knowledge.
48. Understanding different world views, cultures and ways of life.
49. Social development--gaining skill in relating to other people.
50. Personal development--understanding myself, my abilities and limitations, and my place in society.

For questions 51-55 please select a response from the following key.

- KEY: 1. Very much
2. Substantially
3. Moderately
4. Slightly
5. Not at all, or not applicable

To what extent--

51. did your experience in a residence hall positively contribute to your total education at MSU?
52. did your college or major department afford you the opportunity to have informal contacts with faculty outside the classroom?
53. was the individual academic advising in your college or major department helpful to you?

54. were faculty members of your college or department receptive to differing views?
55. have fellow students provided a positive influence on your educational achievements?

56. Regarding your participation in a social fraternity or sorority, during your MSU career, you--
1. never joined, and never seriously considered joining, a fraternity or sorority.
 2. never joined, but did consider joining, a fraternity or sorority.
 3. pledged a fraternity or sorority, but never formally became a member (never were initiated).
 4. pledged and were initiated, but later dropped out of the group.
 5. pledged, were initiated, and have continued your membership to the present time.
57. Students should be permitted to sit as voting members on the MSU Board of Trustees.
1. Yes
 2. No
 3. No opinion

Items 58-72. A number of changes have occurred in higher education in the past ten years. How do you feel about the desirability of these changes?

- KEY: 1. Desirable--and more should be done
2. Good--as it is now
3. Undesirable--have already gone too far
4. No basis for giving a view

58. Classes discussing more contemporary issues
59. Student representation on administrative committees (academic council, departments, etc.)
60. Student involvement in evaluating faculty members
61. Reduction in the number of required courses and increase in number of electives permitted.

62. Provision in class to pursue individual interests
63. Students developing areas of concentration apart from one department (e.g. ecology, environmental or interdisciplinary programs)
64. Using individualized programmed learning, such as audio-tutorial methods or programmed tests
65. Assigning grades on pass-no grade, or credit-no credit basis
66. Using television as an instructional medium
67. Field work outside of the class room being used as a complement to the regular class
68. Provision being made for life-long or adult education
69. Relaxing university regulations governing student behavior
70. Student involvement in how classes are to be conducted
71. Many classes, outside of specialized areas, considering general widespread issues (pollution, ecology, consumerism, etc.)
72. Providing opportunities to do independent study for credit

73. If after graduation you seek but cannot find a job related to your specialized area, what will you do? Choose one.
 1. Take another available job while I keep searching
 2. Get training in another area where jobs are available
 3. Go on to further study or graduate work in my basic area
 4. Take graduate work in another area of concentration
 5. Don't know what I will do

74. Do you feel that you now have an adequate religious faith or personal philosophy which serves as a guide for your personal conduct?
 1. Yes
 2. No
 3. Undecided, don't know

Items 75-81 please select a response from the following key:

- | | |
|---------------|---------------|
| 1. Definitely | 3. Uncertain |
| 2. Probably | 4. Not at all |

I believe that my college or major department in contrast to other colleges or major departments on campus provided me with:

75. closer contact with faculty
76. more individualized attention
77. more specialized training
78. broader training
79. less competition
80. More personal freedom
81. more tolerant faculty

Items 82-89.

How important do you feel each of the following instructional activities should be?

- KEY: 1. Very important
 2. Of some importance
 3. Not important

82. Much student-to-student interaction in class
83. The professor should determine what work is to be done in the course.
84. The students should determine what work is to be done in the course.
85. The course should be presented on an individual or audio-tutorial basis.
86. The professor should have time for students outside of class.

- 87. I'd like to be known well enough to be called by my first name in class.
- 88. Individualized help should be provided for students having academic difficulty.
- 89. Special honors programs should be available for students of exceptionally high ability.

Questions 90-101 concern your participation in certain co-curricular activities during your MSU experience. For each question indicated whether you--

- KEY: 1. Did not participate at all
 2. Participated, but not frequently
 3. Participated often or regularly

- 90. Activities sponsored by a religious organization
- 91. Student government
- 92. Department or college academic governance
- 93. Literary, oratorical, or dramatic activities
- 94. Intramural athletics
- 95. Musical, dance or other fine arts activities
- 96. Workshops, lectures or organized discussions not related to class assignments.
- 97. Special interest clubs (photography, sailing, etc.)
- 98. Volunteer programs (tutoring, aid to the blind, MSU Volunteers-Service Learning)
- *****
- 99. How well informed do you presently consider yourself to be in regard to national and international affairs?

- 1. Very well informed
- 2. Fairly well informed
- 3. Not very well informed
- 4. Uninformed

- 100. Were the placement examinations (Mathematics, Arithmetic, Reading) helpful in placing you into proper entrance levels in these areas?
 1. Yes 2. No 3. Not applicable
- 101. Have your major reasons for attending MSU been realized up to this time?
 1. Definitely yes 2. Mostly yes
 3. Probably 4. Uncertain
 5. No

For items 102-111 indicate how you feel about the statement in each item.

