

This is to certify that the

dissertation entitled

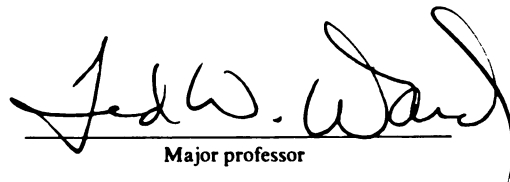
IDENTIFYING AND DESCRIBING DISCERNING QUALITY
IN STUDENT-FACULTY INFORMAL INTERACTION

presented by

Mark Alan Lamport

has been accepted towards fulfillment
of the requirements for

Ph.D degree in Department of
Teacher Education


Major professor

Date 6-26-86



RETURNING MATERIALS:
Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

440137

JUN 6 1997

192

210 K6

~~11 22 1993~~

~~4 11 1992~~

IDENTIFYING AND DESCRIBING DISCERNING QUALITY
IN STUDENT-FACULTY INFORMAL INTERACTION

By

Mark Alan Lamport

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

DOCTOR OF PHILOSOPHY

Department of Administration and Curriculum

1986

Copyright by

MARK ALAN LAMPORT

1986

ABSTRACT

IDENTIFYING AND DESCRIBING DISCERNING QUALITY IN STUDENT-FACULTY INFORMAL INTERACTION

By

Mark Alan Lamport

Numerous opinion articles speculate concerning the value of student-faculty informal interaction in American higher education. Does informal interaction make a difference in student's college experience? What characteristics tend to foster or diminish personal relationships between students and faculty?

Research Questions

Specifically, the following questions are addressed:

1. What are the student's expectations and perceptions of informal interaction, and how has the informal interaction influenced various college outcomes?
2. What specific attributes characterize the most and least informally interacting faculty?
3. What contexts do students identify as most significant in informal interaction with faculty?
4. How does the actual level of social distance between students and faculty compare with the student's desired level?

Mark Alan Lamport

5. Does gender, grade point average or academic division correlate with informal interacting tendencies?

Procedures

Exit interviews are conducted at a single institution north of Boston, Massachusetts. The college is a small four-year, Christian liberal arts school. Fixed questions, open-ended questions, and several rank-order card sorts are used to gather data.

Analyses of responses are calculated for the sample (N=40), and select subsets. Correlations are analyzed for three subset groupings: (1) males and females, (2) above and below the class mean grade point average, and (3) Humanities/Natural Science and Social Science/Education academic divisions.

Results and Implications

Students identified informal interaction with faculty to have positive influence on personal, intellectual, vocational, and educational planning development. Students considered informal interaction with faculty to be important in the overall college experience.

Interacting faculty were described as personable and caring. The most significant contexts for informal interaction were faculty offices, after class, and in the student cafeteria. Students desired to work with faculty on some

Mark Alan Lamport

sort of collaborative project due to the informal time involved. Students wanted significantly more informal interaction than was being experienced.

The findings suggest practical implications for administrators, students, and faculty.

To my wife, Cheryl, who has

prepared	encouraged	organized	adapted
cancelled	read	silenced	moved
waited	rearranged	endured	assured

and my children,

Rachel Louise, Aaron Keith, Emily Jean, Amy Kay.

ACKNOWLEDGMENTS

I wish to express my warmest appreciation to Dr. Ted Ward for his analytical abilities and metaphorical illustrations that kept me from straying down precarious paths. His rude awakenings and tender care combined to provide me with a most thoroughly fulfilling doctoral program. I am also grateful to the members of my Ph.D. committee, Dr. Charles A. Blackman, Dr. Richard L. Featherstone, Dr. Louis F. Hekhuis, and Dr. Peggy L. Riethmiller for their helpful critiques and support. Many thanks also go to Mrs. Geneva Speas for her kindness and helpfulness.

Gratefulness goes to Rev. David Gruelich and Rev. Dale Woods for hiring me and to Trinity Evangelical Congregational Church (Reading, PA) and Corunna Free Methodist Church (MI) for not firing me. I am indebted to Dr. Wayne Clugston and Spring Arbor College for giving me a teaching start, and Dr. R. Judson Carlberg and Gordon College for a light and flexible teaching load during the writing of the dissertation.

I have been helped along my (seemingly eternal) academic career by Dr. J. Duane Beals, who offered excellent advice, and Dr. David A. Dorsey, who modeled many of the

positive qualities of student-faculty informal interaction with me and many others.

Thanks also is extended to Janie Dunfee, an SPSS programming wizard, and Bob Joss, a statistically "significant" contributor.

Finally, relief will be experienced by my supportive yet bewildered parents who have had to tell countless friends that their aging son is still a student.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	x
 Chapter	
I. THE PROBLEM	1
Background of the Study	2
Statement of the Problem	5
Importance of the Study	6
Research Questions	8
Overview of Methodology	9
Definition of Terms	9
Delimitations of the Study	10
Limitations of the Study	11
Perspectives Within the Research	12
Organization of Subsequent Chapters	13
II. REVIEW OF RELATED LITERATURE	14
Faculty as Agents of Socialization	14
Academic Achievement	18
Satisfaction with College	20
Intellectual and Personal Development	21
Persistence and Attrition	23
Career and Educational Aspirations	28
Faculty Interpersonal Characteristics	31
Classroom Atmosphere and Evaluation	33
Research Precedents	35
Summary	39
III. PROCEDURE OF INQUIRY	40
Overview of Methodology	40
Research Questions	40
Population	42
Sampling Procedure	42
Instrumentation	43
Orientation to the Interview	44

	Page
Content of the Interview	45
Pursuit of the Discussion	51
Pilot Study	53
Pilot Study Findings	53
Limitations of the Study	55
Summary	57
IV. PRESENTATION AND ANALYSIS OF DATA	58
Data Analysis	59
Student Expectations and Perceptions....	59
Qualities of Interacting Faculty.....	72
Contexts of Informal Interaction.....	86
Student-Faculty Social Distance.....	93
Interaction Tendency Correlations.....	99
Gender of Students.....	99
Grade Point Average of Students.....	103
Academic Division of Students.....	109
Summary	114
V. CONCLUSIONS.....	116
College Outcomes and Informal Interaction.	117
Faculty Teaching and Student Interest.....	120
Qualities of Faculty Interaction.....	122
The Interactive Climate on Campus.....	122
Implications of the Study.....	124
Recommendations for Further Research.....	129
APPENDICES	132
A. LETTER TO STUDENTS WHO WERE SELECTED FOR THE SAMPLE	132
B. SELECTED DEMOGRAPHIC DATA ON THE STRATIFIED SAMPLE	133
C. STATEMENTS FROM GORDON COLLEGE DESCRIBING STUDENT-FACULTY INFORMAL INTERACTION.....	135
REFERENCES	138

LIST OF TABLES

Table	Page
1. Means and Standard Deviations for College Outcomes Scale	60
2. Percentage Responses for College Outcomes Scale	60
3. Personal Growth Responses	61
4. Intellectual Growth Responses	62
5. Career Goals and Educational Aspirations Responses	64
6. Close Relationships Responses	65
7. Interaction Satisfaction Responses	67
8. Importance of Student-Faculty Interaction for Four-Year College Experience	68
9. Means and Standard Deviations for Faculty Teaching and Student Interest Scale	72
10. Percentage Responses for Faculty Teaching and Student Interest Scale	73
11. Faculty Interest in Students	74
12. Faculty as Superior Teachers	75
13. Faculty Discussion with Students Out of Class	76
14. Faculty Helping Students in More Than Academics	77
15. Faculty Interested in Teaching	78

Table	Page
16. Ranking, Characteristics, and Weighted Scores of Most Important Ideal Professor Characteristics	81
17. Significant Intercorrelation Coefficients for Ranked Characteristics of Ideal Professor	82
18. Ranked Order of Most Informal Contexts	86
19. Frequency, Percent, and Cumulative Percent of Students Visiting Faculty Homes	88
20. Student-Faculty Project Participation Summary ...	89
21. Non-participants' Future Desire for Student-Faculty Projects	91
22. Participants' Future Desire for Student-Faculty Projects	91
23. Characteristics, Frequency, and Percent of Present Social Distance Between Students and Faculty	94
24. Characteristics, Frequency, and Percent of Desired Social Distance Between Students and Faculty	95
25. Frequency and Percent Comparing Current and Future Social Distance	96
26. Changes in Social Distance from Most to Least Desired by Students Comparing from NOW to FUTURE	97
27. Comparable Data Findings for Perceived and Desired Social Distance Between Fiebert and Present Study	98
28. Male/Female Correlations for College Outcomes Scale	99
29. Male/Female Correlations for Faculty Teaching and Student Interest Scale	100
30. Male/Female Comparison of Faculty Characteristic Ranking	101
31. Male/Female Means and Standard Deviations for Present and Desired Social Distance	102

Table	Page
32. Above/Below the Mean Grade Point Average Correlations for College Outcomes Scale	104
33. Above/Below the Mean Grade Point Average Correlations on the Faculty Teaching and Student Interest Scale	105
34. Above/Below the Mean Grade Point Average Comparison of Faculty Characteristics	107
35. Above/Below the Mean Grade Point Average Means and Standard Deviations for Present and Desired Social Distance	108
36. Academic Division Correlations for College Outcomes Scale	109
37. Academic Division Correlations on the Faculty Teaching and Student Interest Scale	110
38. Academic Division Comparison of Faculty Characteristics	111
39. Academic Division Means and Standard Deviations for Present and Desired Social Distance	113

LIST OF FIGURES

Figure	Page
1. Subsets in the Sample.....	44
2. College Outcomes Card Sort Statements.....	46
3. Faculty Teaching and Student Interest Scale Statements.....	47
4. Characteristics of the "Ideal" Professor.....	48
5. Social Distance Statements.....	50

CHAPTER I

THE PROBLEM

The purpose of the study is to identify characteristics of quality in student-faculty informal interaction. The inquiry describes students' perceptions and expectations of the interaction and explores students' descriptions of personal college outcomes. Forty college seniors from a small liberal arts college in New England are interviewed regarding their experiences and opinions of student-faculty informal interaction. Data are gathered on the student's description of the most and least desirable qualities of the "ideal" interacting professor, the most common contexts conducive to significant informal interaction, social distance between students and faculty, and correlations between males and females, academic divisions, and higher and lower grade point averages as it relates to student-faculty informal interaction.

Chapter I includes the background of the problem, statement of the problem, importance of the study, research questions, overview of methodology, definition of terms, delimitations of the study, limitations of the study,

perspectives within the research, and organization of subsequent chapters.

Background of the Problem

An abiding expectation of American higher education is a close working relationship between faculty and undergraduate students. Informal interaction between students and faculty is assumed to enhance the college experience. In the last quarter century, researchers have begun to explore the informal nature of the student-faculty relationship.

In a synthesis of studies conducted in 22 institutions, Jacob (1957) reports one of the early studies in the area of faculty impact upon students. Although skeptical about students being significantly influenced by faculty, Jacob concludes where affiliations between students and faculty are normal, frequent, and unhurried, faculty influence is more distinct. Comparable conclusions were drawn by Eddy (1959) in a 20-institution study of impacts on student character.

The decade of the 1960's witnessed a sustained effort at the inclusion of college impacts in major research projects. Sanford (1962) introduced student-faculty interaction in his widely acclaimed compendium. Transmission of culture, student subcultures, and peer relationships were the subjects of Wallace's (1966) monograph.

Institutional characteristics, such as a bureaucratic atmosphere and growing impersonalism of faculty and

administration toward students, were brought to the fore during the rebellious campus years of the late 1960's. Katz (1968) conducted recurring interviews over a four-year period at Berkeley and Stanford on the dynamics of college impacts. Heath (1968) reports the results of a longitudinal study on sources of influence on student development.

The year 1969 appears to be a turning point in the study of student-faculty interaction. After an incubation period from Jacob (1957) that addressed the general topic of college outcomes, of which student-faculty interaction was a part, three major works were published in 1969 that exclusively addressed the specific nature of student-faculty informal interaction. Feldman and Newcomb (1969) summarized the growing yet limited research. The authors showed that student personal and intellectual development as well as career and educational aspirations can be effected by high levels of faculty interaction. Chickering's (1969) now classic work on the seven "vectors" in student development devotes significant space of his major research project to the impact of student-faculty informal interactions on student's identity formation. Astin and Panos' (1969) monograph presents reliable evidence for a significant amount of educational and vocational development of students who have had a high level of interaction with faculty members.

The mid-1970's research brought a shift in focus and form on the educational concern of student-faculty informal interaction. A weakness heretofore was that the data were

collected only from students. Wilson, Woods, and Gaff (1974) and Wilson et al. (1975) looked at the problem from the other vantage point--faculty response to student interaction--and gave some new perspectives to the developing field of inquiry. Also, research articles in educational, sociological, and psychological journals became the new forum for theory advancement in student-faculty interaction. Finally, not only the quantity (amount) of interaction was studied, but also the quality (type).

Summarily, in the early days of research on college impact, investigators were concerned with the general nature of the college experience. For example, implications of going to college were compared with implications of not going to college. With the expanding opportunities in higher education and institutional diversity, the question of college impact is coming to be one of comparative impact from different types of college experiences (Astin, 1970b). For example, inquiries are conducted comparing the effects on students who are residents and non-residents, traditional age and older reentry students, attenders of large, public universities and smaller private colleges, high-interacting and low-interacting student-faculty informal experiences.

In short, questions on student-faculty informal interaction are moving from what happens to how and why it is happening, and from the amount of interaction to the qualities of the student-faculty relationship. Overall, research, to varying degrees, is adding a new curricular

dimension of conceiving and planning for higher education. The amount and type of student-faculty interaction is positively and negatively associated with student development and the college experience.

Statement of the Problem

The general nature of the inquiry is to gain further insight into the socialization process in the college experience. Transmission of values occurs by various means at college. Peer culture, institutional factors, individual characteristics, and faculty all contribute to student worldview, identity formation, values, and development. The present study gives clues on the importance of the student-faculty informal relationship as contributory to the total college socialization process.

Higher education curriculum planning needs to be informed to a greater extent of the potentially valuable impacts of high quality student-faculty interaction. Thus far, modest yet statistically significant research has given credence to the prospects for influence of faculty upon students. However, the educational concern for student-faculty informal interaction is somewhat nominal. Student-faculty relationships are regarded by many as ancillary, non-academic experiences. Yet associations are made that link, to a significant degree, the impact of various college experiences upon the academic performance--one of which are student-faculty relationships. Therefore, research on

student-faculty informal interaction is an integral part of a more wholistic understanding of college students' academic and overall personal development.

The literature in higher education indicates a shift in conceptualizing about academic and non-academic issues. Modern writing refers to the "co-curricular" experiences, activities, or involvements of students rather than the once popular "extra-curricular" experiences. "Extra-" implies something that is "in addition to" or "an appendage of." "Co-" refers to "the mutual compatibility of various means toward the same goal."

Inquiry into the nature of student-faculty interaction, and the resultant effects upon the student, better informs the curriculum planning in higher education.

Importance of the Study

The pragmatic or opinion article on the role of student-faculty interaction is flourishing (Alciatore and Alciatore, 1979; Davis and Young, 1982; Kestol, 1975; Meloy, 1986; Oramaner, 1981; Reinfeld, 1976; Rhodes, 1975; Sinclair, 1977; Smith, 1976). A number of published articles recognize the potential worth of student-faculty interaction. A chapter is inserted into the recent update of Sanford's (1962) compendium on "student-faculty relationships" edited by Chickering and Associates (1981). Many experience the favorable consequences on behalf of students and teachers. Nonetheless, only a small body of research and theory

addresses student-faculty informal interaction (Endo and Harpel, 1982). Due to the popularity of the issue, and because of the growing positive implications from recent research, the quality of student-faculty interactions must be looked at more closely.

Philosophically and educationally, many concede the value of college goes beyond the transmission of factual material in the classroom. Knowledge is not the exclusive end of education, but a part of a process in which students become more learned concerning society and psyche. Sociologically and psychologically, support is being given to various "cultures" within the college experience that socialize values, attitudes, and beliefs within the student. One segment of the enculturation process is evidenced to be the faculty members who display various personal and professional attributes and who desire to contribute to student development outside the classroom.

The research conducted heretofore appears to be somewhat imbalanced as far as research design. Most inquiries into the nature of student-faculty informal interaction are correlative (e.g., Pascarella's and/or Terenzini's work), which have causal problems. Some are experimental (e.g., Alberti, 1972), which lack an adequate research base in testable hypotheses; and even fewer are interview (e.g., Gamson, 1967; Snow, 1973), which are needed to expand the research base and build a solid foundation for further investigation.

A prime concern of the present study is to employ a descriptive design (i.e., exit interviews) for a qualitative analysis of the qualities in student-faculty informal relationships. The interviews define characteristics both unique and common that tend to foster or diminish warm, informal interactions between students and faculty members. While some studies address the quantitative dimensions of student-faculty interaction, the present inquiry seeks to ask, what characteristics of the student-faculty relationship best enhance quality interaction?

Practical outcomes of the inquiry have forward-looking implications for teacher education, faculty development programs, higher education curriculum planning (formal and informal), the current faculty reward system, faculty course load assignments, in-class accessibility cues, and physical location of office space.

Perhaps large-scale institutional overhaul seems too monumental a task to accomodate the implications of informal interaction. Yet even on an individual faculty-to-faculty basis steps can be taken to foster informal interaction with students, which tend to work for the betterment of all parties involved.

Research Questions

The major research questions are the following:

1. What are the student's expectations and perceptions of student-faculty informal interactions in the college

experience?

2. What are specific qualities or attributes that characterize the most and least informal interacting faculty members?

3. What are contexts identified by students as most significant in informal interaction with faculty?

4. What characteristics do students identify as descriptive of typical social distance with faculty, and how does the present social distance compare with student's desire for change?

5. Do students' informal interacting tendencies correlate with the following factors?

- a. gender of students?
- b. grade point average of students?
- c. academic division of students?

Overview of Methodology

The study is descriptive. Data are collected as a result of interviews with forty seniors. The sixty-minute exit interviews were conducted in the spring quarter (March) --two months before graduation. The sample was students at a small Christian liberal arts college north of Boston, Massachusetts.

Definition of Terms

Clarification of terms germane to the present study, particularly the research questions, are described here.

Informal interaction (or contact): The interaction that occurs between faculty and students which is normally outside the classroom setting, yet is inclusive of possible contact before or after class or even during a class break period.

