An examination of the impact of changes in the administrative organizational structure of selected community colleges on workload of division chairmen

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AN EXAMINATION OF THE IMPACT OF CHANGES IN THE ADMINISTRATIVE ORGANIZATIONAL STRUCTURE OF SELECTED COMMUNITY COLLEGES ON WORKLOAD OF DIVISION CHAIRMEN

A Dissertation
Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Sandra Dale Hobbs
February 1986
AN EXAMINATION OF THE IMPACT OF
CHANGES IN THE ADMINISTRATIVE ORGANIZATIONAL STRUCTURE
OF SELECTED COMMUNITY COLLEGES
ON WORKLOAD OF DIVISION CHAIRMEN

by

Sandra Dale Hobbs

Approved February 1986 by

Dr. Douglas Prillaman
Dr. Elmo Rossler
Dr. James Vanovich

Chairman of Doctoral Committee
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CHAPTER I
THE RESEARCH PROBLEM
INTRODUCTION

Organizational changes abound in higher education today. Changes, particularly in the direction of consolidation, have been taking place in the administrative organizational structures of many individual colleges in the Virginia Community College System. These changes have taken place over time based on individual college decisions rather than a systemwide mandate or plan, and the exact nature and scope of these changes have not yet been described. Further, the impact of changes in administrative organizational structure on functions of management positions has not been examined systemwide. Since changes in administrative organizational structure may be expected to impact most directly on administrative positions rather than on faculty positions, and since the position of division chairman in the community college has been identified as a key position of instructional leadership (Branch, 1982; Tucker, 1981) and as an important connecting link between administrative and faculty (Palmer, 1984), change that affects the workload of division chairmen becomes a significant issue. Although changes in administrative
organizational structure may occur above the division chairman level, an examination of how those changes impact on the workload at the division chairman level is significant because of the pivotal nature of the position.

The literature on division chairmen consistently concludes that chairman workload is a problem. Chairmen report their workload as heavy, report themselves frustrated because of a lack of time, and express a need for staff development (Branch, 1982). Issues of time, morale, satisfaction with work, and effectiveness are among many which may need to be addressed. Of special significance to the academic organization at this time, however, is the issue of becoming aware of the factors that increase workload for division chairmen who already express frustration with their workload. The purpose of this study was to examine the impact of changes in the administrative organizational structures of colleges in the Virginia Community College System on the perceptions of workload by division chairmen. This research examined what changes in administrative organizational structures division chairmen had actually experienced at their colleges in a three year period and how the division chairmen thought the changes had
affected their workload. Division chairman workload in Virginia was described. Division chairmen reported relative amounts of time currently spent on workload functions and how the time spent had changed. Finally a profile was drawn of demographic characteristics and employment patterns of division chairmen in the VCCS and compared with a profile of VCCS division chairmen from 1974.

A number of dissertation studies have defined the role of the division chairman primarily by developing lists of responsibilities or analyzing workload in terms of those responsibilities. The present study built on previous research but looked at the workload issue from the larger perspective of administrative organizational structure. Since the division chairman is a key management position which links administration and the faculty (Palmer, 1984), then the position in relation to the organizational structure was of greater interest than a simple one-dimensional role description.

NEED FOR THE STUDY

Recognizing that consolidation of the administrative organizational structures has been a pattern in many colleges of the VCCS and recognizing that the impact of changes in administrative organizational structures
on the workload of division chairmen may, in fact, not now be considered when making such changes, this study will provide an assessment tool. If the division chairman position is the crucial one the literature describes, then management needs as much information as possible about the implications of its decisions. Specifically, this study examined the workload of division chairmen whose colleges had made changes in their administrative organizational structures since fall 1981 to see how the chairmen rated the impact of those changes on their workload. Although the study did not count the number of different changes in administrative organizational structures that took place from 1981 to 1984 in Virginia, it did describe the most common types of changes together with the number of chairmen who experienced them. Since the community colleges in Virginia will need to continue to examine organizational structures and make changes for efficient and effective management of resources, this research will be useful in future planning.

Although this research is limited to the community college as an organizational type, it does provide new information about structural differentiation in that specific organization. Furthermore, the organizational literature on size and structural differentiation deals
almost entirely with growth (Blau, 1973; Daft & Bradshaw, 1980). While some generalizations might be true for both growth and retrenchment conditions, this is not necessarily so. For example, Blau (1973) concluded in studying university departments that the forces leading to new departments were almost always a consequence of growth. Especially at a time when retrenchment conditions are evidenced, those forces associated with consolidation or reduction of departments also bear some consideration. Although this research was not designed to look at cause and effect, the relationship between factors such as size and consolidation were considered by identifying size in several ways: students enrolled, numbers of divisions on campus, and numbers of faculty supervised, among others. Span of control as a measure of differentiation is also addressed in the study. Consolidation of the administrative component and a smaller span of control at one level, for example, is examined in relation to the span of control at the level of the division chairman.

In order to look at changes in workload it is essential to know what workload is. Workload of the division chairman in the statewide System of Community Colleges in Virginia has not been previously described
in specific terms. There is no state job description, and many colleges have only general job descriptions in handbooks. This research will describe divisional organizations and outline how chairmen distribute their time to workload functions. Furthermore, the study will describe how the time spent on workload functions is changing and what factors are associated with the time spent on various functions.

Finally, the study will present a profile of division chairmen in the VCCS. No such profile has been developed for this administrative position in Virginia since a dissertation study examined role and responsibilities of division chairmen at sixteen colleges in Virginia (Stull, 1974). In addition, a description of demographic characteristics and employment patterns of division chairmen at the two-year college will be a useful addition to the research on administrative careers in the community colleges which has tended to be anecdotal, on the presidency (Moore, 1983), or, most recently, on positions other than the middle management level (Moore, 1985). The career patterns examined have tended to be those of four-year college or university department chairmen (Bragg, 1980; Engle, 1974). Studies which have been done on division chairmen at community colleges have
tended simply to develop lists of job responsibilities rather than to look at career patterns (Combs, 1972; Lombardi, 1974; O'Grady, 1971; Tucker, 1984).

PURPOSE OF THE STUDY

The purpose of this study was to examine the relationship between changes in the administrative organizational structures of community colleges in Virginia and division chairman workload. Changes in administrative organizational structures of colleges and divisions were characterized by structural complexity variables, primarily horizontal and vertical differentiation, and division chairman workload was analyzed. Division chairmen in Virginia's community colleges were described by demographic characteristics and employment patterns.