- KEY: 1. Strongly agree 2. Agree
 3. Disagree 4. Strongly disagree

- 102. I would rather decide things when they come up than try to plan ahead.
- 103. Competition encourages excellence
- 104. There's not much use for me to plan ahead because there's usually something that upsets my plans.
- 105. I nearly always feel pretty sure of myself and maintain my composure when people disagree with me.
- 106. For the well-prepared student, there is rarely if ever such a thing as an unfair test.
- 107. Exam questions often tend to be so unrelated to course work that studying is really useless.
- 108. Becoming a success is a matter of diligent work; luck has little or nothing to do with it.
- 109. Leadership positions tend to be held by capable people who deserve being chosen.
- 110. When I make careful plans I am almost certain that I can make them work.
- 111. Women should have complete equality with men in social, political and economic matters.

112. About what percent of your college expenses came from your parents, spouse, or guardian?

1. None
2. 1-25%
3. 26-50%
4. 51-75%
5. 76-100%

113. About what percent of your college expenses came from personal earnings, personal loans, or savings?

1. None
2. 1-25%
3. 26-50%
4. 51-75%
5. 76-100%

114. About what percent of your college expenses came from grants-in-aid or scholarships (e.g., college, public or private agency, including G.I. Bill)?

1. None
2. 1-25%
3. 26-50%
4. 51-75%
5. 76-100%

Academic Advisement

Items 115-120. Consider the assistance you received from your ACADEMIC ADVISOR.

- KEY: 1. Very helpful
2. Helpful
3. Not much help
4. Not relevant - no experience

115. The help and guidance you received as a junior and/or senior

116. The help and guidance you received as a freshman and/or sophomore

117. The help and guidance you received from college academic affairs office

118. My adviser's attitude toward my personal problems

119. My adviser's knowledge of MSU resources

120. My adviser's help in selecting courses

CAREER COUNSELING AND FUTURE PLANS

121. In thinking about your occupational future, which of the following do you feel you will have a preference for in the long run? (Select one of the eight responses in item 121 or item 122)

1. An academic life (teaching research, other scholarly work)
2. A business life
3. A professional life (doctor, lawyer, engineer, etc.)
4. A life of a trained technician or craftsman
5. A life centering upon some aspect of the creative arts

122. (Future continued)

1. A life centering upon a home and a family
2. Other
3. I have not given sufficient thought to this matter to say

123. What do you plan to do immediately after graduation? (Select one of the ten responses in item 123 or 124)

1. Attend a graduate or professional school
2. Take a position in government service
3. Take a position in business or industry
4. Take a teaching position
5. Go into military service
(Continued in item 125)

124. (plans continued)

1. Join the Peace Corps, Vista, or some similar volunteer organization
2. Become a homemaker
3. Take any job I can get
4. I have no definite plans
5. Other

125. If you could have your own choice in the matter, in which kind of firm, organization, or situation would you prefer to work after you finish your schooling? Mark only the one of the nine alternatives in either item 125 or 126 that applies.

1. Own business (or farm)
2. Small business firm
3. Medium to large firm or corporation
4. Own professional office (e.g., law office, dental office)
5. An educational institution (e.g., high school, college)

126. (work continued)

1. A public or private research organization
2. A public or private welfare agency
3. Government service (other than research, welfare or military)
4. Other firm, organization or situation

* * * * *

127. Have you had formal career or vocational counseling while at MSU? (Check the major experience.)

1. Yes, as a freshman
2. Yes, as a sophomore
3. Yes, as a junior
4. Yes, as a senior
5. No

128. If you sought formal career or vocational counseling, where did you go for help? (Please check the principle source.)

1. Counseling Center
2. My Academic Adviser
3. From some other source
4. I wanted help but didn't know where to go.
5. I did not seek career counseling.

129. If you received career or vocational counseling, how satisfied were you?

1. Very satisfied
2. Satisfied
3. Undecided
4. Dissatisfied
5. Not applicable - I did not seek help.

Items 130-132. Winter term 1981 the Board of Trustees at Michigan State University declared the university to be in a financial crisis. For questions 130-132 please select the response that best corresponds with your awareness or involvement.

130. Were you aware of the financial crisis at MSU during the winter and spring of 1981?

1. Yes
2. No

131. If you answered 'yes' to 130, did you actively support any of the programs scheduled for elimination?

1. Yes
2. No

132. If yes, how were you involved?

1. Wrote a letter to the Board of trustees or the President.
2. Wrote a letter to a state senator or representative
3. Marched in protest of the budget cuts
4. Actively worked with other students, faculty, or staff on special projects or presentations.
5. Was supportive of a cause but did not get involved.