College outcomes: The resultant effects of student-faculty relationships, particularly as manifest in student achievement, career and personal development, or values and attitudes.

College experience: The cumulative sociological influences and impacts experienced by student's during the four-year college career.

Delimitations of the Study

First, the research data are collected at a single institution.

Second, the institution is chosen, and not randomly selected.

Third, the institution is a Christian liberal arts college.

Fourth, the institution is located in New England, northeast of Boston, Massachusetts.

Fifth, the sample is comprised of only senior class students.

Sixth, the sample is primarily middle-class Caucasian students.

Seventh, the methodological design used for research is

interview.

Finally, the data are presented and analyzed by a single interpreter.

Limitations of the Study

First, because the data are gathered at a single institution, generalizations are not applicable to all student-faculty interactions.

Second, due to the fact that the institution is chosen and not randomly selected, generalizations are not reliable beyond the studied institution.

Third, the chosen institution is a Christian liberal arts college. Thus, generalizations are limited for public and non-liberal arts institutions.

Fourth, the context of the college is New England. The location may diminish applicability to other regions of the country.

Fifth, college seniors are the only data sources in the study. Therefore, patterns of influence may not be viewed for the whole college experience--only the senior year.

Sixth, because middle-class Caucasians are the primary contributors to the study, generalizations may not be made for minority or ethnic students, and student-faculty interactions at extremely upper or lower class institutions.

Seventh, the research methodology of interview limits findings due to the nature of the design. The type of data that can be gathered is confined. Extensive correlative

tables or longitudinal data cannot be known.

Finally, because only one researcher is analyzing the data, no protection is given that the interpreter's bias will not influence the findings.

Perspectives within the Research

Although limitations may confine the results of the study, the present inquiry's contributions within the field of student-faculty informal interaction may broaden the research base.

First, although the study is conducted at a small liberal arts college (about 65 full-time faculty and 1250 students), much of the previous research has been done in large, public universities.

Second, even though the data are gathered from only a single institution, the vast majority of existing research comes from one college or university. For example, Pascarella and Terenzini's published articles, which are widely known and often referred to for theoretical support, are from several studies conducted in the 1970's at Syracuse University.

Third, Astin (1978) reports private institutions, four-year colleges, small colleges, and religious colleges have positive environmental effects on student-faculty informal interaction--all descriptors of the chosen institution in the present study. Therefore, the best generalizations may benefit a similar school. However, as far as can be found,

research is extremely limited on student-faculty informal interaction in any type of Christian colleges. In other words, distinctions of interaction tendencies in Christian colleges, if any, are not known. The study contributes knowledge to an untapped subset of student-faculty informal interaction--the religious institution.

Finally, much of the previous research has been gathered by means of quantifiable questionnaires. The present study is adding to a new perspective of methodological design by interviewing college seniors. All other interviews studies, which are limited in number, have interrogated only faculty.

Organization of Subsequent Chapters

The content of Chapter I describes the problem of the study. In Chapter II the literature related to the study is reviewed. A description of the design and methodology used in the study is contained in Chapter III. In Chapter IV, the data are presented and analyzed. In Chapter V, a summary of the study, discussion of results, and appropriate conclusions and recommendations for future research are presented.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of the study is to identify and describe quality in student-faculty interaction. Discerning characteristics of informal interaction that impact college outcomes are also explored.

The review of the literature is organized under the following headings: (1) Faculty as Agents of Socialization, (2) Academic Achievement, (3) Satisfaction with College, (4) Intellectual and Personal Development, (5) Persistence and Attrition, (6) Career and Educational Aspiration, (7) Faculty Interpersonal Characteristics, (8) Classroom Atmosphere and Evaluation. A review of research precedents is also presented.

Faculty as Agents of Socialization

Consistent with a growing body of literature, faculty members do influence student outcomes both positively and negatively (Chickering, 1969; Endo and Harpel, 1981; Feldman and Newcomb, 1969; Jacob, 1957; Terenzini, Theophilides, and Lorang, 1984). Though research on college outcomes has

increased, limited empirical studies on student-faculty interaction exist. As a result, researchers know that certain general types of college experiences may be associated with certain general outcomes, yet little is understood concerning the specific nature of interaction leading to the observed outcomes (Pascarella, 1985).

Jacob's (1957) summary of the literature on the impact of teachers cites evidence that the quality of teaching has little effect on the value outcomes of general education for the majority of students. Elsewhere Jacob concedes that some teachers do exert a profound influence on some students:

Faculty influence appears more pronounced at institutions where associations between faculty and students is normal and frequent, and students find teachers receptive to unhurried conversations out of class (Jacob, 1957:8).

Feldman and Newcomb (1969) conclude that where both the influence of student peers and of faculty complement and reinforce each other, there is potential for faculty impact.

Thus, as faculty occupy an increasingly significant quality relationship amidst the student's social environment, the more likely the student is to be influenced by the faculty attitudes and other socializing variables (Pascarella, 1980).

Close student-faculty interaction is identified to be of varying significance in the college socialization process. Some research bears out the impact of college culture as the prime agent of student socialization. Chickering

(1969) identifies three main factors in college enculturation: (1) student's entry characteristics, (2) structural and environmental factors of the college, and (3) interactions between students and the primary agents of socialization on campus (i.e., faculty and peers).

Thistlewaite (1960) claims the impact of college is carried by the faculty. Similarly, Newman and Newman (1978) report that the college faculty members and some active administrative personnel (e.g., counselors, residence hall advisors, or the Dean of Students) are the primary agents of college influence in student value consolidation.

Wallace (1966) and Feldman and Newcomb (1969) point to the admittedly powerful socializing influence of peer groups on student values, attitudes, and development during college. Yet faculty have the potential to make a unique contribution as informal socializing agents (Terenzini and Pascarella, 1980a). In some cases, student informal interaction with faculty may even override the influence of the general student culture (Pascarella, Terenzini, and Hibell, 1978).

Bean (1985) finds that rather than being passive, students play an active part in selecting preferred agents of socialization and negotiate the form and content of the socialization experience with the agents. Denzin (1966) reports that college-age youth actively choose significant others based on the way they perceive others evaluate them.

Students differ to the degree by which influence may

have a socializing effect (Feinberg, 1972). Quality of relationship rather than the frequency of interaction (quantity) is more important (Churukian, 1982; Endo and Harpel, 1981; Terenzini, Theophilides, and Lorang, 1984). Endo and Harpel distinguish between friendly and formal student-faculty interaction. Friendly contacts are more personal than academic advising (formal contacts) and cover a broad range of issues. The reported results of friendly interaction positively affected nine of fourteen outcomes; whereas, the formal interaction positively affected only two of fourteen outcomes. Also, professional program students had greater frequencies of formal, and less of friendly student-faculty interaction, than liberal arts students.

Lacy (1978) shows the effects in the nature and content of interaction with faculty and peers in student change. Although potentially at a similar stage in life cycle, individual student characteristics vary, which affects outcomes of socialization in college. In short, although students report the most significant changes occur in the area of interpersonal relationships (Katz, 1968), and that informal face-to-face contact was the 18-20 year old's choice factor in the selection of significant adults (Galbo, 1984), students differ in openness to new experiences and openness to the influence of others (Palola and Evans, 1981). However, the college culture which is highly interactive becomes a primary setting for socialization (Orth, 1963).

Student-faculty informal interaction may impact on the

college student's academic achievement.

Academic Achievement

Some researchers attempt to correlate the relationship between student-faculty informal interaction and grade point average. Confounding variables skew results. Faculty perceptions of student's characteristics (Gamson, 1967), student's entering academic aptitude (Wallace, 1966), amount (Astin and Panos, 1969) and quality (Terenzini and Pascarella, 1980a, b) of student-faculty interaction, and general college environment all cloud reality.

Astin and Panos (1969) and Pascarella, Terenzini, and Hibel (1978) sought to control for student preenrollment variables and distinguished between six types of student-faculty nonclass contact. Yet other variables are less than satisfactorily addressed. Prior achievement, motivation for grades in college, and perhaps more importantly, impact of peer groups need further study.

Pascarella warns of the problem of reciprocal causation:

Does informal interaction with faculty positively influence academic achievement, or is it initial perceptions of academic success which eventually lead students to seek contact with faculty beyond the classroom? . . . it may be that the instructor perceives those students who seek contact with him or her outside of class as being more intellectually curious and interested in the course material than students who do not, and has a tendency to be subtly influenced by this perception in the evaluation of student performance in the course (Pascarella, 1980:508).

However, the contention logically follows that student-faculty interaction positively affects academic achievement based on the premise that faculty place importance on grades and students are socialized to some extent by faculty (Chickering, 1969; Nettles, 1984). "Admiration of faculty" is significantly associated with higher grade point average (Wallace, 1966). Pascarella et al. (1978) support the Chickering (1969) and Spady (1970) hypothesis that student-faculty informal relationships have positive influence on academic performance.

Studies reveal varying degrees of effect. Frequency and quality of student-faculty contact account for modest significance in freshman academic outcomes (Pascarella and Terenzini, 1978). A subsequent study (Terenzini and Pascarella, 1980) found that not all types of student-faculty contact are equal in importance. Discussion of intellectual matters had more impact on academic achievement. Students with frequent interactions tended to perform academically better than predicted by preenrollment characteristics, while others who had little informal faculty contact tended to achieve lower than predicted (Pascarella et al., 1978). Faculty members can play a significant role in the academic skill development of students, a role that need not be confined to the classroom (Terenzini, Theophilides, and Lorang, 1984).

Satisfaction with College

Overall college satisfaction is associated with student-faculty interaction (Gaff and Gaff, 1981; Pascarella and Terenzini, 1976a, b). Peer groups continue to be a primary source of student satisfactions, but interactions with selected faculty members are also significant (Alberti, 1972). Kirk and Dorfman (1983) report results of a study conducted with mature (over 35) reentry women. The strongest predictor of satisfaction was the helpful attitude of the professors. Davis and Young (1982) describe projects involving students and faculty together in research evaluation, and teaching. The sharing of work, ideas, and personal encounters was the most satisfying for students and faculty.

Naturally, due to definitional problems as well as factors such as peer influence and student personality traits, research on college satisfaction tends to be ambiguous. However, Spady (1971) factored out various student characteristics and experiences and found that a "student-faculty contacts index" explained freshman male satisfaction in college satisfaction.

Astin (1977) conducted a study that included over 200,000 students from more than 300 colleges and universities. Controlling for a number of variables, Astin discovered, during the four year college experience, interacting frequently with faculty has positive impact on status needs, altruism, musical and artistic interests. In

fact, students were satisfied with all aspects of their institutional experience including courses, friendships, intellectual climate, even the administration.

Intellectual and Personal Development

Two important changes college students experience are an increased cognitive ability and a deeper awareness of personal identity and values (Bowen, 1977). Student-faculty interaction is identified as a determinant in these changes (Endo and Harpel, 1981; Galbo, 1984; Newman and Newman, 1978). Therefore, the more informal contact with faculty a student has, the greater the probability that one or more of those faculty members will have some kind of specific impact on student development in college (Wilson et al., 1975).

Pascarella and Terenzini (1978) conducted a longitudinal study at Syracuse University. After controlling for the influence of fourteen preenrollment student variables, eight measures of frequency (no quality measures were used) of student-faculty informal interaction revealed a significant variance in self-perceived intellectual and personal development. The findings lend some support to Feldman and Newcomb's (1969) assertion that faculty have most significant impact on intellectual and career development.

Terenzini and Pascarella (1980) replicated the 1978 study. Design variations may have slightly altered comparative efforts. The later study assesses the quality, in

addition to quantity, of student-faculty interactions. General similarities are noted. Scores on the faculty relations scale are positively related to both personal and intellectual (at a significant level) development.

Pascarella, Duby, Terenzini, and Iverson (1983) gave attention to a totally commuter institutional setting. The study was designed to determine if relationships with faculty in a non-residence college had a similar influence on personal and intellectual development as that of a residence college. Previous research is confirmed in the area of personal and intellectual development due to student-faculty interaction (during the first year of study). However, the quality of the interaction had greater importance for the commuters than frequency of interaction. Nevertheless, students who live at home have less contact with faculty than residents. Therefore, less frequently do social conversations occur or discussion of topics in the professional field of their major professor (Chickering, 1974).

Chambers (1973) compiled evidence that teachers who affect the creative development of students, do so, not in the classroom, but as a result of interaction in the laboratory, office, home, or other informal settings. The context for developing personally is also argued by Hoffnug (1982), who argues the hidden curriculum of formal schooling (i.e., encouragement of standardization, discouragement of individuality) stands in the way of the personal development of the students.

Newman and Newman (1978) examined the process by which the college experience contributes to identity. The study reports that the amount of influence on identity formation a college has is directly related to the quantity of interaction between students and faculty. Where there are few interactions, the college faculty exerts very little influence on student's identity. The socializing factors may then be dominated by peer groups, family, or fields of specialization. In short, the authors posit that faculty are the prime agents of personal and intellectual influence in the lives of students unless they chose to forfeit the role to other agents.

Chickering (1969) identifies "establishing identity" as one of seven vectors of college student development. Young adults grapple with a sense of purpose, values, beliefs, and future direction (Erikson, 1950, 1968). The college experience sometimes raises the anxiety level of self-purpose, thus identity pursuits are frustrated. Usually, however, feelings of direction and self-knowledge contribute toward a systematic means of role development. In either case, faculty can foster the quality relationship which promotes personal and intellectual growth.

Persistence and Attrition

Clearly, student persistence and voluntary dropout behavior in post-secondary education is of great importance to faculty and administrators alike. Enrollment stability,

the institution's financial concerns, wasted human resources, and student development are a few areas of interest. Not surprisingly, the research on college persistence is somewhat more advanced than other concerns in the area of student-faculty informal interaction. Studies are beginning to move from what causes attrition and persistence to why certain variables interact to affect dropout decisions (Bean, 1985).

Higher education personnel have long understood that dropouts tend to come from lower socioeconomic backgrounds, have lower ranks in high school, plan initially to get lower college degrees, apply for relatively fewer scholarships, appear more aloof, self-centered, impulsive, and assertive (Chickering, 1969). However, various conceptual models identify many more variables which are operative in the persistence/attrition decision (Bean, 1985; Pascarella, 1980; Spady, 1970; Tinto, 1975). Certainly, the above listed student personality and preenrollment characteristics are important, but other factors within the college experience also are determinants, such as, college grades, academic integration, institutional fit, institutional commitment, future goals, alienation, social life, finances, outside friends, and faculty integration.

The most comprehensive models, based on synthetic literature reviews, emphasize the level of student integration into the academic and socialization components of the institution. In short, the more integrated into the

institutional environment, the less likely one is to drop-out. Thus, the hypothesis follows that the more one has informal interaction with faculty, the stronger the institutional and personal commitment will be, and subsequently, the less likely one is to withdraw (Pascarella, 1980).

Studies, to varying degrees, confirm the hypothesis that student-faculty interaction increases student persistence and decreases likelihood of voluntary withdrawal. The caveat is the correlational studies which do not reflect causation.

Pascarella and Terenzini (1976a) surveyed 500 freshman on various aspects of academic and non-academic experiences. Obtained data allowed the researchers to distribute respondents into categories of low, moderate, and high interactors with faculty in informal interaction. Generally, the high and moderate interactors were distinguished from the low interactors by their more positive ratings of academic and non-academic life. Specifically, significant associations were found from freshman to sophomore year. Low interactors withdrew from the institution at 27%, whereas, the moderate and high interactors withdrew at 14% and 9%, respectively.

In another investigation, after controlling for sex, academic aptitude, personality needs, but not age, researchers found certain types of informal interactions are more significant than others (Pascarella and Terenzini, 1977). Conversations related to intellectual or course-related matters and career concerns were distinguished between

persisters and dropouts. Pascarella and Terenzini's (1979) longitudinal study controlled for the influence of twelve pre-enrollment characteristics and six additional measures of social and academic integration. Significant partial correlations existed in student-faculty interaction and freshman year persistence decisions, but differed by sex. For men (n=261), discussion of future careers and/or course or academic information was related to persistence. Women (n=276) tended most often to discuss campus issues and socialize informally in the student-faculty interactions. The distinctions could be due to identity needs, career perceptions or social and familial values.

Six studies were assessed that lent support for the construct validity of Tinto's (1975) model of attrition (Terenzini and Pascarella, 1980b). Frequency and quality of student-faculty interaction were related to retention. The results confirm Tinto's conception of the sociological and psychological nature of attrition and retention. Although the bulk of research indicates otherwise (Spady, 1970; Tinto, 1975), preenrollment factors (personal and social characteristics) were not significant in persistence/attrition decisions. However, the research in the six studies was conducted at only a single institution.

Bean (1985) concludes that any effort to increase student's academic performance, enculturation opportunities, and personal loyalty to the institution reduces attrition. The sample included freshman, sophomore, and junior students

(n=1406) from a large midwestern university. Following are the student characteristics required to be included in the sample: white, United States citizen, 23 years old or younger, not married, 10 or more credit hours. The intent was to draw conclusions representative of the majority of college students.

Socialization to values of the institution (i.e., a sense of belonging, institutional fit) has the greatest influence on freshman attrition. Although Bean's study is more of a general nature (i.e., concerning various college outcomes) than many of the above studies (i.e., specifically related to student-faculty informal interaction) the premise that informal contacts are essential for student retention is challenged. Findings of the Bean (1985) study suggest peer group influences to be much greater in impact than faculty interaction. In fact, Bean reports the formal aspects of faculty contact (e.g., in the classroom) at a large university to be more influential to students than informal interactions.

In short, although Beans's research is consistent with Spady (1970), Tinto (1975), and Pascarella (1980) that socialization is a dominant factor in persistence/attrition decisions, the study differs by the nature and character of the socialization process.

The area of student-faculty interaction and the relationship to persistence/withdrawal decisions is one that needs further inquiry. Much of the present research is

gathered from single, large universities, thus not representative of smaller colleges and wider populations. In addition, many studies are conducted on the freshman year only. More work like Bean (1985) could explain variation across the college experience. Correlational studies, with few existing experimental designs regarding student-faculty interaction, confound the picture. Finally, the factor of motivation (e.g., for persistence or withdrawal) has not been sufficiently addressed.

Career and Educational Aspirations

When student-faculty formal and informal interactions are frequent and friendly, and when the interactions occur in diverse settings and various roles, the students' sense of competence and purpose is fostered (Chickering, 1969).