RESEARCH QUESTIONS

To examine the relationship between changes in administrative organizational structures and division chairman workload, four major research questions were answered. Specifically,

1. What were changes in administrative organizational structures at community colleges in Virginia in the period 1981 to 1984?
2. To what degree did division chairmen perceive their workload to have changed?

3. How did division chairman workload change?

4. What changes in administrative organizational structures did division chairmen perceive contributed to change in their workload?

A related questions was also answered:

5. What were demographic characteristics and employment patterns of division chairmen in the community colleges in Virginia?

BACKGROUND OF DEVELOPMENT OF DIVISIONS AND DIVISION CHAIRMEN IN THE VCCS

The Code of Virginia, Chapter 16, Section 23-214 to Section 23-231 (1966 and as amended), provided the Commonwealth of Virginia enabling legislation for the establishment of a System of community colleges. This legislation mandated there be a community college within commuting distance of every citizen in the state. There are now 23 public community colleges with 33 campuses across the state organized by counties/cities composing service regions. The colleges vary in size from a five campus college with a fall term enrollment in excess of 34,000 students in Northern Virginia to a single campus college on the Eastern Shore with an enrollment
of slightly more than 300. The colleges are part of the state funded Virginia Community College System headed by a Chancellor. Sections 23-223 and 23-224 of the Code of Virginia defined the duties of the Chancellor. Appointed by the State Board for Community Colleges, the Chancellor is the chief executive officer of the System and serves as secretary to the State Board for Community Colleges. The Chancellor submits an annual report to the Governor and General Assembly which includes annual financial statements (VCCS Policy Manual).

Although funding by the legislature is for the System as a whole, not the 23 individual colleges, the 23 individual colleges function as separate organizations. Each is headed by a president who has the responsibility for devising the administrative organizational structure and for working with a local board to carry out the goals and objectives of the college's mission. Although the colleges have a variety of organizational structures, they all have one or more key positions reporting to the president. Such positions are administrative, being designed to oversee the colleges' curriculum and instruction, student services, and finance and/or administrative support functions. These administrative positions are usually titled provosts or deans since
there is no designated position for vice-president of a college within the System. Colleges are organized for instruction in multi-disciplined divisions, headed primarily by division chairmen.

Divisions and divisional structures vary. Some divisions have continuing education functions; others deal with program instruction. Divisions also vary in the specific disciplines, programs covered, numbers of divisional faculty, and ratio of part-time to full time faculty. Some divisions have formal program heads or other divisional faculty who serve as assistant to the division chairman.

An advisory report published in 1966 recommended a concept of operation for the Community College System in Virginia and included recommendations for an administrative structure of colleges based primarily on size (Recommendations, 1966). For example, the minimum organization for effective functioning was a president and three major administrative units headed by deans (Figure 1). The medium-sized college, defined as one with between 1,000 and 2,000 full time students, was recommended to have three basic administrative units with divisions of responsibility under those three areas (Figure 2). The report recommendations for community
Figure 1

RECOMMENDED ADMINISTRATIVE ORGANIZATION COMMUNITY COLLEGE - Minimum Size to 1,000 STUDENTS
Figure 2

RECOMMENDED ADMINISTRATIVE ORGANIZATION COMMUNITY COLLEGE - 1,000 to 2,000 STUDENTS

President

Administrative Asst.
Research &
Development

Dean
Administration
& Finance

Asst. Dean
Curriculum
& Personnel

Division Chairman

Local Advisory
Board

Asst. Dean
Continuing
Education

Dean
Instruction

Asst. Dean
Counseling and Admissions

Dean
Student Services

Directors
Functional Areas

Faculty

Counselors
colleges with more than 2,000 full time students specified the same basic administrative structure; however, because of a greater volume of work some assistant administrative positions were assigned functional responsibilities (Figure 3). It was at these largest colleges that a recommendation was made for coordinators of subject fields within the divisions. These coordinators were later operationalized primarily through the title of Program Head.

Subsequently, the report (Recommendations, 1966), defined the administrative units headed by a dean and outlined functions of each of these major operating units:

Dean of Administration and Finance. The dean of administration would be responsible for fiscal management, budget control, accounting, physical plant construction and maintenance, purchasing, internal accounting, and related activities. He should also be responsible for the college food service and bookstore. In addition, he should be responsible for all required state and federal reports, and he should supervise the use of data processing personnel and equipment for administrative and research purposes.

Dean of Instruction. The dean of instruction is the chief academic officer of the institution. He should be responsible for all academic matters, programs, instructional personnel, and related activities. His primary contribution to the institution will be in the areas of research as applied to the development of appropriate educational curriculums; recruitment, selection and evaluation of faculty; articulation with four-year institutions; and articulation of educational programs with community needs.
The office of the dean of instruction should be responsible for all publications having to do with the academic program; articulation of the transfer of students; the continuing education program; a satisfactory college parallel program; and the development and implementation of occupational and technical education. These responsibilities can be handled by the dean and division chairmen in small institutions. However, as enrollment grows, in some of the colleges there should be provision for the addition of qualified staff as assistant deans for continuing education and for curriculum and personnel. These two assistant deans, with the assistance of division chairmen, constitute an adequate administrative staff for this division.

Dean of Students. The dean of students should be responsible for counseling and guidance services, student activities, high school relationships, admissions, records, student placement, and student transfer to four-year institutions. In small colleges this responsibility could be carried out by the dean of students with the assistance of a director of admissions and a director of counseling, with additional help from division chairmen and one or more faculty members who have been given released time from teaching responsibilities. In larger institutions, the dean of students should have assistant deans or directors of admissions and records, counseling, student activities, and placement and transfer.

It seems reasonable that the most effective counseling and advising of students will occur in the academic divisions. It is recommended, therefore, that as enrollments increase qualified faculty members proficient in academic disciplines and in counseling be given released time to assume responsibilities for counseling and academic advisement of students. Such faculty members should have a joint responsibility; that is, to the dean of instruction for their teaching responsibilities and to the dean of students for their work in counseling.
Academic Divisions

It is recommended that the colleges be organized into academic divisions similar to those now in existence in Northern Virginia Community College. This is a particularly expeditious type of organization in a small institution having one or two individuals in a particular subject matter discipline. In general, colleges could be organized into divisions of social sciences, language arts, mathematics and science, business administration, health-technologists (including physical education), social service and welfare, engineering technologies, agriculture, and the library.