Expectations of adults exert considerable influence upon such factors as income, educational, and occupational aspirations (Galbo, 1984). Faculty, as well as parents, are particularly important in influencing occupational decisions and educational aspirations (Astin and Panos, 1969; Feldman and Newcomb, 1969; Pascarella, 1984). Faculty encouragement is found to be a major factor in going to graduate school (Davis, 1964). Admiration of faculty members is positively tied to higher grade point average and more frequent graduate school aspirations (Wallace, 1966).

Student competence and purpose development are to be associated with vocational goals or clear plans about how

time in college is spent. Students who show no clear direction are less likely to become deeply involved in their college work (Chickering, 1969). When plans have meaning, goals and interests are advanced. Learning becomes organized in relation to plans. Reasons for choosing courses or thoughts of graduate school reflect clarification of occupational concerns.

Student-faculty interaction focusing on intellectual and career concerns also have high significant partial correlations with students' rankings of faculty members as a source of positive influence on their intellectual and personal development (Pascarella, Terenzini, and Hibel, 1978). In an environment where professors are often the only older adults with whom students interact on a regular basis, professors are called on to enter into an informal apprenticeship with students (Mokros and Erkut, 1980; Reardon and Regan, 1981).

Only 18% of the Association of American College member institutions have formal activities involving faculty in career advising (Hiley, 1982), yet faculty advisement is potentially the strongest influence in career aspirations (Southern Regional Educational Board, 1977). The value and impact of faculty advising is too often neglected (Johnson, 1979). Student (peer) advising, although time efficient for the faculty, is not an adequate substitute for the student-faculty dialogue (Goldberg, 1981).

The faculty advising relationship is one, intended or

not, that can become a modeling-mentoring relationship. Between one-third and two-thirds of women consider professors to be important models in career and educational planning. Men, in retrospect, feel generally professors have a strong, continuing influence on their careers. The self-disclosure of one's own educational and occupational history are effective means of career and educational aspiration influence in student-faculty interaction (Chickering, 1969; Cooper, Stewart, and Gudykunst, 1982; DeWine, Medcalf, and Bennett, 1977). Same-sex models are most sought by students. Models serve as standards for self-evaluation and encourage innovation in behavior and in selection of jobs typically chosen by one sex (Mokros and Erkut, 1980).

Thistlewaite (1960) reports evidence that if students perceive relationships with faculty as warm and informal, a positive correlation exists in level of educational aspiration. Grigg (1965) sampled graduating seniors and found frequent informal conversations with faculty had significant impact on going to professional or graduate school. Wilson, Gaff, Dienst, Woods, and Bavry (1975) found "high interactors" with faculty were significantly more certain of vocational choice than "low interactors." In a sample of 5,162 nonminority students from 100 colleges, Pascarella (1985) found a small, but positive, influence on individual educational aspirations.

Faculty characteristics and students' perceptions of the qualities that are conducive to student-faculty informal

interactions are discussed in the following section.

Faculty Interpersonal Characteristics

Gaff (1973) posits the single biggest difference between influential faculty and their colleagues is the extent to which interaction occurs outside the classroom. Faculty characteristics (Gadzella, 1977; Powell, 1976; Scheck and Bizio, 1977; Theophilides and Terenzini, 1981), personality (Feldman, 1983; Long, 1977; Rogers, 1962), and perceived attitudes (Cangemi, 1977; Coles, 1977; Jacobsen, 1982) are chiefly contributory toward significant student-faculty informal interaction.

Whereas, Astin (1977) contends the strongest predictor of student-faculty is students' interpersonal self-esteem at college entry, only a 6.8% variance is explainable on an interaction scale. Other research demonstrates too much has been made of the influence of initial student characteristics and orientations. Pascarella and Terenzini (1979) found that 12 preenrollment characteristics explain less than 7% of the six categories of contact. Thus, what happens to a student after arriving on campus appears more important than the individual orientation at entrance (Pascarella, 1980).

Snow (1973) attempts to establish characteristic differences between teachers who have a high level of interaction and those who do not. Higher contact teachers tend to be younger and have less tenure. However, other studies

indicate age is not a factor (Johnson and DeFreece, 1984) nor academic rank (Pascarella, 1975; Wilson, Woods, and Gaff, 1974) in student-faculty interaction. Faculty degree of involvement in professional organizations, publication of articles or books, and gender do not affect out-of-class contact (Chickering, 1969; Snow, 1973; Wilson et al., 1974). High interacting faculty have a greater commitment to teaching than research, and undergraduate students than graduate students (Gaff, 1973).

Distinction among faculty appears to be due to socio-psychological interpersonal characteristics: friendliness, permissiveness, flexibility (Theophilides and Terenzini, 1981); accessible, approachable, available (Chickering, 1969; Jacobsen, 1982; Wilson et al., 1974; Woods and Wilson, 1972); empathetic, genuineness, respectful (Chang, 1981; Long, 1977); and understanding, honest (Galbo, 1984). Snow (1973) finds high and low interacting faculty spend the same amount of time on businesslike topics, but the high interactors spend more time discussing class material, other intellectual interests, exploring career possibilities, and dealing with student's personal concerns. Faculty with higher out-of-class contact receive the greatest number of nominations from colleagues as "outstanding teachers," are selected by senior students as teaching "the most stimulating course," and over the four year's experience, are identified as "the teacher who contributes most to students' personal and educational development" (Wilson et al., 1974).

Cangemi (1977) and Scheck and Bizio (1977) confirm earlier and recent research concerning the substantial negative effects faculty can have on students. Negative or indifferent attitudes, unconcern for lack of subject clarity, and impersonal treatment of students can be detrimental to student-faculty interaction and student development (Coles, 1977; Gadzella, 1977; Mueller, Roach, and Malone, 1971).

In sum, faculty that are willing to extend interaction beyond the classroom have potential to impact students' lives, and vice versa (Oramaner, 1981). Johnson and DeFreece (1984) report that many faculty desire and enjoy interaction with students, yet most are not fully aware of the value in informal interaction.

Classroom Atmosphere and Evaluation

Churukian (1982) states that the value of the learning situation seems to be associated with the quality of the interpersonal relationship that exists between the student and the faculty member. Theophilides and Terenzini (1981) conducted a study to assess the positive hypothesized relationship between student-faculty nonclassroom interaction and students' perceptions of instructional quality. Results confirmed the hypothesis and caused the researchers to conceive more broadly of "teaching" and "instructor effectiveness" outside the boundaries of the classroom (e.g., office, campus coffee shop, and any setting, formal or informal, in

which students and faculty come into contact). In short, instructional ratings from students also tap residual effects of nonclassroom interaction (or lack of it).

Cooper, Stewart, and Gudykunst (1982) report a student's relationship with the instructor to be the best predictor of the evaluation of the instructor, accounting for 28% of the variance. The quality of the relationship, not the content taught, appears to be the most significant element determining effectiveness as teachers (Rogers, 1962).

However, in order to stimulate interaction with students outside the classroom, certain in-class cues may be transmitted by teacher's attitudes, values, or nonverbal communication. Wilson et al. (1974) associate in-class teaching behaviors to professor's out-of-class accessibility. A greater willingness to solicit student views in class, discuss divergent points of view, and expression of student ideas through essay or paper assignments, all are significantly related to extent of faculty's interaction with students.

Students' perception of instructor's in-class empathy (Coffman, 1981; Long, 1977), personality style (Feldman, 1983), and tendency to reveal personal information (DeWine et al., 1977) are associated with perceived out-of-class effectiveness and accessibility. Bausell and Magoon (1976) found course and instructor evaluations positively tied to availability of the instructor outside of class.

Cole (1982) has reviewed the literature on teaching in

higher education. Seven summative statements are given for improvement in higher education instruction; four are applicable to student-faculty interpersonal relations. First, the instructor's personality plays a crucial role in superior teaching regardless of the method. Students look beyond the content to the human element. Second, efforts to improve instruction should harmonize with the institution's character, goals, and philosophy. The student-faculty relationship could be further explored to integrate the student more closely to the institution's mission. Thirdly, traditional roles and relationships of students and faculty need refining. The authoritarian or active-faculty and passive-student roles are not found to be most conducive for maximum student development. Finally, educational institutions need humanizing to regain a sense of the personal element. Sweeping changes are needed in attitudes toward teaching and learning, and relations among faculty, student, and administrators.

Research Precedents

The inquirer's task in collecting data and in selecting a research design is to reduce the chances that rival hypotheses will rule out generalizations from the study. The field of college impacts, and specifically, student-faculty interaction offers some unique methodological problems. A number of studies assume that student change necessarily implies college impact. The notion that change means impact

is confounded by other variables often not measured by the research design (Astin, 1970a).

Alberti (1972) conducted an experiment to measure the effects of informal time with faculty and students. One treatment group spent 16 hours (over the eight-week study) with faculty in an informal setting. The second treatment group met only with students in an informal setting. The control group did not meet at all. Regardless of the results, student demographics, institutional environment, and the nature of the informal contact, to name only a few problems, were not dealt with satisfactorily.

Much of available research heavily relies on students' or faculty's perceptions of informal interaction (i.e., self-reports). Self-reports present certain dangers, depending on the nature of the experience. Experiences that require little or no interpretation, such as if the student lives on or off campus, or age of the faculty member, seem to present few problems. However, the reports that entail more interpretative comments, such as one's opinion of college satisfaction or quality of professors' interactive skills, present difficulties (Astin, 1970b). Latitude in perception, respondent bias, and overall increases in opportunity for subjectivity alters the accuracy of inferences.

Astin (1970a, b) presents a thorough statement on methodological problems in gathering data on college impacts. The author addresses single institution versus multi-institution studies, longitudinal versus cross

sectional studies, alternative statistical designs, effects of measurement error, and methods for detecting student-environment interaction effects. The most definitive information about college impacts is obtained from multi-institution, longitudinal studies in which data on student inputs, student outputs, and environmental characteristics are gathered. Astin (1970b) suggests that due to student perception interpretive difficulties, perhaps measures should be based only on directly observable events.

A major problem in collecting data on student-faculty informal interaction has been a lack of standardized instruments specific to the topic. Some studies have employed more generic instruments (e.g., College Student Questionnaire, Omnibus Personality Inventory, College and University Environment Survey), then endeavored to group respondents into high, medium, or low interacting groups. Finally, investigators correlated the information from the standardized measure and the amount of interaction, then made conclusions.

For example, Pascarella and Terenzini (1976a) measured students' response to the Adjective Rating Scale (ARS). Then the students were asked to estimate both the number of times during the semester they had met informally with faculty members and the number of organized extra-curricular activities participated in. Students were divided into comparison groups of high, medium, and low interactors. Conclusions were correlated between the ARS and the

comparison groups for the academic and non-academic experience of college.

As Astin suggests for the most definitive results, longitudinal studies have been conducted--Gaff (1973) from 1966-1970 at The University of California, Berkeley; Pascarella and Terenzini (1978, 1979) and Pascarella, Terenzini, and Hibel (1978) from 1975-1976 at Syracuse University; Terenzini and Pascarella (1980) from 1976-1977 at Syracuse University; Pascarella, Duby, Terenzini, and Iverson (1983) from 1979-1980 at The University of Illinois, Chicago. However, most of the studies used self-designed questionnaires with little or no reliability or validity ratings.

Pascarella and Terenzini (1980) designed a series of five Likert-type scales to assess various dimensions of social and academic integration (including student-faculty interaction), and goal and institutional commitment. The alpha reliabilities of the scales range from .71 to .84 (mean .79). Bean (1985) constructed another Likert-type instrument that measures 13 variables (53 items) whose alpha reliability range from .62 to .91 (mean .76).

Although most of the above designs use correlation to draw inferences of student-faculty interaction, some data have come from interviews. Both Gamson (1967) and Snow (1973) interviewed, however, only faculty. Gamson described the behavior of faculty within the natural sciences and social sciences of a single institution. Snow surveyed students, and interviewed faculty as well as had sample

faculty keep journals of student conversations in the offices. The investigator defined the distinction between the "interactionist" style and the more "perfunctory and professional" approach to student-faculty interaction.

The design of the present study incorporates student interviews into the data-gathering procedure.

Summary

The related literature reviews the effects of quality and frequency in student-faculty informal interaction. Research supports the conception of the faculty member as a socializing agent in the college experience. To varying degrees, faculty can aid in student academic achievement, college satisfaction, intellectual and personal development, persistence in college, and career and educational aspirations.

Chapter III presents the overview of methodology, research questions, population, sampling procedure, instrumentation, pilot study, and rival hypotheses.

CHAPTER III

PROCEDURE OF INQUIRY

The following chapter provides an overview of methodology, research questions, population, sampling procedure, instrumentation, pilot study, pilot study findings, and an examination of limitations for which design considerations are given.

Overview of Methodology

The study was conducted at a small Christian liberal arts college north of Boston, Massachusetts. Forty graduating seniors were selected for the sample. Data were obtained by means of exit interviews. The interview contained both fixed-alternative questions, open-ended questions, and ranked or scaled items. The one-time interrogation took approximately sixty minutes.

Research Questions

The major research questions are the following:

1. What are students' expectations and perceptions of student-faculty informal interactions in the college experience?

- a. personal growth?
- b. intellectual growth?
- c. career aspirations?
- d. post-baccalaurate education?
- e. amount of time?
- f. overall satisfaction?

2. What are specific qualities or attributes that characterize the most and least informal interacting faculty members?

- a. students' perceptions of faculty's interest level in teaching students?
- b. ranked order from most to least of student's ideal professor characteristics?

3. What are contexts identified by students as most significant in informal interactions with faculty?

4. What characteristics do students identify as descriptive of typical social distance with faculty, and how does the present social distance compare with students' desire for change?

5. Do students' informal interacting tendencies correlate with the following factors?

- a. gender of students?
- b. grade point average of students?
- c. academic division of students?

Population

The college at which the data have been gathered was intentionally selected, that is to say, not randomly. The selected institution is in New England and is a non-denominational Christian liberal arts four-year college. The college is nationally recognized by respected college guides as particularly strong in liberal arts education. Twenty-four majors are offered. The Humanities and Social Science divisions are the two largest, respectively.

The student population is approximately 1250. The majority are white, Christian, middle-class Americans. Student-faculty (FTE) ratio is approximately 17:1.

Therefore, the population to which the research may be compared to are American institutions of similar description.

Sampling Procedure

Permission was granted by the academic dean to conduct the research on the campus. Records and student information were provided by the registrar's office. A master list of "students applying for spring graduation" was compiled. Two substrata were identified: male and female. From the two lists, a stratified random sampling was done. The result yielded twenty (20) male seniors and twenty (20) female seniors. Of the entire senior class, 161 (45%) are male, and 196 (55%) are female (See APPENDIX B).

The forty seniors represent 11% of the senior class,

and 3% of the total student body. The sample's mean grade point average is 2.90 (on a 4.0 scale) compared with the entire senior class's 2.81. The sample's mean SAT score is 1017 (combined) compared with the entire senior class's 1008. (Only 157 of 357 SAT scores are available.)

Thirty-seven of forty students in the sample (93%) live on the campus in residence halls or other student housing. Ninety-two percent (92%) of the total student body live on campus. Twenty (20) students in the sample fall below the class (mean) grade point average (2.81); twenty (20) students are above the class (mean) grade point average.

To allow for a reasonable number in each subset, the students represented in the Humanities division and the Natural Science division are combined; and the Social Science division and the Education division are combined. Twenty students are subgrouped in Humanities/Natural Science (13 and 7, respectively); and twenty students are subgrouped in Social Science/Education (16 and 4, respectively). (See Figure 1.)

Instrumentation

Exit interviews were chosen to permit greater depth and more complete data than a questionnaire or survey. The interview questions are guided by the specific nature of the research questions. Although reliability increases with objectivity and structuredness within the instrument, flexibility and the opportunity to probe further into particular

Figure 1.--Subsets in the Sample (N=40).

=====		
Category	Subsets	N

GENDER:	Male	20
	Female	20
GRADE POINT AVERAGE:	Above the mean	20
	Below the mean	20
ACADEMIC DIVISION:	Humanities/Natural Science	20
	Social Science/Education	20

areas of interest decreases (Isaac and Michael, 1971).

Therefore, a semi-structured interview guide is selected for the present inquiry. In other words, some of the questions are prescribed, but latitude is given for additional questioning as is warranted.

Interview Strategy

The following describes (1) the orientation to the interview, (2) the rationale for the content of the interview, and (3) the mode of eliciting descriptive data.

Orientation to the Interview. Before arriving for the interview, the respondent has received a letter from the academic dean enlisting their participation (see APPENDIX A) and a telephone call by the interviewer making arrangements for the interview.

By establishing a mood of friendliness and gratefulness

for the respondent's presence and contribution to the study, perhaps greater freedom is felt to more openly make expression. As the student enters the location for the interview, essentially the following comments and instructions are given:

Thank you for your willingness to help us in our project. First, tell me your major and what academic division you are in. Have you spent all of your college years at this school or have you transferred from any other college or university? The above information is routine and easily answered. The purpose is to let the respondents answer a couple of semi-personal questions, which can be further pursued by the investigator to learn more about the student and make them feel more comfortable.

Next, the purpose of the study is explained.

I am interested in finding out about student-faculty informal interaction in general, and your experiences and opinions specifically. In the closing days of your college experience, I would like to gather information from your perspective.

I assure you that your name and statements you make are completely confidential, and will not go beyond this room. Also, feel free to use or not use professor's names, as you chose; whichever allows you the most freedom to talk about your experiences. Professor's names and explicit references to specific instances will also not be public information.

After the interview, the respondents are reassured of anonymity and thanked for contributing. Also, to minimize campus conversation and possible Hawthorne effect, the students are asked not to discuss the interview with anyone else so as not to influence other respondents.

Content of the interview. Included in the interview are fixed-alternative questions, open-ended questions, and

rank-ordered card sorts. Four series of card sorts are used to elicit data from the respondents.

The first card sort (Scale II, Interactions With Faculty, Pascarella and Terenzini, 1980:67; alpha reliability .83) asks the respondent to rank one statement each per the five cards. The interviewer hands the respondent one card at a time and asks them to rank in a Likert-type fashion--5 (strongly agree) to 1 (strongly disagree). The five statements are in Figure 2.

Figure 2.--College Outcomes Card Sort Statements.