As colleges expand in size, a coordinator from the faculty can be chosen in each discipline. Thus you would continue with a divisional organization in which, for example, the language arts department would have coordinators in speech, English, foreign languages, etc.

Division chairmen would be responsible for the selection of textbooks, library materials, the development of course outlines, syllabi, selection of faculty and evaluation of same. They would also be responsible for the development of curricula and the courses under the supervision of the dean of instruction.

The principle underlying this recommendation is that a healthy organization needs to have decision-making processes located at the lowest practical point in the pyramid. Division chairmen should, with their faculties, be responsible for the budget development and for the use of budgeted funds within general policy framework. They should have some responsibility for the academic advisement and guidance of students. In other words, they are primarily responsible within the institutional and state policy context for the education of students. (pp. 27-30).

Recognizing that the recommendations from the report published in 1966 were, in fact, recommendations only and idealistic at best, it is still useful to consider
how the colleges have implemented those recommendations
and the implications of changes particularly at the
divisional level and in regard to the primary
responsibilities designated for the division chairmen.

THEORETICAL RATIONALE

The theoretical rationale which undergirds this
research is primarily derived from the organizational
literature. First, the literature has defined complexity
in terms of the structural variables of horizontal and
vertical differentiation and spatial disperson. Complexity is the theoretical basis, then, for explaining
the organization studied -- the community college.
Second, how studies have operationalized structural
variables was considered to develop the indicators and
measures of changes in administrative organizational
structures in the colleges and their divisions. Third,
the relevancy of the relationship between a position
and the structure of the organization was explored.

There is a substantial literature base in
organizational theory, but to date there is no single
theory which helps explain organizations. The literature
has two thrusts. One is the view that positions in
organizations may be analyzed from the perspective of
management psychology which would examine the
socialization for a position, for example, or be concerned with looking at workload in terms of training an individual to improve performance. The conceptual framework for the present study, however, is derived from that thrust of the literature which takes a sociological perspective of the organization and positions in it. From this theoretical viewpoint a position would vary theoretically based on structural differentiation in the organization rather than the psychology of the position holder, the subordinates, or the superior. In the present study structural differentiation or complexity was described as administrative organizational structure and was operationalized by variables of horizontal and vertical differentiation and spatial dispersion (Hall, 1982), and the workload of the division chairman position was looked at in terms of these complexity variables in the colleges and their academic divisions.

Studies have examined organizational complexity in various ways. Some studies have counted departments and counted productivity as a way to examine organizational structure (Blau & Schoenherr, 1971, Dewar & Hage, 1978; Hall, 1982; Scott, 1981); large scale studies have investigated across types of institutions,
such as technological vs. professional, and there has been some work about how professional organizations differ (Meyer, 1968; Meyer & Associates, 1978). There are fewer studies in organizational literature about how colleges and university organizations are structured (Beyer & Lodahl, 1976) and even fewer still which look at community colleges as organizations (Bromerley, 1971). Some studies have used organization charts (Blau and Schoenherr, 1971; Meyer, 1968; Pugh, et al., 1968; Child 1972) and have measured differentiation by job titles and number of levels. Vertical differentiation has been operationalized as the number of levels, hierarchy of authority, or "height of configuration" (Pugh, 1968). Although noting that there were several definitions of horizontal complexity, Hage (1965) defined complexity as "the specialization in an organization measured by the occupational specialities and length of training required by each" (p. 294). Hage's assumption was that the more training people have, the more they are differentiated from other people who may have similar amounts of training but in different specialties. In examining horizontal differentiation, researchers have counted units or divisions within the organization to differentiate the number of specialties in the
organization (Hage, 1967; Price, 1968; Hage & Aiken, 1970, 1971; Dewar & Hage, 1978). **Spatial dispersion** has been used to describe the actual physical dispersion of offices of the same organization (Hall, 1982).

The three components of the complexity variable are relevant to examining a position in the community college in relation to its organizational structure. The colleges have hierarchal structures in their administrative component: **vertical differentiation**. The academic divisional components under consideration for the present research are the academic divisions with their specialties: **horizontal differentiation**. The physical relationship of offices and work areas of faculty members and division chairmen including other buildings or other campus locations: **spatial dispersion**. Another aspect of spatial dispersion may be considered off-campus sites or day/evening program/course responsibility for the division chairman.

Assuming that there are differences in structure and that the organizational structure can be a major determinant of individual actions in an organization, then the structural complexity is a variable of significant interest which can be used in relation to looking at a position in the organization. Hall (1982)
notes that "the ways in which people react to their work results from their own expectations and the characteristics of the organization" (p. 6), and Hall further comments that "... organizational characteristics are critical variables as they interact with those of the individual" (p. 6). Hage's (1965) axiomatic theory and the derived corollaries support the notion that structural aspects affect the performance of the individual in the organization, and as suggested by Katz and Kahn (1964), role expectations are determined by the larger organizational context. For example, rather than examining the role of the division chairman from how well the incumbent understands the role or performs its duties, the division chairman's role, specifically workload, was examined in this research in relation to the structural variable of complexity, the larger organizational context. The proposed study assumed that the behavior of members of the organization was structurally rather than individually based and that structural properties can be treated as independent of the particular individuals in the position (Hage & Aiken, 1967).

For the purposes of this study, the literature review of organizational literature looked at what the
literature had to say theoretically about horizontal and vertical differentiation and spatial dispersion. The empirical literature was surveyed to show how the complexity variable has been measured, what populations were used, what methods have been employed, and what have been major findings. Finally, a synthesis of relevant organizational literature was related to the present study.

The literature on department/division chairmen was then reviewed. This literature has dealt primarily with the roles of chairmen in terms of lists of functions or responsibilities (Branch, 1982; Palmer 1984; Tucker, 1984). There is general agreement about the substance of the lists of responsibilities and consensus on the need for training for this difficult position. The extensive department chairman literature presents some problems since the department chair in a four-year college or university and the division chair in a two-year community college assume somewhat different roles in some key areas (Samuels, 1983). First, the discipline base for the division chairman at the community college is usually wider than for the single discipline or related discipline department head. A community college division chairman may head a "Humanities Division" or an "Applied
Health Division," (or even a division consisting of such diverse disciplines as business and humanities). The faculty are not generally as academically specialized at the community college. Fewer have doctorates, and many come to teach at the community college from secondary schools (Cohen, 1980). The chairman is viewed less as "first among peers" and more clearly in an administrative position even when the chairman has teaching responsibilities. In some cases the division chairman may function more as a dean or associate dean would in a four-year setting, especially when program heads or other faculty leaders work directly with faculty. In other cases the division chairman may have responsibility for regular credit programs and continuing education or non-credit programs as well. The budgetary function assumes less importance in the personnel area. The community college division chairman has less responsibility for bringing money into the department or division than does a department chairman at a university and often less discretion in salary negotiations. Division chairmen at the community college level tend to be more institutionally oriented than discipline oriented nationally. For example, the chairmen would be identified as division chair at the community
college rather than sociologist or historian (Cohen, 1980).

DEFINITION OF TERMS

For clarification terms unique to this research have been discussed below and defined as specifically used in this study.

Administrative Organizational Structure. Administrative organizational structure describes the way work is grouped by position title and reporting relationships and supervisory responsibilities. This includes structural arrangements both at the college administrative and divisional levels (Blau, 1973).

Workload. Extent of job responsibilities of a unit or position in the organization (Blau & Schoenherr, 1971; Dewar & Hage, 1978; Branch, 1982).

Profile. Profile is a description of identified characteristics of a population, such as age, sex, experience or education (Kerlinger, 1973).

Division. The academic unit of the college in which credit courses are offered toward diploma, degree, or certificate programs of the colleges and excludes non-credit instruction (VCCS State Policy Manual).

Division Chairman. The position title that has among its responsibilities direct supervision of divisional faculty (VCCS State Policy Manual).
Abbreviations.

**VCCS** is an abbreviation for Virginia Community College System.

**SCHEV** is an abbreviation for State Council for Higher Education in Virginia.

**FTE** is an abbreviation for full time equivalent students.

ASSUMPTIONS

There were several assumptions which underlay this study.

**The first assumption** was that colleges in the Virginia Community College System would continue to modify organizational structure for efficient and effective management of resources and that good information would be needed to make those decisions; would attempt to retain faculty positions and consolidate administrative positions; and would decrease the number of division chairmen at the colleges and change their span of responsibilities.

**The second assumption** was that changes in position title, functions, or reporting relationships would reflect actual changes in administrative organizational structure at both the college administrative and divisional levels.
The third assumption was that changes would occur in the division chairman's workload functions in relationship to organizational changes rather than characteristics of the chairman.

The fourth assumption was that perceptions of change in workload by division chairmen would accurately reflect actual change.

STUDY DESIGN AND METHODOLOGY

The design of this study was a descriptive survey method using data gathered by a mail survey and document analysis (Kerlinger, 1973). Two instruments were developed: the Division Chairman Questionnaire and the Institutional Characteristics Profile Data Sheet. The resulting observations were organized by research questions and presented systematically through tables and narrative description. Non-parametric statistics were used to analyze the data and formulate conclusions.

The more than 97 division chairmen (Directory, 1984) in the Virginia Community College System were surveyed by the questionnaire. Although, as suggested by Kerlinger (1973) and Parten (1950), an interview schedule administered by telephone or individual interviews might have been useful to probe issues involving change and workload, interviewing was deemed
not to be a practical method of surveying the entire population because of time and financial constraints. In the development of the survey instrument, however, the pilot sample of division chairmen surveyed by a mail questionnaire were telephoned for clarification of unclear responses.

Items for the questionnaire were developed by modifying items on the instrument developed by Stull (1974) for chairman characteristics and employment background and by Branch (1982) for workload. Items were added to those used by Stull which are relevant in 1984, and others were modified for clarification. Workload factors developed by Branch (1982) served as a basis for the workload portion of the survey instrument. Permission was granted by Branch and Stull for use or modification of their instruments for the purposes of this study.

Division chairmen were assumed to report accurately their perceptions about their workload (Bragg, 1980). Chairmen were also asked to report selected personal and demographic characteristics and employment patterns since such data is routinely collected on questionnaires.

Anecdotal and documentary evidence indicates that many changes in administrative organizational structure
have occurred recently in the VCCS, but the extent of these changes was not fully known. Some items in the questionnaire addressed this issue. In looking at ways to gather data about administrative organizational changes, however, further data were required. Institutional documents were considered as a possible source. Although documents were considered objective sources of information, they are sometimes not sufficient. In a study of state government offices, for example, Blau and Schoenherr (1971) found that when organization charts were used, clarification was still required by key informants in that organization. It was determined, then, that institutional documents such as catalogs, master plans, or organizational charts would be time consuming to analyze and would unnecessarily complicate data gathering since no single institution document contained all required data. Furthermore, those documents were found to be out of date when examined for recent organizational changes. Organizational charts submitted to the State personnel office and those published in institutional documents were confusing, not always timely, and not consistent in terms of changes reported. If organizational charts had been used to collect data, in additional to multiple documents being required to
gather data for each institution, a contact would still have been needed with an institutional officer for clarification.

Since division chairmen were assumed to know readily the information about specific organizational changes in their institutions and could be assumed to report accurately, the questions about administrative organizational changes were asked of division chairmen on the survey instrument.

The questionnaire was evaluated for reliability and validity by asking a panel of experts composed of division chairmen, deans of instruction, and full time faculty in community colleges in Virginia to review the instrument. Other researchers interested in the division chairman workload issued were consulted. Further validity and reliability were established by pilot testing the instrument on eight division chairmen in the Virginia Community College System.

Questions were also asked on the original Division Chairman Questionnaire to gather information on institutional characteristics. Review of the recommendations of experts indicated that chairmen may not have had the information easily obtainable and fully accurate. Such information on institutional
characteristics was readily obtainable, however, from public documents and from routine reports submitted by the colleges to SCHEV (State Council for Higher Education in Virginia) and VCCS. Data on institutional characteristics were gathered on an Institutional Profile Characteristics Sheet developed for each of the colleges.

All division chairmen in the VCCS comprised the population for this study. Since the entire population was just under 100 and could be surveyed by mail, a sample was not deemed necessary. In the analysis of data to answer some research questions, a specified sample of the population was used, specifically those chairmen from colleges reporting some change in administrative/organizational structure in the three years beginning 1981-82.

As procedures were developed, ethical safeguards were provided. Permission was granted by the VCCS to conduct the research in the system, and support of each institution's president was obtained through an individual letter to each president. Complete institutional and individual anonymity was assured. Respondents were identified for coding purposes only. Data were aggregated and reported in such a way as to assure individual and institutional anonymity. The research proposal was
reviewed and accepted by the human subjects committee structure of the College of William and Mary.