=====

1. My nonclassroom interactions with faculty have had a positive influence on my personal growth, values, and attitudes.

2. My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.

3. My nonclassroom interactions with faculty have had a positive influence on my career goals and educational aspirations.

4. Since coming to this college I have developed a close, personal relationship with at least one faculty member.

5. I am satisfied with the opportunities to meet and interact informally with faculty members.

The purpose of the card sort is to explore the perceptions students have concerning the ways faculty have influenced them (as stated in research question 1).

The second card sort (Scale III, Faculty Concern for Student Development and Teaching, Pascarella and Terenzini, 1980:67; alpha reliability .82) also ranks in a Likert-type response one statement each per the five cards. The five statements read are presented in Figure 3.

Figure 3.--Faculty Teaching and Student Interest Scale Statements.

=====

1. Most of the faculty members I have had contact with are generally interested in students.

2. Most of the faculty members I have had contact with are generally outstanding or superior teachers.

3. Most of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students.

4. Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas.

5. Most faculty I have had contact with are genuinely interested in teaching.

The responses aim at investigating students' perceptions of faculty interest in students and teaching (as stated in research question 2).

Figure 4.--Characteristics of the "Ideal" Professor.

=====

1. is sincere and honest.
2. has a sense of humor, avoids distasteful jokes.
3. shows sincere interest in teaching students.
4. is commonsensical, practical, "down to earth".
5. is well-groomed and appropriately dressed.
6. has a thorough knowledge of the subject matter.
7. has interest and enthusiasm for subject taught.
8. is pleasant, has good rapport, maintains a relaxed atmosphere.
9. respects differences of opinion.
10. has office hours free to provide for individual conferences (accessible).
11. is willing to discuss student's personal problems.
12. is kind and sympathetic with all students.
13. is approachable outside class.
14. writes books and articles for publication.
15. helps students decide on political and religious issues.

The third card sort (adapted from Gadzella, 1967; Scheck and Bizio, 1977:340-341) asks students to rank fifteen desirable qualities of the "ideal" professor. The investigator hands all the cards (one quality each per card) to the respondent and asks them to rank from most to least desired characteristics. The card sort may take as long as is needed. A list of the qualities are presented in Figure 4.

The objective is to discover the students' view of the most and least important qualities of professors for informal interaction (as stated in research question 2).

The fourth card sort (Social Distance Scale, Fiebert, 1971:4) ask the respondents to describe the way they perceive typical relationships with faculty to be. The interviewer gives ten cards with various identifiers of social distance. The respondent hands back to the interviewer the statements that do not apply now. Next, the interviewer gives all the cards back again, and asks the respondent to select the statements that they wish could be typical of their interactions with faculty. A list of the ten statements is presented in Figure 5.

The card sort determines the difference between the way things are as opposed to the way the respondent would like things to be in regard to student-faculty interactions (as stated in research question 4).

Figure 5.--Social Distance Statements.

=====

1. Student exchanges and/or acknowledges the instructor's verbal greeting in the classroom.
2. Student stays after class to discuss academic matters.
3. Student initiates verbal greeting to professor on campus.
4. Student spontaneously visits instructor during office hours to discuss academic matters.
5. Student and professor engage in short social conversation on campus.
6. Student drops by professor's office to talk about personal problem which is not related to class performance.
7. Student and professor have lunch together on campus.
8. Student spontaneously uses professor's first name in conversation with him/her.
9. Student and professor spend time together off campus engaged in activities of common interest (professor's home, party, sporting event, etc.).
10. Student and professor are in close interaction involving mutual self-disclosure and mutual need satisfaction.

Pursuit of the Discussion. Although the card sorts enable the collection of some quantifiable data, the heart of the procedure is to move to qualitative issues for discussion. The thrust of the interview comes from the responses given on the card sort procedures. Each rank-ordered question or statement may be used as a starting point to launch into personal examples of the specific area probed. Yet, to elicit data without introducing interviewer bias is the prime goal of the interrogation (Isaac and Michael, 1971; Krippendorff, 1980).

The following are questions that are asked to elicit greater depth from the card sorts:

For Research Question 1--

- a. Can you identify one or more faculty members in your four-year college experience that had some kind of an impact on you? In what way(s) were you impacted?
- b. Has student-faculty informal interaction been important to your overall education? Why?
- c. What role do you think faculty should have in the development of students?
- d. If you had the opportunity to address the faculty, what suggestions would you give to improve the nature of student-faculty informal interaction?

For Research Question 2--

- a. Name the specific qualities that you feel characterize the most informal interacting faculty members.
- b. Name the specific qualities that you feel

characterize the least informal interacting faculty members.

c. (After reviewing their choices for the card sort)
Why did you select these qualities as most important for the
"ideal" professor, and these least important?

For Research Question 3--

a. In what setting(s) do you most commonly have
informal interaction with faculty members?

b. Have you been to a faculty member's home? On how
many occasions? Can you give an example. What did you like
about that?

c. Do you feel visits to faculty offices are intru-
sions on their time or are you a welcome visitor? How do
you know?

d. Have you ever worked on a collaborative project,
research or otherwise, with a faculty member? If so, what
did you like about it? If not, would you have liked to?
What would you like to have done?

e. What kind of "cues" do faculty give to students
either in class or out of class about their desire for
informal interaction with students?

For Research Question 4--

a. (After reviewing their choices for the card sort)
Do you think the changes you would like might happen? What
causes do you attribute to the way your interactions pre-
sently are?

b. Tell me about the general feeling you have about
the social distance between students and faculty. Do you

like what you experience in those relationships?

Pilot Study

A pilot study was conducted in February, 1986. Four students were selected for the interviews. The respondents were specifically chosen rather than randomly selected. The concern was to interview subjects similar to the respondents in the master study. Two male and two female seniors were interviewed.

The pilot study was needed to aid in the refinement of the instrument. Three primary criteria were assessed in the implementation of the study. First, although the respondents answers were noted, the investigator was most interested to see if the questions were clearly understood. Secondly, the investigator sought to comprehend if the respondents answered the questions in the same general way. Finally, as a result, the investigator was able to make the interview questions and card sort procedures more pointed.

The study proved to be fruitful, in that, many of the areas of questioning were confirmed, and others showed need for restructuring. The adjustments made from the original instrument to the present form are noted in the following section.

Pilot Study Findings

Specific changes were made in the original instrument and/or interview procedure to clarify the meaning.

1. A chart was made to briefly identify the four main areas of inquiry for the interview. Foreknowledge of the topics made the pilot study samples more at ease.

2. Several demographic questions were asked of the interviewees to turn the introductory discussion toward them and build a nonthreatening climate.

3. In the second card sort, the first three statements were confusing as originally worded. For example, "Few of the faculty members I have had contact with are generally interested in students." "Few" was changed to "most" on the first three statements for easier comprehension. The fourth and fifth statements already began with "most."

4. In the fourth card sort, the intent of the first statement was misunderstood. The original form said: "Student nods to instructor and acknowledges the instructor's verbal greeting." The adapted statement reads: "Student exchanges and/or acknowledges the instructor's greeting in the classroom."

5. Questions were given a more personalized flavor than the academic-sounding ones originally presented. For example, "what suggestions can you give to improve the nature of student-faculty informal interaction?" was changed to "if you had the opportunity to address the faculty, what suggestions would you make concerning student-faculty interaction?"

6. Research question 3 was refocused from "what specific efforts or activities do the faculty members undertake

who had significance in informal interactions with students?" to "what are contexts identified by students as most significant in informal interactions with faculty?"

7. Research question 4 was reworded from "what characteristics do students identify as positive features of student-faculty relationships?" to "what characteristics do students identify as descriptive of typical social distance with faculty, and how does the present social distance compare with student's desire for change?"

Limitations of the Study

Presented are several factors which may influence the actual results from being known:

1. Reciprocal causation may be the most likely limitation of student-faculty informal interaction. For example, does a student's achievement cause more interaction or does interaction foster greater student achievement? The study is not designed nor intended to disentangle the cycle. Another study is needed to address reciprocal causation outcomes in student-faculty interactions.

2. The study is based on data collected from students at a single institution. The institution is chosen, and not randomly selected. In addition, the school is a Christian liberal arts college situated in the context of New England. The data are not generalizable beyond the degree to which similar students and similar institutions may identify.

3. The data are based on a cross-sectional design, even though the respondents are answering from a longitudinal perspective over the college career. Astin (1970a) asserts a longitudinal design to be the most definitive. A different inquiry is needed to gather information from students throughout the four-year experience.

4. No variables are held constant to more accurately account for the effects of student-faculty informal interaction (peer culture, institutional atmosphere, social class, etc.). A different methodological design and measure are needed to factor out variables.

5. Students have no other college experience with which to compare the present experience of student-faculty interaction. Students do not know if their experience is common or atypical. Students who have attended several schools may shed light from varying perspectives. A specific inquiry designed to address multiple attenders is needed.

6. Students may find difficulty in separating the formal and informal influences. In other words, students may acknowledge being influenced by one or more faculty members, but have trouble separating whether the influence has come from formal means rather than informal means. The design of the present study does not allow for formal and informal influences to be delineated.

7. In a related vein, students may not realize the influence faculty members have had and are having in their attitudes, values, decisions, and behaviors. Alummni have

been surveyed, several years after the college experience, and reflected more clearly after a new perspective of time and distance is added. Another inquiry could report findings of distinction perceived in student-faculty interaction between enrolled college students and graduates.

Summary

Chapter III contained a discussion of methods and procedures used in the study. The data sources and the instrumentation design were described. The pilot study with the findings were given and the rival hypotheses were explained.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of the study is to identify and describe quality in student-faculty informal interaction. Also explored are student's perceptions of faculty influence on college outcomes. Chapter IV presents the qualitative and quantitative data, as well as an analysis of the results. The following major research questions are addressed:

1. What are the student's expectations and perceptions of student-faculty informal interactions in the college experience?
2. What are specific qualities or attributes that characterize the most and least formal interacting faculty members?
3. What are contexts identified by students as most significant in informal interaction with faculty?
4. What characteristics do students identify as descriptive of typical social distance with faculty, and how does the present social distance compare with students' desire for change?
5. Do students' informal interacting tendencies correlate with the following factors?

- a. gender of students?
- b. grade point average of students?
- c. academic division of students?

Data Analysis

The data are presented for student expectations and perceptions of interaction, qualities of interacting faculty, significant contexts in informal interaction, social distance and desired change, and correlation of variables between selected subsets.

Student Expectations and Perceptions of Interaction

Students rated five statements on student-faculty informal interaction (5=strongly agree to 1=strongly disagree). Tallied results for the sample are found in Tables 1 and 2.

Table 1.--Means and Standard Deviations for College Outcomes Scale.

=====			
Statement	N	Mean	Standard Deviation

Personal Growth	40	4.05	0.93
Intellectual Growth	40	4.08	1.02
Career Goals/Educa. Aspirations	40	3.63	0.98
Close Relationship	40	4.08	1.07
Interaction Satisfaction	40	3.70	1.20

Table 2.--Percentage Responses for College Outcomes Scales.

=====					
	Strongly			Strongly	
Statement*	Agree	Agree	Neutral	Disagree	Disagree

Personal Growth	38%	35%	25%	0%	3%
Intellectual Growth	45%	25%	25%	3%	3%
Career Goals/					
Educa. Aspirations	18%	43%	28%	10%	3%
Close Relationships	48%	25%	15%	13%	0%
Interaction					
Satisfaction	35%	23%	23%	18%	3%

*See Figure 2 for Statements

Personal Growth. Students agreed that nonclassroom interactions with faculty had a positive influence on personal growth, values, and attitudes (Table 3).

Table 3.--Personal Growth Responses.

=====		
Response	Frequency	Percent*

Strongly Agree	15	38%
Agree	14	35%
Neutral	10	25%
Disagree	0	0%
Strongly Disagree	<u>1</u>	<u>3%</u>
TOTALS	40	100%

*Percentages are rounded

Most often mentioned areas of faculty influence are the following: heightened philosophy of life, positive example of personal values and ethics, development of self-confidence, perspective on controversial issues, help in times of personal crises, and learned how to critically think.

Although students agreed to the informal influence of faculty in personal growth, one student reported being somewhat negatively affected. One respondent's job as teaching assistant enabled the student to know more about the professor's good and bad characteristics than was desired (#10).

Pascarella and Terenzini (1978) confirm the agreement of faculty influence on student's personal growth (73% agreed in the present study) at a significant level ($p < .001$, $df = 8$ and 505).

Table 4.--Intellectual Growth Responses.

=====		
Response	Frequency	Percent

Strongly Agree	18	45%
Agree	10	25%
Neutral	10	25%
Disagree	1	3%
Strongly Disagree	<u>1</u>	<u>3%</u>
TOTALS	40	100%

Intellectual Growth. Students agreed with the statement that nonclassroom interactions had a positive influence on intellectual growth (Table 4).

Many students found personal growth tied closely to intellectual growth. One commented that much out of classroom interaction begins in discussion of academic matters and sometimes moves to personal interests (Subject 31). Another student stated that as much intellectual growth occurred in the classroom as outside the classroom (S 2). Students enjoyed the opportunity to pursue classroom conversation beyond the classroom. Nonclassroom interaction gave the students a chance to understand the professor's thinking processes and to dialogue on religion and politics.

Research by Pascarella and Terenzini (1978) support the general agreement (70%) that faculty have influenced student's intellectual growth. The increase due to student-faculty interaction was significant at $p < .001$ ($df = 8$ and 505). (Academic performance also significantly increased due to student-faculty interaction ($p < .001$; $df = 8$ and 505), although the relationship to intellectual growth does not necessarily follow.

Career Goals and Educational Aspirations. Students rated the influence of faculty on career goals and educational aspirations lowest of all statements, however, the respondents somewhat agreed on faculty's positive influence (Table 5).

Table 5.--Career Goals and Educational Aspirations Responses.

Response	Frequency	Percent*
Strongly Agree	7	18%
Agree	17	43%
Neutral	11	28%
Disagree	4	10%
Strongly Disagree	<u>1</u>	<u>3%</u>
TOTALS	40	100%

*Percentages are rounded

Students seemed to be somewhat inconsistent between the numerical score given and the comments regarding specific examples. The mean score was 3.63, yet many of the respondent's comments were disagreeable to the statement.

Some indicated faculty's advice on career goals was not reliable. Others said faculty were of little help, too dogmatic, and suggested a need for more practical suggestion in job search information.

Yet a number of students indicated faculty had been helpful. Three students had become interested in teaching due to the faculty's role model of teaching (Ss. 8, 11, 24). Similarly, several stated that faculty interest and enthusiasm about a particular topic or field had shaped the

student's course of study.

For post-baccalaureate education, students received less help than on career information. Many did not receive any direct advice and others had intense negative feelings about the advice that was given. Others were helped to see the implications of graduate school given the student's chosen field of employment interests. Some faculty had shown students brochures describing an advanced degree program. One student felt more accepted by faculty after being admitted to graduate school (S 18).

Table 6.--Close Relationship Responses.

=====		
Response	Frequency	Percent*

Strongly Agree	19	48%
Agree	10	25%
Neutral	6	15%
Disagree	5	13%
Strongly Disagree	<u>0</u>	<u>0%</u>
TOTALS	40	100%

*Percentages are rounded

Amount of Time. Students described faculty as hard-presses for time, and claimed that time was key factor in developing close relationships with faculty. Seventy-three percent of students agreed or strongly agreed that they had at least one "close, personal relationship" with a faculty member (Table 6).

One student had four different advisors in four years and stated that not enough time was available for the development of a very personal relationship. Many said that the students had not taken the time to pursue an informal relationship with faculty. One even questioned the validity of a close relationship (S 5). A respondent observed that opportunities for interaction seemed to decrease from freshman year to senior year (S 15). Two had lived in faculty members' homes for some period of time. Evening conversations and feeling a part of the family were extremely valued experiences. One student actively sought out faculty interaction to temper the peer influence (S 26). Another so much wanted additional time in informal interaction that the student claimed he would "even enter a small seminar class to force the interaction with faculty" (S 35). Albeit, several students recognized and deeply appreciated the time faculty had taken to show care and concern.

Overall Satisfaction. Most students were satisfied with the opportunity to meet faculty informally (Table 7), nonetheless 44% either were neutral or were not satisfied.

Table 7.--Interaction Satisfaction Responses.

Response	Frequency	Percent*
Strongly Agree	14	35%
Agree	9	23%
Neutral	9	23%
Disagree	7	18%
Strongly Disagree	<u>1</u>	<u>3%</u>
TOTALS	40	100%

*Percentages are rounded

A significant number of students blamed themselves for not taking advantage of the opportunities that were available for more informal interaction. "It's my fault. I missed out. As I reflect in later years, I will be disappointed by not availing myself of this opportunity" (Ss. 15, 16, 27, 31, 35). One was held back from faculty interaction by personal insecurities (S 35). Another was disappointed by not enough interaction. Upon entering college, the admissions office had spoken of the close interaction with faculty, but the student had only experienced one such relationship (S 25).

Some students described the level of satisfaction by calling informal interaction with faculty "the basis of my education" (S 23), "a phenomenal influence" (S 1), "the most

important influence on my life" (S 8).

Students were asked to what extent student-faculty informal interaction played in the overall education of the college experience. Responses indicated from very important to of little importance (Table 8).

Table 8.--Importance of Student-Faculty Interaction for Four-Year College Experience.

=====		
Response	Frequency	Percent*

Very Important	19	48%
Somewhat Important	12	30%
Little Importance	<u>9</u>	<u>23%</u>
TOTALS	40	100%

Mean=1.75

Standard Deviation=.81

*Percentages are rounded

Consistent with another study, whereas formal student-faculty interaction negatively affected satisfaction with education, frequency of informal interaction positively influenced satisfaction with college (Endo and Harpel, 1982).

Expectations. Respondents were questioned concerning expectations of student-faculty informal interaction from

two perspectives: (1) expectations before the student came to college, and (2) expectations at the end of the college career.

First, when students imagined what student-faculty relationships would be like before coming to college, most thought the interaction would be more academic and less personable than actually occurred. As incoming freshman, the sample did not anticipate the faculty being as open (S 14), caring (S 30), and interacting (S 37). One admitted "complete surprise" that professors would be interested in students outside the classroom (S 40). The findings reflect the same trend Pascarella and Terenzini (1978) describe in expecting less interaction than actually received. The pre-enrollment expectations mean and standard deviations were 2.16/.91 and 2.93/.93, for example, in intellectual and personal development. The four-year perceived scores were 2.49/1.03 and 3.22/1.01, respectively.