Data were gathered using the Division Chairman Questionnaire during the winter quarter of 1985. Questionnaires and institutional characteristics were coded and keyed into the SAS program. Data were tabulated. Printouts were reviewed and tables and data displayed organized by research questions.

Data were analyzed using appropriate non-parametric tests, primarily $\chi^2$ (chi-square)\(^1\) and by rank ordering or comparing basic statistics of percentage and frequency (Siegel, 1956; Kerlinger, 1973). Conclusions were drawn based on the findings. Implications of the research were discussed and suggestions for further study were made.

LIMITATIONS

This study will not examine the process of change or the cause of changes in administrative organizational structure but will be limited to describing what changes in administrative organizational structure took place by change in titles, functions, and reporting relationships.

\(^1\) The symbol $\chi^2$ will be used to indicate the chi-square test.
The study will provide limited generalizability because the data will be gathered on a single institutional type rather than from across many organizational types. Although limited in terms of generalizability, such data can discover a great deal about complexity (Daft and Bradshaw, 1980) in the particular institutions in this statewide system.

The study will examine administrative organizational structure for the past three years only and will not deal with changes in administrative organizational structures longitudinally. For the purposes of this study the three-year time frame was viewed as the single point around which a "before" and an "after" can be constructed and not as a span of time over which change will be measured. The beginning of the time period was established as a point at which many changes began to occur in the community colleges in Virginia.

The study will define workload and accept perceptions about relative amount of time spent on functions as described by division chairmen themselves not as seen by their referrant groups of deans and faculty. Percentage of time or specific accounts of time will not be reported.
RESEARCH QUESTIONS AND HYPOTHESES

Five research questions guided the study. Two questions were essentially exploratory in nature and did not generate research hypotheses. For the other three questions, however, research hypotheses were generated. Statistical hypotheses were developed from those, stated in null and alternate forms, and tested. Statistical hypotheses are discussed briefly in Chapter III and restated fully in Chapter IV in the report of findings and analyses of data.

The period of study was one which represented a changing period in the community colleges in Virginia. A research question was needed about those changes in relation to administrative organizational structures.

Research question one: What were changes in administrative organizational structures at community colleges in Virginia in the period 1981 to 1984? Although it was assumed that changes had occurred at the colleges in their administrative organizational structures, specifically in administrative positions and in divisional organization, question one was designed to find out which changes the population of division chairmen had actually experienced. Since this was an exploratory question, no research hypothesis was needed.
The second area of research interest were the perceptions division chairmen had about their workload. Research question two: To what degree did division chairmen perceive their workload to have changed? It was hypothesized that division chairmen would perceive their workload to have increased to a moderate degree.

Assuming some change in workload, a question was then posed to ask in what way workload changed. Research question three: How did division chairman workload change? In this question division chairmen were asked to report actual workload in terms of relative amount of time spent on specified functions. It was hypothesized that division chairmen would spend more time currently in administrative functions (supervision and management) than in other workload functions. It was also hypothesized that chairmen would report that relative time spent on the administrative functions of management and supervision changed during the period of study.

The relationship between workload and changes in administrative organizational structure was then addressed. Research question four: What changes in administrative organizational structures did division chairmen perceive to have impact on their workload? It was hypothesized that selected changes in
administrative organizational structures would be perceived to have made a high impact on workload.

Finally, to define the nature of the population under study, a research question was posed about division chairman background. Research question five: What were demographic characteristics and employment patterns of division chairmen in community colleges in Virginia? Since research question five was also exploratory and designed to elicit simply a profile of division chairmen, no research hypothesis was developed.

Except for research question one, it was of interest to look at the relationship of institutional characteristics or division chairmen characteristics and division chairmen responses. It was hypothesized that division chairmen responses for questionnaire items might differ when grouped by institutional characteristics or division chairmen characteristics. Statistical hypotheses were stated in null and alternate forms and tested to determine if such differences existed for characteristics and time spent on workload functions, whether workload functions had changed, and impact of changes in administrative organizational structures. Further, the relationship between institutional
characteristics and division chairmen characteristics was also examined.

OVERVIEW

In Chapter I the need for this study was discussed and the purpose of the research specified. Background information was provided for orientation to the Virginia Community College System and the division chairman position. Briefly, the conceptual framework for the study was explained, and the design of the study outlined. Research questions and hypotheses were listed.

A review of relevant literature on organizational structure and on the division chairman follows in Chapter II.

The methodology of the study is thoroughly presented in Chapter III. Procedures used are described and the population defined. Both the development of instruments and the rationale for their structure and content are presented in the chapter on methodology. The use of statistical analyses and how the study was designed are discussed along with an elaboration on the research questions and hypotheses.

The findings are presented in detail in Chapter IV. How data were secured and how analyses were made are specified.
A summary of findings begins Chapter V. Finally, in this chapter conclusions are drawn, implications of findings are discussed, and recommendations for further study are made.
CHAPTER II
REVIEW OF RELATED LITERATURE

INTRODUCTION

In the review of the literature two major bodies of literature are examined to develop the theoretical relationship between organizational structure and division chairman workload. First, the literature on complex organizations is examined to see what the literature has to say theoretically about structural variables. Theoretical arguments are presented, measurement issues are addressed, and the organization as the unit of analysis is defended. Relevant studies are briefly reviewed which describe how complexity variables have been measured and what methodologies have been used. Second, studies are then reviewed to see what the literature has said about the division chairman position and division chairman workload and specifically what methodologies have been used to study workload. The chapter then develops the rationale for examining the relationship between division chairman workload and organizational theory.

ORGANIZATIONAL THEORY AND THE COMPLEXITY VARIABLE

The complexity variable has been a primary analytic factor for examining organizations in empirical studies
and in developing theoretical statements about organizations. Complexity is central to describing complex organizations since organizational complexity is that structural variable which can help explain organizations and the functioning of their members. Hall (1982) delineates three components of complexity in complex organizations: vertical and horizontal differentiation and spatial dispersion. Despite the fact that there is no clearly developed single theory regarding complexity, for the purposes of this research study, a review of what the literature has to say both theoretically and operationally about horizontal and vertical differentiation and spatial dispersion has been useful.

Defining Structural Complexity

The structural complexity variable is the notion of structural differentiation as shown on organizational charts (Blau & Schoenherr, 1971; Child, 1972; Meyer, 1968; Pugh et al, 1968) and as measured by job titles and number of levels. Vertical differentiation has been operationalized as the number of levels, hierarchy of authority, or "height of configuration" (Pugh, 1968). Although noting that there are several definitions of complexity, Hage (1965) defined complexity as "the specialization in an organization measured by the
occupational specialties and length of training required by each" (p. 294). Hage's assumption was that the more training people have, the more they were differentiated from other people who may have similar amounts of training but in different specialties. In examining horizontal differentiation, researchers have counted units or divisions within the organization to differentiate the number of specialties in the organization (Hage, 1967, Price, 1968; Hage & Aiken, 1970, 1971; Dewar & Hage, 1978). Spatial dispersion refers to the actual physical dispersion of offices of the same organization (Hall, 1982).

In Hage's (1965) axiomatic theory of organizations, complexity was one of the eight general variables hypothesized to explain organizations. Complexity was defined as a "means" variable; that is, one of the variables explaining what an organization does:

Organizations must divide work into jobs in order to achieve their special objectives. Some organizations hire individuals in specific occupations, such as the professions or the crafts, which require long periods of training, i.e., person specialization; some organizations divide work into specific tasks that require little education or skill, i.e., task specialization. --But these two indicators of complexity can be combined into an index of complexity. The complexity or specialization in an organization is measured by the number of occupational specialties included and the length of training required by each. The greater
Hage's theory goes on to show relationships between each of the eight variables using the concept of functional strains where an increase in one variable would mean a decrease in another. Although Hage's subsequent propositions and corollaries are not useful for the present review, those relating complexity to job satisfaction, efficiency, and the functioning of an individual in a position would be of interest for studying the division chairman position in a slightly different context.

Identifying and Measuring Indicators of Complexity

Hage and Aiken (1967) interpreted complexity to mean at least three things: "the number of occupational specialties, the professional activity, and the professional training" (p. 90). They suggested that complexity along with centralization and formalization are abstract but basic dimensions of all organizations. While conceptually these abstract dimensions were useful in understanding the nature of organizations, those indicators were not appropriate for the present study.

Although viewing structural differentiation and complexity as alike, Dewar and Hage (1978) distinguished between them on the basis of the indicators they used.
"Structural differentiation has been measured by job titles, number of departments, and number of levels, whereas complexity has been measured by the number of different occupations, level of training, and extent of professional activity (Hage & Aiken, 1970; Aiken & Hage, 1971). The former focus on the division in the organization chart, whereas the latter relates to different branches of knowledge and levels of expertise" (p. 111). Both variables were seen, however, as essentially describing division of labor in organizations.

In developing a theoretical synthesis of the concepts of organizational size, technology, complexity and structural differentiation, Dewar and Hage (1978, p. 115) presented theoretical arguments (Figure 4) which served as a basis for the relationships hypothesized between changes in administrative organizational structure and division chairman workload in the present study. In addition their variables suggested indicators of changes in administrative organizational structure.
### Theoretical Arguments Relating Levels and Rates of Technology and Size to Complexity and Structural Differentiation

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively related because the greater the number of clients and depth of involvement with them or the greater the variety of products and the difficulty of producing them, the greater the number of technologies and thus different occupational specialties because of the limits of cognition.</td>
<td></td>
</tr>
<tr>
<td>2. Rate of task scope change</td>
<td>Rate of complexity change</td>
</tr>
<tr>
<td>Positively related because the addition of new clients or products requires new technologies, which in turn require new occupational specialties.</td>
<td></td>
</tr>
<tr>
<td>3. Level of size</td>
<td>Level of complexity</td>
</tr>
<tr>
<td>Positively related only because large organizations achieve economies of scale that result in advantages in hiring occupational specialties in administrative areas.</td>
<td></td>
</tr>
<tr>
<td>4. Rate of size change</td>
<td>Rate of complexity change</td>
</tr>
<tr>
<td>No relationship because the hiring of new personnel does not necessarily mean the hiring of new occupational specialties.</td>
<td></td>
</tr>
<tr>
<td>5. Rate of size change</td>
<td>Level of vertical differentiation</td>
</tr>
<tr>
<td>Small positive relationship because technological complexity decreases spans and necessitates more levels.</td>
<td></td>
</tr>
<tr>
<td>6. Rate of task scope change</td>
<td>Rate of vertical differentiation change</td>
</tr>
<tr>
<td>No relationship because new technologies are usually added horizontally, not vertically.</td>
<td></td>
</tr>
<tr>
<td>7. Level of size</td>
<td>Level of vertical differentiation</td>
</tr>
<tr>
<td>Positively related because large numbers require many supervisors; there is a limit to the span of control.</td>
<td></td>
</tr>
<tr>
<td>8. Rate of size change</td>
<td>Rate of vertical differentiation change</td>
</tr>
<tr>
<td>Small positive relationship because the hiring of new people, unless there are large numbers of them, does not stress spans sufficiently to necessitate addition of new levels.</td>
<td></td>
</tr>
<tr>
<td>9. Rate of task scope change</td>
<td>Level of horizontal differentiation</td>
</tr>
<tr>
<td>Positively related because different clients or products and/or technologies are usually housed in different departments for social and ecological reasons.</td>
<td></td>
</tr>
<tr>
<td>10. Rate of horizontal differentiation change</td>
<td>Rate of horizontal differentiation change</td>
</tr>
<tr>
<td>Positively related because new clients or products and/or technologies are usually housed in new departments.</td>
<td></td>
</tr>
<tr>
<td>11. Level of size</td>
<td>Level of horizontal differentiation</td>
</tr>
<tr>
<td>Small positive relationship because of economies of scale that permit the hiring of ancillary specialists that are located in new departments.</td>
<td></td>
</tr>
<tr>
<td>12. Rate of size change</td>
<td>Rate of horizontal differentiation change</td>
</tr>
<tr>
<td>No relationship because the addition of new people has no necessary relationship with the addition of departments.</td>
<td></td>
</tr>
</tbody>
</table>
Relationships Between Organizational Structure and Position in an Organization

Assuming that there are differences in structure and that the organizational structure can be a major determinant of individual actions in an organization, then the structural complexity is a variable of significant interest in relation to a position in the organization. Hall (1982) notes that "the ways in which people react to their work results from their own expectations and the characteristics of the organization" (p. 6), and Hall further comments that "... organizational characteristics are critical variables as they interact with those of the individual" (p. 6).