However, one student expected more than was experienced in the four-year experience. The respondent's sister attended a small Christian college and had experienced several close faculty relationships. Therefore, the respondent had the same anticipation when undertaking her college career (S 2).

Secondly, the sample was also asked to state the role faculty should have in the development of students (perceived expectations). Responses typically addressed the role of faculty outside the classroom. "The (professor's)

job goes beyond teaching. Students have more on their minds than academics" (Ss. 14, 20). Students identified being supportive and encouraging as extremely important for student motivation. For faculty to foster critical thinking and inquiring minds was believed to be a prime role of faculty. Shaping lives, expressing availability, and providing an example of leadership were also noted as expectations of the students. Finally, students expressed an intense desire to be more personally known by their advisors which could enable better academic and career planning, but also to be challenged when found to be lax.

Suggestions for Increased Interaction. Noting the significant effects faculty had in student's college experience, respondents offered a number of suggestions to further improve the nature of student-faculty informal interaction. Although one said to "warn (the faculty) not to be personally involved; don't share too much; warn them of students becoming too dependent" (S 10), most of the students gave suggestions for more interaction opportunities. For example, specific suggestions given to faculty were as follows (unranked):

*eat lunch with students more often (Ss. 1, 19, 22)

*have more departmental meetings with students for socializing (Ss. 3, 8, 14, 15)

*schedule smaller classes to enable more discussion (Ss. 7, 15)

*write notes to schedule personal conferences and/or

- encourage student achievements (Ss. 8, 12, 27)
- *invite students to faculty homes for dessert (Ss. 7, 9, 15, 17, 19, 22, 29)
- *attend more campus activities (Ss. 9, 19, 38, 40)
- *be more involved in student orientation (S 1)
- *keep consistent office hours (Ss. 1, 18, 33, 35, 36)
- *take more initiative in interacting with students (Ss. 4, 16, 29, 40)
- *be available and approachable (Ss. 14, 16, 18, 24, 27, 31, 33, 34, 37)
- *don't be condescending, intimidating, rushed (Ss. 12, 15, 16, 30, 31, 32).

Summary. Students agreed that faculty informal interaction had a positive influence in every category reported: personal growth, intellectual growth, career goals and educational aspirations, and overall college satisfaction. Career goals, educational aspirations, and overall satisfaction, however, were rated slightly lower than personal growth and intellectual growth. Students placed student-faculty informal interaction as very to somewhat important in the entire college experience. Incoming students, in most cases, did not expect the faculty to be as concerned outside the classroom as was experienced, and the respondents had suggestions to improve the opportunity for informal interaction.

Qualities of
Interacting Faculty

Three means were employed to assess student's perceptions of faculty interest in students and qualities of the most and least informally interacting faculty. Students evaluated statements, listed qualities, and rank-ordered a set of qualities.

The sample responded to statements regarding faculty interest in students and faculty interest in teaching (5=strongly agree to 1=strongly disagree). Results are reported in Tables 9 and 10.

Table 9.--Means and Standard Deviations for Faculty Teaching And Student Interest Scale.

=====			
Statement	N	Mean	Standard Deviation

Faculty interest in students	40	4.55	0.60
Faculty as superior teachers	40	4.05	0.71
Faculty discuss out of class	40	4.45	0.64
Faculty help more than academic	40	3.75	0.93
Faculty interested in teaching	40	4.48	0.68

Table 10.--Percentage Responses for Faculty Teaching and Student Interest Scale.

=====					
	Strongly			Strongly	
Statement*	Agree	Agree	Neutral	Disagree	Disagree

Faculty interest					
in students	60%	35%	5%	0%	0%
Faculty as					
superior teachers	28%	50%	3%	0%	0%
Faculty discuss					
out of class	50%	48%	3%	0%	0%
Faculty more help					
than academic	20%	45%	28%	5%	3%
Faculty interested					
in teaching	58%	33%	10%	0%	0%
=====					

*See Figure 3 for Statements

Faculty Interest In Students. Respondents agreed that faculty are interested in students. (See Table 11.)

Table 11.--Faculty Interest in Students.

=====		
Response	Frequency	Percent

Strongly Agree	24	60%
Agree	14	35%
Neutral	2	5%
Disagree	0	0%
Strongly Disagree	<u>0</u>	<u>0%</u>
TOTALS	40	100%

Respondents identified many faculty as "taking the time" and "visibly attempting to be caring" for students.

Faculty As Superior Teachers. Seventy-eight percent of the students agreed that the teachers were outstanding or superior instructors (Table 12).

Table 12.--Faculty as Superior Teachers.

Response	Frequency	Percent*
Strongly Agree	11	28%
Agree	20	50%
Neutral	9	23%
Disagree	0	0%
Strongly Disagree	<u>0</u>	<u>0%</u>
TOTALS	40	100%

*Percentages are rounded

Students indicated that many were outstanding, but would not agree to "most" of the faculty being superior. Several respondents commented some of the faculty are brilliant, but lack teaching and communication skills. Some students sensed that faculty who taught introductory courses radiated a discontent for teaching the same course repeatedly, which negatively impacted the student's opinion.

Faculty Discussions Out of Class. All but one subject in the sample strongly agreed or agreed that faculty are willing to spend time outside class in discussion of issues important to the students (Table 13).

Table 13.--Faculty Discussion with Students Out of Class.

=====		
Response	Frequency	Percent*

Strongly Agree	20	50%
Agree	19	48%
Neutral	1	3%
Disagree	0	0%
Strongly Disagree	<u>0</u>	<u>0%</u>
TOTALS	40	100%

*Percentages are rounded

Although most students agreed the faculty are highly regarded and sought out for informal interaction, one said some were not willing to talk about matters outside their academic discipline.

Faculty Help More Than Academic. Most agreed faculty are interested in helping students grow in more than just academic areas (Table 14). The statement received the lowest score of the five-item scale (3.75).

Table 14.--Faculty Helping Students in More Than Academics.

Response	Frequency	Percent*
Strongly Agree	8	20%
Agree	18	45%
Neutral	11	28%
Disagree	2	5%
Strongly Disagree	<u>1</u>	<u>3%</u>
TOTALS	40	100%

*Percentages are rounded

Students identified other areas than academics in which faculty had helped (ranked order): personal, spiritual, vocational, emotional, familial, interpersonal.

Faculty Interested in Teaching. Respondents believed that most faculty were genuinely interested in teaching (Table 15).

Table 15.--Faculty Interested in Teaching.

=====		
Response	Frequency	Percent*

Strongly Agree	23	58%
Agree	13	33%
Neutral	4	10%
Disagree	0	0%
Strongly Disagree	<u>0</u>	<u>0%</u>
TOTALS	40	100%

*Percentages are rounded

Even though strong agreement was evidenced, students had comments about the remainder of the faculty who were not considered to be interested in teaching. Several said some faculty should be doing other things than teaching. Some faculty were regarded as unorganized and unenthusiastic.

Present findings are consistent with other research which indicates high interacting faculty have a greater commitment to teaching than research, and undergraduate students than graduate students (Gaff, 1973).

Qualities of Interacting Faculty. Students were asked to describe the qualities or attributes that characterize the most and least informally interacting faculty members. The results were tallied and rank-ordered. Following are the qualities of the most informally interacting faculty:

- *care and concern for students
- *affirming and encouraging to students
- *able to relate to students
- *vulnerable
- *skillful listener
- *sense of humor
- *happy with self, job
- *respect for student as person.

Additionally noted qualities are openness, flexibility, unhurried, and able to discuss campus issues.

Present findings support research by various studies on the contribution of faculty interpersonal characteristics to informal interaction: friendliness, flexibility (Theophilides and Terenzini, 1981); accessible, approachable, available (Chickering, 1969; Wilson et al., 1974; Woods and Wilson, 1972); empathetic, genuineness, respectful (Chang, 1981; Long, 1977); and understanding, honest (Galbo, 1984).

Students also described the most common qualities of the least interacting faculty (rank ordered):

- *formal, serious, academics only
- *too busy, rushed
- *intimidating

*not available

*not approachable

*inflexible

*arrogant, condescending

*invulnerable.

No variable of faculty gender, academic division or publishing record was directly stated to be a tendency of more or less interacting faculty. Age was mentioned by 10% of the sample. One said older faculty were less interacting. Two said younger faculty were more interacting. One said age was not a factor in interaction tendencies.

In addition to the descriptions of typical qualities for more and less informally interacting faculty, the students rank-ordered a series of fifteen qualities from most important to least important for the "ideal" professor. The selections were then weighted. The most important quality choice for each respondent equaled 30 points, the second most important equaled 28 points, and so on, until the fifteenth most important equaled 2 points. The frequency of each choice was multiplied by the selection weight, then all scores were tallied and ranked. (See Table 16.)

Table 16.--Ranking, Characteristics, and Weighted Score of Most Important Ideal Professor Characteristics.

=====		
Ranking	Characteristic	Score

1	Sincere interest in teaching students	1094
2	Interest and enthusiasm for subject taught	1024
3	Thorough knowledge of subject matter	996
4	Respects a difference of opinion	864
5	Sincere and honest	834
6	Pleasant, good rapport, relaxed atmosphere	746
7	Approachable outside class	682
8	Kind and sympathetic with all students	678
9	Commonsensical, practical, "down to earth"	562
10	Office hours for conferences (accessible)	560
11	Will discuss student's personal problems	482
12	Sense of humor, avoids distasteful jokes	472
13	Helps student decide on polit/rel issues	344
14	Writes books and articles for publication	220
15	Well-groomed and appropriately dressed	200

The data were statistically analyzed to determine the nature of agreement between the respondents choices for the ranking of the characteristics. Kendall's coefficient of concordance (W) score was $p < .0001$; $\chi^2 = 53.99$; $df = 14$). The score indicates significant agreement among the respondents

and a similar standard of ranking can be assumed for the respondents. (A subset analysis of the respondent's ranking are discussed later.)

Table 17.--Significant Intercorrelation Coefficients for Characteristics of Ideal Professor.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1								-29*							
2			-29*					28*							-26*
3											-28*				
4								-34*							
5						28*	-27*		-37**						
6											-32*				
7								-26*						-26*	
8															
9															
10														-34*	
11															
12													-26*		
13															-27*
14															
15															

* $p < .05$ ** $p < .01$ decimal points omitted

Table 17 displays the significant intercorrelation coefficients within the ranked characteristics. Spearman's rho rank order correlation analysis was used. The variables 1 to 15 represent the (ranked) most to least important qualities for the sample. (See Table 16 for the descriptors of the characteristics.)

In the above table, numbers 1 through 15 represent the rank-ordered characteristics the sample described as most important for faculty. For example, characteristic 1 (sincere interest in teaching students) is negatively associated (-.29) with characteristic 9 (commonsensical, practical, "down to earth").

Although the above fifteen significant intercorrelations exist at a $p < .05$ or $p < .01$ level, no strong relationships can be assumed between characteristics from the coefficient readings. The range is from -.37 to .28.

The specific fifteen characteristics chosen for rank-ordering were adapted from an expanded version of 33. Given that variation, present findings are comparable to the results of a survey by Scheck and Bizio (1977) at San Diego State University.

The rank order of the five most important characteristics at SDSU were (1) thorough knowledge of the subject matter, (2) interest and enthusiasm for subject taught, (3) interest in teaching students, (4) is inspiring and presents material to meet student needs, and (5) sincere and honest. In other words, four of the top five most important in the

present study were found in the SDSU study, and the unnamed characteristic was not included in the present study.

Also significant to note is that the most important criteria of the college professor varied little from research done in 1930. A study by Clinton reported the five most important characteristics to be (1) "thorough knowledge of the subject," "a pleasing personality," "neatness and appearance in work," "fairness to all students," and "kind and sympathetic to all students." In addition, other findings in more recent studies yield very similar results for most important characteristics of professors (e.g., Gazzella, 1967; Mueller, Roach, and Malone, 1971).

The same agreement is found on the least important characteristics. The lowest five from the present study were also found in the lowest eight from the SDSU study. The remaining three characteristics (of the eight from the SDSU study) were not included in the present study.

To further pursue the preference of students in faculty personality and teaching style, the investigator asked which was more important to the student: a professor who is an expert in a given field of knowledge, yet with little or no concern for the student's overall development, or a professor who is mediocre in the subject matter, yet extremely concerned with the overall development of the student? Of the 24 students who responded, 58% stated their first priority was a professor who cared for the personal development of the student and student-faculty interaction more than

subject matter.

One stated the choice for content above the interacting personality only because of the lack of adequate interaction (S 16). Another selected subject matter as more important, but admitted she had not much experience in informal interaction with faculty (S 17). Finally, one asserted "interaction will not increase learning; in fact, it decreases learning. This is a real danger--the awe of education can be lost" (S 10).

On the other hand, most preferred a more personable style for a professor. "I would rather have faculty with adequate knowledge and helpful personality than expertise with little concern for the student" (S 16). Several said the enthusiasm and personality of the professor communicates the content. "It is easier to listen to someone you respect. The credibility of the person carries the weight of the message" (S 18). "What good is it if you're an expert and you can't communicate it!" (S 7).

Summary. Students perceive that faculty are interested in teaching and are generally outstanding instructors. Faculty also display concern for areas other than academic and are willing to discuss various matters outside the classroom. Students identified specific traits which characterize the most and least informally interacting faculty members. Personal qualities, such as, care, encouragement, vulnerability, and respectfulness, described the more interacting faculty. Serious, rushed, and not available

described the least interacting. Students also ranked characteristics of the ideal professor. Consistent with earlier and more recent research, findings indicated students to be interested in content factors, but even more interested in the human personality variables which aid in the educative process and enhance various areas of student growth.

Significant Contexts
in Informal Interaction

Students named the specific contexts in which the most common informal interaction with faculty members occurred. Table 18 reports the unweighted tally in ranked order.

Table 18.--Ranked Order of Most Informal Contexts.

=====	
Context	Raw Score

Faculty office	35
After class discussion	14
Student cafeteria	12
Faculty home	11
Campus activities	8
Church	4
In class	2
Off campus	1
Department socials	1

Faculty Office. The context with the most common occurrence of student-faculty informal interaction was the faculty offices. Most of the students felt welcome when visiting faculty offices, but could tell when faculty were busy. A few respondents felt like intruders in the offices on occasion, but also welcomed at other times. One student said

I feel like I am welcome at certain times during the quarter but not so much at others. At the beginning of the term the faculty are less busy, but towards the end they have a lot of grading (S 2).

No student felt only as an intruder and never welcomed.

Faculty Homes. Informal interaction in faculty homes was the fourth most common context for interaction. All the respondents, except one, had been in a faculty's home either for dinner, dessert, party, class session or meeting (98%). (See Table 19.) The mean for student visits in faculty homes was 7.7 times over the four-year college experience. Fifty-two percent had been to faculty homes 5 times or more; 33% had been 10 or more; and 13% had been 20 or more.

Table 19.--Frequency, Percent, and Cumulative Percent of Students Visiting Faculty Homes.

=====			
Visits to homes	Frequency	Percent*	Cumulative**

0	1	3%	3%
1	1	3%	5%
2	4	10%	15%
3	8	20%	35%
4	5	13%	48%
5	4	10%	58%
6	3	8%	65%
8	1	3%	68%
10	2	5%	73%
11	1	3%	75%
12	3	8%	83%
15	2	5%	88%
20	2	5%	93%
23	1	3%	95%
24	1	3%	98%
25	<u>1</u>	3%	100%
TOTAL	40		

Mean=7.7; Standard Deviation=6.80

*Percentages are rounded **Percentages are actual

Students enjoyed the visits in faculty homes and suggested that more interaction in the home would be conducive to informal interaction. Even the students who had little informal interaction in the four-year experience would welcome invitations going to faculty homes.

Students liked seeing faculty in the home for the following reasons (rank-ordered): (1) more relaxed setting, (2) wholistic view of faculty as a person, (3) increased opportunity for informal interaction, (4) got to know faculty's family, (5) good food, (6) made them feel important, and (7) discussion of variety of topics.

Student-Faculty Projects. The sample responded concerning participation in individual or small group projects with faculty members. (See Tables 20, 21, and 22.)

Table 20.--Student-Faculty Project Participation Summary.

=====

Have you worked on any kind of individual or small group project with a faculty member?

Response	Frequency	Percent

Yes	18	45%
No	21	53%
No response	<u>1</u>	<u>3%</u>
	40	100%

In addition to the contexts previously mentioned, informal interaction appears to occur in various kinds of student-faculty collaborative projects. The following were specific projects or activities students worked on with faculty: independent study, laboratory assistant, teaching assistant, research, organize activity, committee. Table 20 reports that roughly half (45%) of the sample had participated in a student-faculty project; while the other half (53%) had not.

However, when students who had not been involved were asked if they would participate in faculty projects, the majority were agreeable (Table 21). Eighty-five percent of the respondents who had not experienced the personal interaction with faculty, in the context of project work, desired to do so. Three respondents (14%) had no interest in working on any project.

The two activities students would be most interested to collaborate on with faculty were (1) doing research on a particular topic and (2) being a teaching assistant.

Table 21.--Non-participants' Future Desire for Student-Faculty Projects.

=====

You have not been involved with faculty in any kind of projects, would you like to do so, given a chance?

Response	Frequency	Percent

Yes	17	85%
No	<u>3</u>	<u>15%</u>
	20	100%

Missing cases: 1

Table 22.--Participants Future Desire for Student-Faculty Projects.

=====

You have participated in faculty projects already, would you like to be involved again, given a chance?

Response	Frequency	Percent

Yes	9	82%
No	<u>2</u>	<u>18%</u>
	11	100%

Missing cases: 7

In addition, students who had done project work with faculty, were asked if they would like to do more (Table 22). The majority of students (82%) would be willing to be involved again. Two respondents were not interested. Lack of time was the major factor for further non-participation. (The response of the seven missing cases would give more clarification in the findings.)

The reason students enjoyed the experience in working with faculty--or would desire the opportunity to do so if given the chance--was the amount of personal time spent in informal interaction with faculty in a different context than the formalized classroom. One student said, "if I could find that sort of (interaction) with faculty I'd change majors to get it" (S 28).

Findings of student satisfaction in collaborative work with faculty are consistent with the reports of others. Davis and Young (1982) describe projects involving students and faculty together in research evaluation and teaching. The dialogue of ideas and personal disclosure was most rewarding for both student and faculty members. Evidence gathered by Chambers (1973) showed that creativity by students is best fostered in the laboratory, office, home or other informal settings, and not the classroom.