Hage's (1965) axiomatic theory and the derived corollaries support the notion that structural aspects affect the performance of the individual in the organization, and as suggested by Katz and Kahn (1964), role expectations are determined by the larger organizational context. In the present research rather than examining the role of the division chairman from the perspective of how well the incumbent understands the role or performs its duties, the division chairman's role, specifically workload, has been examined in relation to the structural variable of complexity, the larger organizational context. The present research study assumed
that the behavior of members of the organization was structurally rather than individually based and that structural properties can be treated as independent of the particular individuals in the position (Hage & Aiken, 1967).

In their work on organizational properties from a sociological perspective of organizational reality, Hage and Aiken (1967) suggested "an organization is a collection of social positions and not an aggregate of individuals. While it is true that individuals work in organizations, they do so as occupants of social positions and thus this is the starting point for computation or properties such as centralization, formalization, and complexity. These sociological properties refer to how positions are arranged in the social structure, not individuals who can come and go while the positions remain" (Hage and Aiken, p. 77).

Of significance to the present study is the conceptual framework and design of studies which used a sociological basis, and where the units of analysis were the organizations, not individuals in the organizations. The data were aggregated to reflect the properties of organizations.
REVIEWS OF RELEVANT STUDIES

Daft and Bradshaw (1980) explored horizontal differentiation to explain the size and technology relationships and organizational differentiation. The study looked at five Canadian universities and examined thirty new departments formed at those universities. While the focus was on a single type of event in a single organization type, the researchers believed that since the problem involved the process of horizontal differentiation, a methodology should be used to permit probing to answer research questions. Thus, they used an interview format with the first phase being a lengthy open-ended interview and the second, a semi-structured questionnaire.

The findings showed differences in stimulus for forming new departments depending upon whether they were administrative departments or academic departments. Administrative departments were precipitated by problems of coordination and control or the university's need for function. Academic departments were formed in response to internal needs. Also, the study indicated that although 29 of the 30 departments were formed to deal with problems, none was precipitated by crisis conditions.
Daft and Bradshaw (1980) noted that in eight of ten administrative departments, stimulus was associated with size. Only one department was formed as Blau (1973) had earlier theorized. "After observing a strong positive relationship between size and number of departments in universities, Blau (1973) proposed a specific differentiation process. As university size increased, the size of university departments also increased. As department size increased, subspecialties would gradually appear and grow until a critical mass was reached, when members of a subspecialty would see themselves as separate and begin to exert pressure for separate departmental status. Moreover, since large department size and diverse subspecialties could lead to overload for administrators, forming a new department would be a logical alternative. Forces for horizontal differentiation thus originated almost entirely within the university as an ultimate consequence of size" (p. 444). In terms of the three decision sequences looked at in the study, however, horizontal differentiation was more complex than Blau (1973) suggested. In one case the process was entirely different. In the other cases, the impetus for horizontal differentiation was not the logical alternative Blau's theory would have envisioned.
Cost was a factor in both academic and administrative departments. More pronounced need due to size was "very" important to eight of ten administrative departments consistent with other evidence that size often generates need for new administrative departments rather than academic departments. However, looking at whether differentiation causes size or vice versa, evidence indicated that administrative departments started with fewer people and only four caused increase in university growth.

Using discriminant analysis to support cautiously the notion of two different processes, the study concluded that administrative and academic departments were characterized by different processes (Daft and Bradshaw, 1980, p. 453). Two models were developed (Figure 5.)

**FIGURE 5**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1: Administrative department</th>
<th>Model 2: Academic department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stimulus</td>
<td>Problem</td>
<td>Problem</td>
</tr>
<tr>
<td></td>
<td>Within organization</td>
<td>Outside organization</td>
</tr>
<tr>
<td></td>
<td>Related to size</td>
<td>Related to needs of clients</td>
</tr>
<tr>
<td>Size</td>
<td>Provokes or intensifies need</td>
<td>Sometimes facilitates approval</td>
</tr>
<tr>
<td></td>
<td>Sometimes facilitates approval</td>
<td></td>
</tr>
<tr>
<td>Energy and support</td>
<td>Idea champion is administrator</td>
<td>Idea champion is dean or professor</td>
</tr>
<tr>
<td></td>
<td>Small amount of effort</td>
<td>Large amount of effort</td>
</tr>
<tr>
<td></td>
<td>Short time lag</td>
<td>Medium-long time lag</td>
</tr>
<tr>
<td>Financial resources</td>
<td>Sometimes facilitate approval</td>
<td>Sometimes facilitate approval</td>
</tr>
<tr>
<td>Increase in staff</td>
<td>Little</td>
<td>Moderate</td>
</tr>
<tr>
<td>Future revenues</td>
<td>Never</td>
<td>Often</td>
</tr>
</tbody>
</table>
These findings, although limited and exploratory, showed processes within organizations and provided a basis for new theory about organizational differentiation. Four propositions were developed:

Proposition one. Horizontal differentiation is the result of two processes which depend upon type of department.

Proposition two. Size has a multifaceted relationship with horizontal differentiation.

Proposition three. Financial resources influence decisions about structural change.

Proposition four. The most important decisions associated with horizontal differentiation are the least obvious (Weick, 1969). (Daft & Bradshaw, 1980, pp. 453-455).

The notion of two cores -- one technical, one administrative -- may account for confusion in research about horizontal differentiation. Aggregation of departments may explain difficulty even with longitudinal data in identifying effects of size and scope of task on horizontal differentiation. One importance of the Daft and Bradshaw (1980) study is the attention they draw to possible methodological and theoretical problems inherent in investigations of differentiation in organizations.

The Daft and Bradshaw (1980) study provided framework for considerations in looking at administrative organizational changes in the community colleges. Although
no distinction was drawn between consolidations (or changes) which may have been considered administrative or those considered technical, the variables identified for differentiation could be operationalized. Furthermore, Daft and Bradshaw (1980) suggested a research strategy that would focus on dimensions of structural differentiation in a single type of organization. Although, as in the case of using community colleges only, the one setting may limit generalizability, such a strategy provides an opportunity to probe a particular problem. For their study, Daft and Bradshaw (1980) gathered data from the recall of those considered well-informed informants, i.e., those involved in the changes. They used a six-year time period which suggested the reasonableness of the three-year period used in the present study for looking at administrative organizational changes in the community colleges.

Beyer and Trice (1979) looked at the structural complexity variable measured as horizontal and vertical differentiation in a study of 71 federal government organizations across nine different federal departments that carried on a wide range of tasks. The study attempted to replicate the Blau and Schoenherr (1971) study of state agencies although the Beyer and Trice study differed in some statistical methodologies from Blau and Schoenherr.
Beyer and Trice concluded that the generalizability of Blau and Schoenherr's findings were limited and suggested modifications finding that the relationships of size and structural complexity are not directly related. Furthermore, Beyer and Trice found differences between routine and nonroutine organizations and size and horizontal and vertical differentiation. They suggested that other studies using other samples will show still other patterns of relationships and that further study for the separate measures of complexity would not be useful.