Summary. The top three contexts students identified for the most common informal interaction were on-campus settings: faculty office, after class, and student cafeteria. Students, however, were desirous of more off-campus

interaction in faculty homes. The average student had been to faculty homes about twice a year--7.7 times per year. Almost half of the students had worked on a personal basis in a work or research settings with faculty. Of the 53% that had not, 85% would welcome the opportunity to be involved in some sort of student-faculty project. Of the ones who had been involved in a project, 82% wanted more opportunities. (Some were too busy and other responses were missing.)

Social Distance and Desired Change

Respondents reported the perceived social distance between students and faculty for both present relationships and future desired relationships. (See Tables 23-27.) Variables 1 (fairly formal) through 10 (very informal) represent various "typical" descriptors of student-faculty relationships.

Table 23 describes the current social distance between students and faculty as perceived by the students at the time of the interview. The sample identified about 5 of 10 items that were typically descriptive of informal interactions. Table 24 describes the desired changes that the sample wish could be made to make the student-faculty interaction more informal. The sample desired more than 7 of 10 items to be descriptive of the relationships with faculty. Table 25 shows the comparison in frequency and percent between current and future descriptive characteristics.

Table 23.--Characteristic, Frequency, and Percent of Present Social Distance Between Student and Faculty.

=====		
Card	Characteristic	Frequency Percent

1	S/F exchange greeting in classroom	35 88%
2	After class to discuss academics	29 73%
3	S initiates greeting on campus	36 90%
4	S visits F office for academics	32 80%
5	S/F social conversation on campus	32 80%
6	S visits F office for personal problem	12 30%
7	S/F have lunch/coffee on campus	13 33%
8	S uses F's first name with him/her	4 10%
9	S/F spend time off campus interests	8 20%
10	S/F mutual self-disclosure	2 5%
N=40 mean=5.08 SD=1.82		

Table 24.--Characteristic, Frequency, and Percent of Desired Social Distance Between Student and Faculty.

=====			
Card Characteristic		Frequency	Percent

1	S/F greeting in the classroom	38	95%
2	After class to discuss academics	34	85%
3	S initiates greeting on campus	34	85%
4	S visits F office for academics	38	95%
5	S/F social conversation on campus	39	98%
6	S visits F office for personal problem	27	68%
7	S/F have lunch/coffee on campus	38	95%
8	S uses F's first name with him/her	9	23%
9	S/F spend time in off campus interests	25	63%
10	S/F mutual self-disclosure	12	30%
N=40 mean=7.35 SD=1.46			

Table 25.--Frequency and Percent Comparing Current and Future Social Distance.

=====					
Charac-	Present		Future		Percent
teristic*	Frequency	Percent	Frequency	Percent	Gain/Loss

1	35	88%	38	95%	+ 8%
2	29	73%	34	85%	+13%
3	36	90%	34	85%	- 5%
4	32	80%	38	95%	+15%
5	32	80%	39	98%	+18%
6	12	30%	27	68%	+38%
7	13	33%	38	95%	+62%
8	4	10%	9	23%	+13%
9	8	20%	25	63%	+43%
10	2	5%	12	30%	+25%

* See list in Table 23.

A two-tailed t-test showed significant differences between the present social distance level and that desired by the students (t=8.14; p<.001; df=39).

Table 26.--Changes in Social Distance from Most to Least Desired by Students Comparing from NOW to FUTURE.

=====		
Card	Characteristic	Gain/loss

7	S/F have lunch/coffee on campus	62%
9	S/F spend time off campus in interests	43%
6	S visits F office for personal problem	38%
10	S/F mutual self-disclosure	25%
5	S/F social conversation on campus	18%
4	S visits F office for academics	15%
2	After class to discuss academics	13%
8	S uses F's first name with him/her	13%
1	S/F exchange greeting in classroom	8%
3	S initiates greeting on campus	-5%

The top five desired changes concerned personal interaction between students and faculty. If student wishes for interaction with faculty could be fulfilled, the primary changes would be in developing more informal, not only academic, relationships.

Fiebert's (1971) study at California State College, Long Beach yielded some similar findings to the present results. Table 27 displays the comparisons from the present study to Fiebert's study.

Table 27.--Comparable Data Findings for Perceived and Desired Social Distance Between Fiebert and Present Study.

Category	Present (N=40)		Fiebert (N=507)	
	mean	SD	mean	SD
Present social distance	5.1	1.8	3.7	2.2
Future desired change	7.4	1.5	7.6	2.5

The ideal desired level of informality with faculty from a student view is similar. The current level of social distance in the present study is less distant from the faculty than that of the previous study. The declining frequency trend from formal (statement #1) to informal (statement #2) responses were observed in both studies for current interactions. (Line-item responses were not given for desired future changes in the Fiebert study.)

Summary. Students reported a score of 5.08 (of 10) on a social distance scale. The desired score for student-faculty informal interactions was 7.35. Areas identified by students as more frequently desired for faculty relationships were (1) having lunch together, (2) spending time off-campus in mutual interests, (3) visiting faculty offices for personal problems, and (4) mutual self-disclosure. The present findings are in some ways comparable to an earlier

study done at a large university (Fiebert, 1971).

Correlation of Variables
Between Selected Subsets

Correlations were tabulated between males and females, above and below the mean class grade point average, and academic divisions.

Gender. No significant differences were found between males and females in perceived college outcomes as a result of student-faculty informal interaction. (See Table 28.)

Table 28.--Male/Female Correlations for College Outcomes Scale.

Outcome	Significance	χ^2	df
#1 Personal Growth	.52	2.29	3
#2 Intellectual Growth	.62	2.62	4
#3 Career Goals/Ed. Aspirations	.53	3.16	4
#4 Close Relationship	.63	1.74	3
#5 Interaction Satisfaction	.69	2.25	4
(N=male=20; N=female=20)			

Slight differences were found between males and females on the Faculty Teaching and Student Interest Scale. (See Table 29.)

Table 29.--Male/Female Correlations for Faculty Teaching and Student Interest Scale.

Statement	Significance	χ^2	df
#1 Faculty Interest in Students	.15*	2.60	1
#2 Outstanding Teachers	.39	1.89	2
#3 Faculty Outside Discussion	.43	1.67	2
#4 Faculty More Than Academic	.02*	5.38	1
#5 Faculty Interest in Teaching	.11*	2.50	1

*Significance figured after collapsing the data across categories. Cells with expected frequencies < 5=0%.

Males and females scored differently (at a significant level, $p < .03$) in that males perceived faculty to be interested in helping students in more than academic areas. (Strongly disagree, disagree, and neutral responses were collapsed, and agree and strongly agree responses were collapsed for significance.)

Somewhat related, but not significantly, males tended to be more agreeable than females concerning faculty interest in teaching ($p < .11$). Males also agreed more than females that faculty are interested in students ($p < .15$).

The overall importance of student-faculty informal interaction on male or female's experience was not significant ($p < .48$). The amount of times males or females visited

faculty homes was not significant ($p < .42$).

Males and females responded similarly in ranking faculty characteristics. (See Table 30).

Table 30.--Male/Female Comparison of Faculty Characteristic Ranking.

=====		
Characteristic	Male	Female

Interest and enthusiasm for subject taught	1	1
Thorough knowledge of subject matter	2	2
Sincere interest in teaching students	3	3
Respects a difference of opinion	4	5
Sincere and honest	5	4
Approachable outside of class	6	7
Pleasant, good rapport, relaxed atmosphere	7	6
Office hours for conferences (accessible)	8	11
Kind and sympathetic with all students	8	9
Will discuss student's personal problems	10	12
Sense of humor, avoids distasteful jokes	11	10
Commonsensical, practical, "down to earth"	12	8
Helps students decide on polit/rel issues	13	13
Well-groomed and appropriately dressed	14	15
Writes books and articles for publication	15	14

A Kendall's rank correlation coefficient (τ) was calculated to measure the degree of agreement between the groups. The score was .81, which indicates a high level of correspondence between male and female rankings. Males tended to be slightly more interested in accessibility than females, and less interested in practicality.

Kendall's coefficient of concordance (W) measured the level of agreement within the subset groups ($N=20$). Male's degree of similarity was $p<.06$; $\chi^2=23.01$; $df=14$. A high level of agreement existed between the male responses. Female's degree of similarity was $p<.0001$; $\chi^2=50.96$; $df=14$. A highly significant level of agreement existed between the female responses.

No significance was evident between male and female responses to social distance either present or future. (See Table 31.)

Table 31.--Male/Female Means and Standard Deviations for Present and Desired Social Distance.

Social Distance		N	Mean	Standard Deviation
Present:				
	Male	20	5.35	1.76
	Female	20	4.80	1.88
Future:				
	Male	20	7.40	1.43
	Female	20	7.30	1.53

Two-tailed t -test scores measured no significant difference for present social distance ($p < .35$; $t = .96$; $df = 38$) or for desired change in social distance ($p < .83$; $t = .21$; $df = 38$). Significant difference was found for the total sample ($N = 40$) in present social distance compared to desired social distance ($p < .0001$; $t = 8.14$; $df = 39$).

Gender Summary. No significant differences were found between males and females on the College Outcomes Scale, the ranking of ideal professor characteristics, and present or desired social distance. However, the Faculty Teaching and Student Interest Scale indicated some differences. Students perceived faculty were more interested in helping males grow in areas other than academics rather than females. Trends were also found to indicate males viewed faculty more interested in teaching and students than females (at a level approaching significance).

Grade Point Average. Several significant differences were found between students above the mean class grade point average and students below the mean. (See Table 32.)

Students above the class (mean) grade point average (2.90) were significantly different ($p < .04$) than students below the mean in amount of positive influence faculty have had on intellectual growth and interest in ideas. (The strongly disagree, disagree, and neutral categories were collapsed.) Therefore, students with higher grade point averages were likely to be more intellectually influenced by

Table 32.--Above/Below the Mean Grade Point Average Correlations for College Outcomes Scale.

Outcome	Significance*	χ^2	df
#1 Personal Growth	.25	2.77	2
#2 Intellectual Growth	.04	6.49	2
#3 Career Goals/Ed. Aspirations	.33	0.94	1
#4 Close Relationship	.09	6.52	3
#5 Interaction Satisfaction	.03	7.12	2
(N=above=20; N=below=20)			

*Significance figured after collapsing the data across categories.

faculty in nonclassroom interactions.

Respondents above the mean were significantly different ($p < .03$) from students below the mean in informal interaction satisfaction. Students above the mean, however, both strongly agreed (45%) and disagreed (50%) with the number of satisfactory opportunities for informal interaction. (Strongly disagree, disagree, and neutral categories were collapsed.) Some above the mean were satisfied with interaction opportunities and others desired more than they were currently experiencing.

A trend was observed ($p < .09$) somewhat distinguishing students above and below the mean grade point average for

tendencies in developing close, personal relationships with faculty. The above the mean subset tended to have more close relationships with faculty than those below the mean.

No significant differences were found between students above and below the mean grade point average on the Faculty Teaching and Student Interest Scale. (See Table 33.)

Table 33.--Above/Below the Mean Grade Point Average Correlations on the Faculty Teaching and Student Interest Scale.

Statement	Significance	χ^2	df
#1 Faculty Interest in Students	.80	0.45	2
#2 Outstanding Teachers	.52	1.29	2
#3 Faculty Outside Discussion	.43	1.67	2
#4 Faculty More Than Academic	.10*	7.59	4
#5 Faculty Interest in Teaching	.20	1.64	1

*At present significance level, expected frequency cells < 5=60%. When cells are collapsed, a perfect correlation (1.0) exists.

A trend approaching significance ($p < .13$; $\chi^2 = 4.09$; $df = 2$) existed in importance of student-faculty informal interaction for the overall college education experience between students above and below the mean grade point average. Students above the mean reported informal interaction to be

very important (60%) and somewhat important (30%). Students below the mean reported informal interaction to be somewhat important (30%) and of little importance (35%).

The amount of times students above and below the mean visited faculty homes was not significant ($p < .41$). (Categories were collapsed to 1-3, 4-6, 7 or more.)

Students above and below the mean grade point average responded similarly in ranking faculty characteristics. (See Table 34.)

A Kendall's rank correlation coefficient (τ) was calculated to measure the degree of agreement between the groups. The score was .85, which indicates a high level of correspondence between above the mean and below the mean rankings. Students above the mean were slightly more concerned that faculty be interested in teaching students, and more interested in good rapport than students below the mean.

Kendall's coefficient of concordance (W) measured the level of agreement within the subset groups ($N=20$). Students above the mean's degree of similarity was $p < .002$; $\chi^2 = 34.82$; $df=14$. A significantly high level of agreement existed between the above the mean responses. Students below the mean's degree of similarity was $p < .005$; $\chi^2 = 31.59$; $df=14$. A significantly high level of agreement also existed between the below the mean responses.

Table 34.--Above/Below the Mean Grade Point Average Comparison of Faculty Characteristics.

Characteristic	Above	Below
Sincere interest in teaching students	1	3
Interest and enthusiasm for subject taught	1	1
Thorough knowledge of subject matter	3	2
Pleasant, good rapport, relaxed atmosphere	4	6
Respects a difference of opinion	5	4
Sincere and honest	6	5
Approachable outside of class	7	7
Commonsensical, practical, "down to earth"	8	9
Kind and sympathetic with all students	9	8
Office hours for conferences (accessible)	10	10
Will discuss student's personal problems	11	12
Sense of humor, avoids distasteful jokes	12	11
Helps students decide on polit/rel issues	13	13
Well-groomed and appropriately dressed	14	15
Writes books and articles for publication	15	14

No significance was evident between above the mean and below the mean responses to social distance either present or future. (See Table 35.)

Table 35.--Above/Below the Mean Grade Point Average Means and Standard Deviations for Present and Desired Social Distance.

=====			
Social Distance	N	Mean	Standard Deviation

Present: Above	20	5.05	1.57
Below	20	5.10	2.08
Future: Above	20	7.45	1.31
Below	20	7.25	1.62

Two-tailed t -test scores measured no significant difference for present social distance ($p < .93$; $t = .09$; $df = 35$) or for desired change in social distance ($p < .67$; $t = .43$; $df = 36$). Significant difference was found for the total sample ($N = 40$) in present social distance compared to desired social distance ($p < .0001$; $t = 8.14$; $df = 39$).

Grade Point Average Summary. Significant differences were found between students above and below the mean grade point average on perceived college outcomes. Students above the mean were more influenced in intellectual growth by informal interaction, and were both more and less satisfied with opportunities for informal interaction than students below the mean. Students above the mean have closer, more personal relationships with faculty than students below the mean at a level approaching significance ($p < .09$).

No differences were found in the Faculty Teaching and Student Interest Scale, rankings of the ideal faculty characteristics or level of present and desired social distance.

Academic Division. Minor differences existed between students in the Humanities/Natural Sciences (HU/NS) and students in Social Sciences and Education (SS/ED) divisions. (See Table 36.)

Table 36.--Academic Division Correlations for College Outcomes Scale.

Outcome	Significance	χ^2	df
#1 Personal Growth	.63	1.75	3
#2 Intellectual Growth	.30*	1.07	1
#3 Career Goals/Ed. Aspirations	.19*	1.67	1
#4 Close Relationship	.72	1.32	3
#5 Interaction Satisfaction	.14*	2.56	1
(N=HU/NS=20; N=SS/ED=20)			

*Significance figured after collapsing the data across categories. Cells with expected frequencies < 5=0%.

Although differences were not significant, two trends approached significance. First, HU/NS students were more satisfied with opportunities to interact informal with faculty than SS/ED students. (Strongly disagree, disagree, and

neutral categories were collapsed, and agree was collapsed with strongly agree.) Second, SS/ED students tended to be more positively influenced by faculty in career goals and educational aspirations than HU/NS students.

No significant differences were found between students in HU/NS or SS/ED academic divisions. (See Table 37.)

Table 37.--Academic Division Correlations on the Faculty Teaching and Student Interest Scale.

Statement	Significance	χ^2	df
#1 Faculty Interest in Students	.34	2.16	2
#2 Outstanding Teachers	.20	3.18	2
#3 Faculty Outside Discussion	.53	1.25	2
#4 Faculty More Than Academic	.90	1.09	4
#5 Faculty Interest in Teaching	.94	.12	2

Significant differences were found in the importance students attributed to student-faculty informal interaction for the four-year college experience ($p=.05$; $\chi^2=3.60$; $df=1$). HU/NS students found informal interaction with faculty very important to the college experience (65%). SS/ED students found informal interaction with faculty somewhat or of little importance (70%).

The amount of times students in HU/NS or SS/ED

divisions visited faculty homes was not significant ($p < .32$).
(Categories were collapsed to 1-3, 4-6, 7 or more.)

Students in the HU/NS and SS/ED academic divisions responded similarly in ranking faculty characteristics.
(See Table 38.)

Table 38.--Academic Division Comparison of Faculty Characteristics (Rank Order).

=====		
Characteristic	HU/NS	SS/ED

Interest and enthusiasm for subject taught	1	1
Sincere interest in teaching students	2	3
Thorough knowledge of subject matter	3	2
Sincere and honest	4	5
Respects a difference of opinion	5	4
Pleasant, good rapport, relaxed atmosphere	6	6
Approachable outside of class	7	7
Commonsensical, practical, "down to earth"	8	11
Kind and sympathetic with all students	9	8
Sense of humor, avoids distasteful jokes	10	13
Office hours for conferences (accessible)	11	9
Will discuss student's personal problems	12	10
Helps students decide on polit/rel issues	13	12
Well-groomed and appropriately dressed	14	15
Writes books and articles for publication	15	14

A Kendall's rank correlation coefficient (τ) was calculated to measure the degree of agreement between the groups. The score was .83, which indicates a high level of correspondence between HU/NS and SS/ED division students. HU/NS students were more concerned that faculty be humorous and practical, and less concerned with accessibility and discussing the student's personal problems than SS/ED students.

Kendall's coefficient of concordance (W) measured the level of agreement within the subset groups ($N=20$). Students in the Humanities and Natural Science divisions had a degree of similarity of $p<.0001$; $\chi^2=52.22$; $df=14$. A significantly high level of agreement existed between the HU/NS responses. Students in the Social Sciences and Education divisions had a degree of similarity of $p<.27$; $\chi^2=16.86$; $df=14$. No consistent pattern or no high level of agreement existed between the SS/ED responses.

No significance was evident between students in HU/NS or SS/ED for social distance either present or future. (See Table 39.)

Table 39.--Academic Division Means and Standard Deviations for Present and Desired Social Distance.

=====				
Social Distance		N	Mean	Standard Deviation

Present:	HU/NS	20	5.15	1.57
	SS/ED	20	5.00	2.08
Future:	HU/NS	20	7.25	1.48
	SS/ED	20	7.45	1.47

Two-tailed t -test scores measured no significant difference for present social distance ($p < .80$; $t = .26$; $df = 38$) or for desired change in social distance ($p < .67$; $t = .43$; $df = 38$). Significant difference was found for the total sample ($N = 40$) in present social distance compared to desired social distance ($p < .0001$; $t = 8.14$; $df = 39$).

Academic Division Summary. A significant difference was found between the amount of importance informal interaction had in the overall college education for HU/NS students and SS/ED students ($p = .05$). No significant differences were found in the College Outcomes Scale, Faculty Teaching and Student Interest Scale, rankings of ideal faculty characteristics or level of present and desired social distance.

Summary

Following are the major findings of the study:

1. Students attributed informal interaction with faculty as a positive influence on personal growth, intellectual growth, career goals, and educational aspirations.

2. Students considered informal interaction with faculty to be very important to somewhat important in the overall college experience.

3. Students perceived the faculty to be very interested in both students and teaching.

4. Students described the most interacting faculty as professors willing to be personable, caring, and encouraging with students.

5. Students identified the most significant contexts for student-faculty informal interaction as faculty offices, after class, and the cafeteria.

6. Students desired to work with faculty on collaborative projects (of any kind) due to the informal interaction time experienced in the process.

7. Students desired more informal relationships with faculty than were characterized by the present level of social distance.

8. Faculty were more interested in developing males than females in areas other than academics (e.g., career).

9. Students with higher grade point averages were more influenced by student-faculty informal interaction than students with lower grade point averages.

10. Students with higher grade point averages were more satisfied with opportunities for informal interaction with faculty than students with lower grade point averages.

11. Humanities/Natural Science students found informal interaction with faculty very important to the overall college experience, whereas, Social Science/Education students found informal interaction with faculty somewhat important or of little importance.

CHAPTER V

CONCLUSIONS

The purpose of the study is to gain insight into the nature of student-faculty informal interaction. A description of various qualities and contexts for the interaction is explored. In addition, the present and desired levels of social distance in the student-faculty relationship are examined. Exit interviews from a sample of forty graduating seniors report on faculty influence in student's college outcomes. Findings reveal friendly student-faculty informal interaction has a positive influence on every area observed. Students believe faculty to have a significant role in the amount of satisfaction experienced in college. In addition, students desire increased opportunities for informal interaction with faculty.

The following sections discuss conclusions drawn from the major research questions: (1) college outcomes, (2) faculty teaching, (3) interactive qualities, and (4) social distance.

College Outcomes and Informal Interaction

One assumption of the study was that there would be positive influences on students due to faculty informal interaction. The present findings confirm that notion. Students perceive informal interaction with faculty to be a positive influence in personal and intellectual growth, and career and educational planning.

Admittedly, students have no other set of college experiences with which to compare their current experiences. Therefore, students can speak only from their experience which is incomparable to any other. Additional limitations come from the nature of the study: cross-sectional; the sample: seniors; the type of institution: Christian liberal arts college; and a portion of the methodological design: correlational, which does not necessarily imply causation.

Nonetheless, the data suggest several generalizations:

1. The greater the quality of informal interaction between student and faculty, the greater the chance is of personal growth for students. The findings lend support to the position of Pascarella, Terenzini, and Hibel (1978) that faculty informal interactions are particularly rich in potential to influence student attitudes, values, and behaviors. Areas beyond academics are considered of importance to students in overall development. No differences could be found between males and females, higher and lower grade point averages, or students in various academic divisions. None were anticipated.

2. The greater the quality of informal interaction between student and faculty, the greater the chance is of intellectual growth for students. Students have trouble in many cases distinguishing between faculty influence on personal and intellectual growth. Students desire the opportunity to extend academic discussion beyond the classroom. The present findings give support to the research of Eddy (1959), Pascarella (1985), Pascarella et al. (1978). Correlations of male/female, higher/lower grade point average, and type of academic division reveal no differences. None were expected.

3. Although less affected than personal and intellectual growth, students are positively influenced by faculty informal interaction in areas of career and educational aspirations. Both direct advice and subject area enthusiasm by faculty to students are very influential in student decisions concerning jobs and graduate schools. Previous findings by Astin (1969), Chickering (1969), Hiley (1982), and Pascarella (1984) are confirmed. No differences are found between males/females, higher/lower grade point averages, and academic divisions. None were assumed.

4. Students who identify faculty informal interaction as having positive influence, also are found to have the closest relationships with faculty. The findings suggest that close relationships with faculty play an important role in influencing student's college outcomes. Students with higher grade point averages approached significance ($p=.09$)

in degree of closeness with faculty. No other correlative significant difference was found.

5. Students are mixed in the degree of satisfaction in opportunities for informal interaction. Students with higher grade point averages are significantly different ($p=.02$). A greater degree of satisfaction for informal interaction opportunity was found in students with higher grade point averages. On the other hand, those with higher grade point averages also were the least satisfied. A possible explanation is that some higher average students were experiencing a good deal of informal interaction, and others had had some, but were very desirous of more. In addition, Humanities/Natural Science students were more satisfied with interaction opportunity than Social Science/Education students. No differences were found between males and females.

6. Students expect faculty to be less personable in their encounters with students than they turn out to be. As entering freshman, students assume faculty to be formal. By the senior year, however, students realize faculty are not like the assumed image. Once that misconception is dispelled, students desire even greater opportunity for informal interaction.

7. Finally, students rate the importance of student-faculty informal interaction as very important to somewhat important in their overall four-year education. Present findings are similar to Astin's (1984) who argues interaction with faculty is more strongly related to satisfaction

with college than any other type of involvement or any other student or institutional characteristic. A significant difference was found between the academic divisions ($p=.05$). Humanities/Natural Science students found informal interaction very important to their overall education (60%); whereas, Social Science/Education found informal interaction either somewhat or of little importance (70%). (This conclusion may be disputable due to the very tenuous composition of the academic division subsets. Only 4 of the latter subset are Education majors, and the former subset is two-thirds Humanities. Therefore, unless both academic divisions within each subset follow similar response patterns, conclusions are suspect. In addition, the present findings are not supported by another study [Gamson, 1967] which concludes Social Science faculty are more interactive than Natural Science faculty.) A trend from the data suggests that students with higher grades view informal interaction as more important than students with lower grades ($p=.13$). No differences were found between males and females.

Faculty Teaching and Student Interest

Another assumption of the study was that if students regarded faculty as positive influences in college outcomes, students would also agree that faculty are interested in teaching and in students.

Findings of Churukian (1982), Terenzini, Theophilides, and Lorang (1984), and Theophilides and Terenzini (1981)

assert instructor evaluation and course ratings also tap the effects of out-of-class interaction. In other words, if students have informal interaction outside the classroom with faculty, the relationship impacts student's ratings of the instructor's performance (and the course in general) in the classroom. Therefore, because student's associate faculty informal interaction with the positive outcomes of their college experience, it follows that faculty would also receive high scores on teaching and level of interest in students.

Students gave extremely high marks to faculty's interest in both teaching as an occupation and in students. Growth, in more than just academic areas, was more nurtured by faculty in males than females ($p=.02$). That finding is especially interesting because the sample comes from an institution comprised of more females than males (55% to 45%).

In what appears to be a related finding, males indicated (at a level approaching significance, $p=.15$) that faculty are interested in students. In other words, females were much less willing to agree that faculty were interested in students than males. This conclusion could be supported by the previous observation that faculty helped females less than males in areas other than academics.

No other significant differences were noted. In fact, the academic divisions responded very similarly with regard to faculty teaching and student interest.

Qualities of Faculty Interaction

Clearly, students desire more interaction with faculty on an informal basis. The students indicated in the social distance scale a significant desire for a more informal relationship than presently experienced ($p < .0001$). Qualities that students identify as most conducive to the most interacting faculty are consistent with several other studies (Chang, 1981; Chickering, 1969; Gaff, 1973; Galbo, 1984; Long, 1977; Theophilides and Terenzini, 1981; Woods and Wilson, 1972). In addition, strong agreement in responses exists both within and between the subsets.

Consistent with Cole's (1982) review of the literature on improving higher education instruction, the instructor's personality plays a crucial role in the educative process. Students describe qualities of concern, encouragement, and a willingness to be vulnerable as contributory toward student-faculty interaction.

Students are more interested in faculty who are concerned about more than academics, but are willing to become personally interested in the various facets of student's lives. Formalism, hurriedness, and inavailability do not engender a sense of the informality students need.

The Interactive Climate on Campus

Students name faculty offices, after class discussions, and the student cafeteria as the contexts of most significance for students in informal interaction. A limitation of

the present study is the size of the institution studied. Similarities and differences are generalized.

1. The present findings are different from studies conducted at large, public universities. Clearly, as Astin (1977) indicates, smaller, four-year, religious, liberal arts colleges are positively associated with student-faculty informal interaction. Comparing the social distance scores in Fiebert's (1971) study of California State University, Long Beach and the institution reported in the study, significant differences are revealed in the present level of informal relationships. Although the desired mean for social distance is similar for both institutions, the present level of social distance perceived by the students is markedly different (3.7 for CSU, LB compared to 5.0 for the present study). The data suggest that larger universities are less informally interacting than smaller colleges. This finding would give some support to a distinction that small colleges advertise as being a favorable trait of their social climate. (See APPENDIX C for the studied institution's statements and assessments of its student-faculty informal interaction.)

2. All but one of the students in the present study had been to a faculty member's home (98%). The sample averaged almost eight times over the four-year college experience. This finding seems to be unlikely even for smaller colleges let alone larger universities. Informal interaction in faculty homes to this degree is bound to contribute

heavily to the sample's overall response in the study. Additionally, most students mentioned "more visits to the homes" as a suggestion for even further interaction opportunities. Certainly, the more interaction in faculty homes, the more likely a student is to be influenced by faculty.

3. Of the sample interviewed, almost half had worked with faculty on a collaborative project. Of the remaining half who had not, 85% would like to work with faculty in some sort of project, given the chance. Even those that had already been involved in student-faculty projects desired to do more work with faculty. Similar findings were presented by Chambers (1973), Davis and Young (1982), and Meloy (1986). Students are looking for opportunities to be involved with faculty in some meaningful endeavor. The more opportunity given for such projects, the more faculty have a chance to influence students. Naturally, some faculty have neither the time nor the inclination to work with students on collaborative projects.

4. The most offered suggestions students make to move beyond the present level of social distance are (1) eating together on campus, (2) being able to share personal problems with selected faculty, and (3) spending more time together doing activities of mutual interest.

Implications of the Study

The findings of the study suggest practical implications for three segments of people in the higher education

enterprise: (1) administrators and student personnel staff, (2) students, and (3) faculty.

Administrators and Student Personnel Staff

A number of applications seem viable for academic deans and staff involved in student development given the research findings:

1. Higher educational curriculum planning needs to be informed by the implications of student-faculty informal interaction. Academic deans should consider the roles of both formal and informal in curriculum design.

2. The developmental issue of adolescent autonomy versus peer tension, and the young adult's maturation of healthy interdependency is important to grasp for a more wholistic perspective of the student.

3. Admissions offices can emphasize to potential students the benefits of the institution due to its commitment to student interest through nurturing student-faculty informal relationships. Incoming freshman expectations indicate the assumption that faculty are formal and unconcerned. The thought of caring faculty is appealing to potential students.

4. Students who have had a personally satisfying educational experience are more apt to recommend their college and support its mission and programs than students who have had less than satisfying college careers. Therefore, participation in alumni functions, student recruiting, and financial donations will be more fully supported by graduates who

have enjoyed close and informal interactions with faculty.

5. The Dean of Student's Office or other student personnel staff can gain a fuller understanding how to enhance college student's wholistic development by acknowledging the significant role faculty have to play in the overall process.

6. Higher education administrators need to reevaluate the current faculty reward system, faculty teaching load assignments, teacher education, and faculty development programs in light of the important contributions that can be made through student-faculty informal interaction. If the institution regards its students' educational development as well as personal development to be important, time and incentive should be granted to the faculty to foster helpful student-faculty relationships.

While not major research questions, the following findings are consistent with the literature:

7. More resident housing arrangements and a low commuter student population are more likely to have increased informal interaction than high commuter schools. Although a commuter/resident subset comparison was not done in the study, generalizations were consistent with the research.

8. College retention is proportionately related to the level of student-faculty informal interaction. The more a student "fits" into the institutional environment, the less likely the student is to drop out. Several students in the sample indicated that they would have dropped out of college

except for the influence of or relationship with faculty members. Faculty are to be viewed as central figures in the socialization process of students.

Students

Previous research reports that students are not passive in the selection of those who serve as significant others. In the last analysis, students are the central figures in the educative task in higher education.

1. Students should be more persistent in initiating relationships with faculty. Rather than being drawn to students at large, faculty seem to befriend those more often who seek them out.

2. Students should avail themselves of the opportunities for informal interaction with faculty members. Visits in faculty offices, homes, and/or the dining hall are most conducive for informal interaction. A collaborative project or working as a teaching assistant offers a chance for personal time with faculty.

3. Students need to know of the potential for positive influence that can result from faculty nonclassroom interaction. The relationship can temper the peer influences with a more balanced perspective.

Faculty

Many faculty are not aware of the value of student-faculty informal interaction. Some faculty believe they do not

have the time or the personality to be involved in student interaction outside the arena of formalized academics.

1. Students describe their education and courses by the total interaction both in and out of class with faculty. Teaching and learning is extended beyond the course lecture. Courses are often evaluated by the faculty's personality and willingness to extend himself or herself beyond the material into the lives of the students.

2. Faculty need to be more helpful and accessible to students. Students both need and desire the faculty to help them learn how to think. Students count on faculty advice for assistance in personal and professional decision-making.

3. Not all faculty personalities need to be of the same sort to positively influence students. In fact, a diverse faculty best identifies with the needs of a diverse student population. In other words, all faculty who desire to do so, can develop informal relationships with particular students, to some degree.

4. Faculty who tend to be more interacting are most often identified by colleagues for teaching awards, and by students as faculty who have contributed most to his or her overall education and personal development.

5. Faculty need to balance concern for career (professionalism) and concern for students (localism). Informal interaction takes time and a desire to see students develop as persons. One possible solution to the dilemma is to involve students with the faculty, as the need and ability

warrants, in research and/or other professional activity. Evidence suggests students want to be involved with faculty in collaborative projects.

6. Faculty need to be involved in orientation to the institution. Early visibility speaks of concern for students and a willingness to be involved in student life as they adjust to new surroundings.

7. Faculty can be a most important source of influence in student's values, beliefs, and behaviors if they chose not to forfeit the role. Frequency of interaction is not enough, quality must also be apparent. Students indicate a strong desire for more informal relationships with faculty by an extremely significant margin.

8. In a Christian college, such as the one studied, the issue of modeling anti-hierarchical values and reciprocal (mutual) support of the young and the old may be somewhat atypical to other types of institutions due to the Christian concept of shared life.

Recommendations for Further Research

A growing number of studies is expanding higher education knowledge concerning the role of student-faculty informal interaction. More descriptive and correlational studies are needed at the present time to develop a sound theoretical base. Experimental designs tend to be lacking an adequate research base. Additional research in the following issues would contribute to a clearer understanding of

student-faculty informal interactions:

1. What are the negative effects of student-faculty informal interaction, and how do various interactions contribute toward those effects?

2. To what extent, and in what ways, do faculty see their responsibility in student development?

3. What do faculty want from informal interactions with students, and what do faculty gain from the interactions?

4. How do peer group influences on students compare with the faculty influences for different levels of interaction?

5. To what degree do students with high or low levels of informal interaction correlate with persistence and attrition in college?

6. What are the differences in student-response from a senior cross-sectional observation and a four-year longitudinal observation? How does student-faculty interaction vary through the typical four-year college experience?

7. How do student-reports of faculty interaction importance vary compared to their own (longitudinal) alumni responses--after a period of reflection and perspective?

8. What are the primary student-faculty informal interaction differences between students who have attended multiple institutions in the college experience compared to students who have attended the same institution for the duration?

9. What are the differences between formal and informal influences from faculty on student outcomes?

10. How do findings compare to a similar small, Christian liberal arts college, and to a large, state university?

11. How do findings compare to a longitudinal study of the sample from freshman, sophomore, junior, and senior years?

The study describes the important role faculty may have in the college outcomes of students. The findings present data to support the positive influence of informal interaction in various areas of student development. Students report faculty to have a very important role in the overall college experience. Therefore, faculty should be aware of the potentially important relationship with students, and endeavor to be a significant contributor to student's college experience.

APPENDICES

APPENDIX A

APPENDIX A

THE LETTER SENT TO STUDENTS WHO WERE
PART OF THE SAMPLE

March 3, 1986

Dear (student's name):

You have been especially chosen to represent the Senior Class.

In order to learn more about the class of 1986, Gordon College is conducting interviews with select members of your graduating class.

To enable the gathering of this information, we would like to ask you about your experiences and opinions concerning your four-year college career. This one-time interview will take about 45 to 60 minutes. A time will be arranged to suit your schedule.

Professor Mark Lamport will be calling you in the next day or so to make the arrangements for your interview.

Thank you ahead of time for your valuable contribution to this important project that will help us learn about your class and Gordon College.

Sincerely yours,

R. Judson Carlberg
Dean of the Faculty

P.S. By the way, for your contribution to the project, we would like to show our appreciation to you. Though it is a small token, please accept a McDonald's free meal certificate!

APPENDIX B

APPENDIX B

SELECTED DEMOGRAPHIC DATA ON THE STRATIFIED SAMPLE

<u>Sample Code No.</u>	<u>GPA (4.0)</u>	<u>SAT (1600)</u>	<u>GPA above (+)/ below (-) mean</u>	<u>Academic Division</u>
01	3.17	1090	+	HU
02	2.40	990	-	HU
03	2.55	790	-	SS
04	3.07	980	+	ED
05	2.51	700	-	SS
06	3.23	880	+	HU
07	3.26	1030	+	SS
08	3.96	1010	+	HU
09	3.28	1140	+	SS
10	2.80	1050	-	HU
11	2.10	980	-	SS
12	2.67	950	-	ED
13	2.75	960	-	SS
14	2.41	800	-	SS
15	3.21	910	+	SS
16	2.23	920	-	ED
17	3.72	1270	+	NS
18	3.46	1180	+	NS
19	2.99	960	+	NS
20	3.36	1070	+	SS

<u>Sample Code No.</u>	<u>GPA (4.0)</u>	<u>SAT (1600)</u>	<u>GPA above (+)/ below (-) mean</u>	<u>Academic Division</u>
21	3.15	-----	+	HU
22	1.87	-----	-	SS
23	2.90	980	+	HU
24	3.38	1320	+	NS
25	2.59	1040	-	HU
26	2.70	-----	-	HU
27	3.21	1290	+	SS
28	2.67	930	-	SS
29	3.65	1240	+	SS
30	3.70	1270	+	NS
31	3.48	1170	+	HU
32	2.05	970	-	HU
33	2.21	820	-	HU
34	3.19	1170	+	HU
35	2.71	1000	-	SS
36	2.58	840	-	NS
37	2.16	850	-	SS
38	2.50	970	-	ED
39	3.39	1160	+	NS
40	2.40	970	-	SS
	<u>2.90</u>	<u>1017</u>	<u>(1)</u>	<u>(2)</u>

(1) 20 in the sample are above the class (mean) grade point average (2.90); 20 are below the class (mean) grade point average.

(2) 20 in the sample are in the combined Humanities (HU=13) and Natural Science (NS=7) subset; 20 are in the combined Social Science (SS=16) and Education (ED=4) subset.

APPENDIX C

APPENDIX C

STATEMENTS FROM GORDON COLLEGE DESCRIBING STUDENT-FACULTY INFORMAL INTERACTION

Statements have been gathered from published materials and brochures, and existing policies and practices to describe the Gordon College philosophy of student-faculty informal interaction.

1986-1987 Catalog

The Character of Gordon College--"(The Gordon educational philosophy) is a highly personal approach to students. (It) fosters a strong sense of Christian community" (page 6).

The Academic Program--"...education in the total college experience...includes both the formal academic program and the informal learning..." (page 29).

Faculty Advisor--"Students are assigned a faculty advisor who will help them develop their academic program and give them personal guidance during college life. This relationship between students and faculty is stressed in all aspects of the Gordon program. Faculty advisors can be a valuable resource for students adjusting to the demands of a college education. Making their support and insight

available, faculty advisors are committed to helping students work through academic and career decisions" (page 29).

Admissions Brochure

An Exceptional Faculty--"The highest compliment a student can give a teacher is not 'Thanks for the A' but 'I know I'm a different person as a result of taking that course. To me, that's education.'" (professor)

"I've often talked to faculty members across a dining table or desk and thought, 'What can I tell them they don't already know? Why are they even bothering to listen to me?' And yet the message comes across loud and clear--they're interested in you. And you walk out of the dining hall or their office feeling like you're really worth something. Maybe it has something to do with seeing people as created in the image of God. They don't see just who you are, but who you will become." (student)

"A faculty-student ratio of 17:1 guarantees that you will get personal attention from teachers. At Gordon, the average class size is under 30. And every course is taught by a full-fledged faculty member, not a graduate assistant. You'll be impressed with their approach to life. They are solid role models. Gordon faculty are also approachable. They don't just teach and run. They're available outside of class for extra tutoring, unhurried conversation, and shared meals in the dining hall or in their homes. Students

quickly discover than their professors are not remote figures on inaccessible pedestals of knowledge and wisdom, but people who care about their problems, their futures." (brochure)

Faculty/Administration Handbook

The Faculty/Administration Handbook does not make explicit reference to the role of student-faculty informal interaction under the section on faculty job responsibilities. However, under a section describing the criteria for faculty promotion, student interaction outside the classroom is listed.

Student Hosting

Funds are available to faculty members for the purpose of entertaining students either in the home or at on-campus facilities.

REFERENCES

REFERENCES

- Alberti, R. Influence of the faculty on college student character. Journal of College Student Personnel, 1972, 13, 18-23.
- Alciatore, R.T. & Alciatore P.L. Consumer reactions to college teaching. Improving College and University Teaching, 1979, 27, 93-95.
- Astin, A. The methodology of research on college impact (I). Sociology of Education, 1970, 43, 223-254. (a)
- Astin, A. The methodology of research on college impact (II). Sociology of Education, 1970, 43, 437-450. (b)
- Astin, A. Four critical years: effects of college on beliefs, attitudes, and knowledge. San Francisco: Jossey-Bass, 1977.
- Astin, A. & Panos, R. The educational and vocational development of college students. Washington, D.C.: American Council on Education, 1969.
- Bausell, R.B. & Magoon, A.J. Extra-class interactions with instructors. Improving College and University Teaching, 1976, 24, 53-55.
- Bean, J. The synthesis of a theoretical model of student attrition. Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, April 13-17, 1981. (ERIC Document Reproduction Service No. ED 202 444.)
- Bean, J. Interaction effects based on class level in an explanatory model of college student dropout syndrome. American Educational Research Journal, 1985, 22, 35-64.
- Bowen, H.R. Investment in learning: the individual and social value of american higher education. San Francisco: Jossey-Bass, 1977.
- Cangemi, J.P. Negative faculty cause student unrest. College Student Journal, 1977, 11, 291-292.

- Chambers, J.A. College teachers: their effect on creativity of students. Journal of Educational Psychology, 1973, 65, 326-334.
- Chang, A.F. The relationship of student self-esteem and teacher empathy to classroom learning. Psychology, 1981, 18, 21-25.
- Chickering, A.W. Education and identity. San Francisco: Jossey-Bass, 1969.
- Chickering, A.W. Commuting versus residential students: overcoming the educational inequalities of living off-campus. San Francisco: Jossey-Bass, 1974.
- Chickering, A.W. & Associates. The modern American college. San Francisco: Jossey-Bass, 1981.
- Churukian, G.A. Perceived learning in the classroom and teacher-student interpersonal relationships. Paper presented at Teacher Education 80-90 International Seminar, Groningen, Netherlands, April, 1982. (ERIC Reproduction Service No. ED 218 273.)
- Clinton, R.J. Qualities college students desire in college instructors. School and Society, 1930, 32, 702.
- Coffman, S.L. Empathy as a relevant instructor variable in the experiential classroom. Group and Organizational Studies, 1981, 6, 114-120.
- Cole, C.C. Improving instruction: issues and alternatives for higher education. Washington, D.C.: AAHE-ERIC, 1982.
- Coles, H.W. College student perceptions, 1976 freshmen and seniors: expectations and perceptions of faculty. State University of New York, Buffalo: Student Testing and Research Office, 1977. (ERIC Reproduction Service No. ED 152 206.)
- Cooper, P.J., Stewart, L.P., & Gudykunst, W.B. Relationship with instructor and other variables influencing student evaluations of instruction. Communication Quarterly, 1982, 30, 308-315.
- Davis, J.D. & Young, R.E. Students and faculty: classroom and beyond. Plantings, 1982, 3, 1-9. (ERIC Reproduction Service No. ED 226 667.)
- Denzin, N.K. The significant others of a college population. Sociological Quarterly, 1966, 7, 298-310.
- DeWine, S., Medcalf, L., & Bennett, D.T. Modeling and self-disclosure in the classroom. Paper presented at the

International Communication Association, Berlin, Germany, May 29-June 4, 1977. (ERIC Reproduction Service No. ED 141 848.)

Dilley, J. Student-faculty non-communication. Journal of College Student Personnel, 1962, 8, 315-317.

Eddy, E. The college influence on student character. Washington, D.C.: American Council on Education, 1959.

Endo, J.J. & Harpel, R.L. The effect of student-faculty interaction on students' educational outcomes. Paper presented at the Annual Forum of the Association for Institutional Research, Minneapolis, MN, May 17-20, 1981. (ERIC Reproduction Service No. ED 205 086.)

Erikson, E.H. Childhood and society. New York: Norton, 1950.

Erikson, E.H. Identity: youth and crisis. New York: Norton, 1968.

Feinberg, L. Faculty-student interaction: how students differ. Journal of College Student Personnel, 1972, 13, 24-27.

Feldman, R.S. Personality factors and expectation effects in teacher-student interaction. Paper presented at the Annual Convention of the American Psychological Association, Anaheim, CA, August 26-30, 1983. (ERIC Reproduction Service No. ED 239 184.)

Feldman, K., & Newcomb, T. The impact of college on students. (2 Vols.) San Francisco: Jossey-Bass, 1969.

Gadzella, B.M. Student view of an "ideal" professor. College Student Survey, 1967, 1, 7-8, 21.

Gadzella, B.M. How college students view a professor's role. College Student Journal, 1977, 11, 2-8.

Gaff, J. Making a difference: the impacts of faculty. Journal of Higher Education, 1973, 44, 605-622.

Gaff, J. & Gaff, S.S. Student-faculty relationships. In A.W. Chickering (Ed.), The modern American college (pp. 642-656). San Francisco: Jossey-Bass, 1981.

Galbo, J.J. Adolescents' perceptions of significant adults: a review of the literature. Adolescence, 1984, 19, 951-970.

Gamson, Z.F. Performance and personalism in student-faculty relations. Sociology of Education, 1967, 40, 279-301.

- Goldberg, L.G. Peer advising: a supplement to, but not a substitute for, faculty advising. NACADA Journal, 1981, 1, 41-43.
- Grigg, C. Recruitment to graduate study: college seniors' plans for post-graduate education and their implementation the year after commencement. SREB Research Monograph No. 10. Atlanta: Southern Regional Educational Board, 1965.
- Heath, D. Growing up in college. San Francisco: Jossey-Bass, 1968.
- Hiley, D.R. Faculty roles in career advising of liberal arts students. Liberal learning and career series. Association of American Colleges, Washington, D.C., 1982. (ERIC Reproduction Service No. ED 227 792.)
- Hoffnung, R.J. Form as the hidden curriculum in college teaching. University of New Haven (CT), 1982. (ERIC Reproduction Service No. ED 222 105.)
- Isaac, S. & Michael, W.B. Handbook in research and evaluation. San Diego: EdITS Publishers, 1971.
- Jacob, P. Changing values in college: an exploratory study of the impact of college teaching. New York: Harper, 1957.
- Jacobsen, C.R. Instructional development report. Outstanding teachers: how do UND students describe them? North Dakota University, 1982. (ERIC Reproduction Service No. ED 224 427.)
- Johnson, C.W. Faculty advising of students: important, neglected, some alternatives. College Student Journal, 1979, 13, 328-331.
- Johnson, S.T., & DeFreece, M.T. Extending classroom office and self: developing an instrument to measure attitudes towards faculty development in renewal activities. Paper presented at the American College Personnel Association, Baltimore, April, 1984. (ERIC Reproduction Service No. ED 243 393.)
- Katz, J. No time for youth: growth and constraint in college students. San Francisco: Jossey-Bass, 1968.
- Keller, J. Perceptions of the college environment and campus life: the black experience. Journal of Non-White Concerns in Personnel and Guidance, 1982, 10, 126-132.
- Kestor, J. Your attitude can make or break you. College Student Journal, 1975, 9, 151-152.

- Kirk, C.F. & Dorfman, L.T. Satisfaction and role strain among middle-age and older reentry women students. Educational Gerontology, 1983, 9, 15-29.
- Krippendorff, K. Content analysis: an introduction to its methodology. Beverly Hills, CA: Sage Publications, 1980.
- Lacy, W.B. Interpersonal relationships as mediators of structural effects: college student socialization in a traditional and an experimental university environment. Sociology of Education, 1978, 51, 201-221.
- Long, L. The effects of pre-teaching teacher interaction style on student achievement. Catholic University of American, Washington, D.C., 1977. (ERIC Reproduction Service No. ED 144 927.)
- Meloy, J. Of hopes and expectations. Phi Delta Kappan, 1986, 67, 390-391.
- Millen, L. & Roll, S. Adolescent males' ratings of being understood by fathers, best friends, and significant others. Psychological Reports, 1977, 40, 1079-1082.
- Mokros, J.R., & Erkut, S. Are professors viewed as appropriate models, or are their behaviors dismissed as irrelevant to the lives of their students? College Board Review, 1980-1981 (Winter), 3-5.
- Mueller, R.H., Roach, P.J., & Malone, J.A. College students' views of the characteristics of an ideal professor. Psychology in the Schools, 1971, 8, 161-167.
- Nettles, M.T. & Associates. Comparing and predicting the college performance of black and white students. Paper presented at the Annual Meeting for the Study of Higher Education, Chicago, March 12-14, 1984. (ERIC Reproduction Service No. ED 245 615.)
- Newman, P.R. & Newman, B.M. Identity formation and the college experience. Adolescence, 1978, 13, 311-326.
- Oramaner, M. The other side of student-faculty relationships. Community and Junior College Journal, 1981, 51, 12-15.
- Orth, D.C. Social structure and learning climate: the first year at the harvard business school. Boston: Harvard University Press, 1963.
- Palola, E.G. & Evans, M.J. Quality relationships in individualized education. New Directions for Experimental Education, 1981, 12, 73-89.

- Pascarella, E.T. Student-faculty informal contact and college outcomes. Review of Educational Research, 1980, 50, 545-595.
- Pascarella, E.T. College environmental influences on students' educational aspirations. Journal of Higher Education, 1984, 55, 751-771.
- Pascarella, E.T. Students' affective development within the college environment. Journal of Higher Education, 1985, 56, 640-663.
- Pascarella, E.T., Duby, P.B., Terenzini, P.T., & Iverson, B.K. Student-faculty relationships and freshman year intellectual and personal growth in a nonresidential setting. Journal of College Student Personnel, 1983, 28, 395-402.
- Pascarella, E.T. & Terenzini, P.T. Informal interaction with faculty and freshman ratings of academic and non-academic experience of college. Journal of Educational Research, 1976, 70, 35-41. (a)
- Pascarella, E.T. & Terenzini, P.T. Outcomes of the academic and non-academic experience of college related to frequency of students' informal interaction with faculty. Paper presented at the Annual Forum of the Association for Institutional Research, Los Angeles, May 3-6, 1976. (ERIC Reproduction Service No. ED 134 056.) (b)
- Pascarella, E.T. & Terenzini, P.T. Patterns of student-faculty informal interaction beyond the classroom and voluntary freshman attrition. Journal of Higher Education, 1977, 48, 540-552.
- Pascarella, E.T. & Terenzini, P.T. Student-faculty informal relationships and freshman year educational outcomes. Journal of Educational Research, 1978, 71, 183-189.
- Pascarella, E.T. & Terenzini, P.T. Student-faculty informal contact and college persistence: a further investigation. Journal of Educational Research, 1979, 72, 214-218.
- Pascarella, E.T. & Terenzini, P.T. Predicting freshman persistence and voluntary dropout decisions from a theoretical model. Journal of Higher Education, 1980, 51, 60-75.
- Pascarella, E.T., Terenzini, P.T., & Hibbel, J. Student-faculty interactional settings and their relationship to predicted academic performance. Journal of Higher Education, 1978, 49, 450-463.
- Powell, J.P. Informal staff-student contact at the university of NSW. TERC research and development paper no. 42.

New South Wales University, Kensington, Australia, 1976.
(ERIC Reproduction Service No. ED 172 721.)

Reardon, R. & Regan, K. Process evaluation of a career planning course. Vocational Guidance Quarterly, 1981, 29, 265-269.

Reinfeld, P.M. For better relations with students--encourage office visits. Journal of Teacher Education, 1976, 27, 284-285.

Rhodes, W. Know your students. Physics Teacher, 1975, 13, 352-353.

Rogers, C.R. The interpersonal relationship: the core of guidance. Harvard Educational Review, 1962, 32, 416-429.

Sanford, N. (Ed.) The American college: a psychological and social interpretation of the higher learning. New York: Wiley, 1962.

Scheck, D.C. & Bizio, S. Students' perceptions of the ideal professor. College Student Journal, 1977, 11, 335-342.

Sinclair, P.A. The proof of the pudding: when you're eyeball-to-eyeball with students. The University of Toledo (OH), 1977. (ERIC Reproduction Service No. ED 148 287.)

Smith, P.C. Faculty-student interaction and student learning. Improving College and University Teaching, 1976, 24, 27-30.

Snow, S.G. Correlates of faculty-student interaction. Sociology of Education, 1973, 46, 489-498.

Southern Regional Education Board. Faculty involvement in career and academic advisement. Issues in higher education no. 10. Atlanta, 1977. (ERIC Reproduction Service No. ED 149 667.)

Spady, W. Dropouts from higher education: an interdisciplinary review and synthesis. Interchange, 1970, 1, 64-85.

Spady, W. Dropouts from higher education: toward an empirical model. Interchange, 1971, 2, 38-62.

Terenzini, P.T. & Pascarella, E.T. Student-faculty relationships and freshman year educational outcomes: a further investigation. Journal of College Student Personnel, 1980, 21, 521-528. (a)

Terenzini, P.T. & Pascarella, E.T. Toward the validation of Tinto's model of college student attrition: a review of recent studies. Research in Higher Education, 1980, 12,

271-282. (b)

Terenzini, P.T., Theophilides, C., & Lorang, W.G. Influences on students' perceptions of their academic skill development during college. Journal of Higher Education, 1984, 55, 621-636.

Theophilides, C. & Terenzini, P.T. The relation between non-classroom contact with faculty and students' perceptions of instructional quality. Research in Higher Education, 1981, 15, 255-269.

Thistlewaite, D. College press and changes in study plans of talented students. Journal of Educational Psychology, 1960, 51, 222-234.

Tinto, V. Dropout from higher education: a theoretical synthesis of recent research. Review of Educational Research, 1975, 45, 89-125.

Wallace, W. Student culture: social structure and continuity in a liberal arts college. Chicago: Aldine, 1966.

Wilson, R., Gaff, J., Dienst, E., Woods, L., & Bavry, J. College professors and their impact on students. New York: Wiley, 1975.

Wilson, R., Woods, L., & Gaff, J. Social-psychological accessibility and faculty-student interaction beyond the classroom. Sociology of Education, 1974, 47, 74-92.

Woods, L. & Wilson, R. Teachers with impact. The Research Reporter, 1972, 7, 1-4.