Their recommendation is somewhat different and supports studies other than those examining direct casual relationships:

The search for single or primary causes of organizational complexity seems doomed to failure now that many more comparative studies of structure have been done (Kimberly, 1976; Ford and Slocum, 1978). A more reasonable approach, in the light of the present state of our knowledge, is to focus on the strategies linking size and the various types of complexity in organizations (Child, 1972). We can then view the cause of organizational complexity as the decisions and actions by decision makers that added a more expert employee, a new job title, a level of hierarchy, or another horizontally differentiated subunit. (Furthermore, we will then be more likely to recognize that managers who adopt a new technology, grow by entering a new market, or economize and cut operations know the multiple impacts of that decision, and therefore probably adopt an overall strategy to deal with the unavoidable linkages between
size and the various dimensions of complexity.) This will also focus attention on the situations, constraints, demands, and opportunities to which the decision makers were responding with that strategy; for example, increasing internal control, responding to new environmental demands or opportunities, technological advances, and considerations of economy. While beyond the scope of this paper, further theoretical development of the strategic approach seems desirable, including empirical studies that focus on the strategic decisions involved in changes in organizational complexity. (p. 62)

Thus, the research of Beyer and Trice (1979) suggested that looking at relationships between structural complexity variables and the impacts of management decisions as has been done in the present study would be a useful approach.

Mileti, Gillespie and Haas (1977) constructed a path model (Figure 6) which investigated relationships between organizational size and horizontal, vertical, and spatial complexity. In order to help clarify the issue regarding size and complexity as explanatory variables in organizational analysis, Mileti, Gillespie and Haas specified the relationships between organizational size and vertical, horizontal and spatial complexity. Previous research used measures of organizational differentiation which do not show these as different aspects. Since these measures are indeed different, an organization, as Hall (1972) suggested, could rank
Where $X_1$ = organizational size, $X_2$ = spatial differentiation, $X_3$ = vertical differentiation, and $X_4$ = horizontal differentiation
high on a complexity scale for one and low for another. The following distinctions in the complexity relationship were made:

- **Spatial differentiation** is the number of places where work is done;
- **Horizontal differentiation** is the number of services or jobs performed;
- **Vertical differentiation** is the number of hierarchical ranks.

Twenty-eight organizations were selected from various federal and state agencies in California by Mileti, Gillespie and Haas (1977) to represent a range of types of tasks and variation in geographical locations across the state. Data were analyzed using the Ordinary Least Squares technique after converting curvilinear relationships to linear relationships. All relationships were statistically significant of the .005 level or above and established the predictive power of the model. The conclusions both supported the model of Blau and Schoenherr and expanded upon it (Figure 7).
<table>
<thead>
<tr>
<th>Miteli, Gillespie, &amp; Haas Findings</th>
<th>Blau and Schoenherr Findings</th>
<th>Organizational Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size is positively related to both vertical and horizontal differentiation at a decelerating rate as size increases.</td>
<td>Same</td>
<td>Larger an organization, the more pronounced (at declining rates) is the division of labor and for separation into divisions</td>
</tr>
<tr>
<td>Relative effect of size on vertical differentiation is stronger than on horizontal differentiation</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>Strong positive association between size and spatial differentiation</td>
<td>Stronger relationship</td>
<td>Size and spatial complexity are different theoretical concepts</td>
</tr>
<tr>
<td>Linear</td>
<td>Curvilinear at a declining rate</td>
<td></td>
</tr>
<tr>
<td>Spatial differentiation positively related to vertical differentiation at an increasing rate</td>
<td></td>
<td>As organizations become increasingly complex geographically, division of labor only slightly affected. As grows geographically, must depend on geographical specialization of labor which itself also increases administrative responsibilities too broad to be absorbed by existing structures, thereby promoting increased levels of administrative specialization. Paradox - Organizations that continue to grow in size but not spatial complexity will eventually</td>
</tr>
<tr>
<td>Positive effect of spatial differentiation on horizontal differentiation</td>
<td>Not same pattern as size</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Linear</td>
<td>Geographical complexity signifies functional differentiation of organization into different geographical divisions</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If spatial differentiation does signify geographical specialization of functions, it should be related to increased functional (horizontal) differentiation for the organization as a whole</th>
<th>Vertical and horizontal complexity can vary in same direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship between vertical and horizontal differentiation</td>
<td>Linear</td>
</tr>
<tr>
<td>Linear</td>
<td>Negative*</td>
</tr>
<tr>
<td>As organizations grow in size, the proportionate growth of vertical ranks is greater than the growth of horizontal divisions.</td>
<td></td>
</tr>
</tbody>
</table>

*Explanation may be that negative direction is true in state employment agencies, population used by Blau and Schoenherr.
To add to theoretical understanding, Mileti attempted to increase generalizability and specification of complexity relationships, but like other researchers, conclusions pointed to limited generalizations when studying a single organizational type.

Dewar and Hage (1978) proposed a theoretical synthesis dealing with analytical concepts used to understand complex organizations. Dewar and Hage argued that a better measure between size and task scope and complexity and structural differentiation is to measure rates of change rather than associations between levels (that is, amounts of time). They defined structural differentiation and complexity as different:

**Structural differentiation** -- measured by job titles, number of departments, and number of levels; division on organizational chart.

**Complexity** -- measured by number of different occupations, level of training, and extent of professional activity (Hage & Aiken, 1970; Aiken & Hage, 1971) and refers to different branches of knowledge and levels of expertise.

Dewar and Hage used the data from research conducted by Aiken and Hage on 16 social service organizations in 1964, 1967 and 1970. Their purpose was to have
longitudinal data to use in regression analysis on levels and rates of change in levels.

Their study raised methodological issues for the present research dealing with administrative organizational changes in the community colleges. They suggested that the choice of the length of change interval is an important substantive, although not mathematical, issue. In their case, not so short that casual process did not take place, not so long that other factors affected the dependent variable. The three and six-year periods in their data suggest that a three-year interval may be too short to expect a relationship between changes in size and changes in vertical differentiation unless changes in size are of either two or three times the magnitude of largest changes in the data observed.

"Our conclusions, then, regarding relationships between changes in size and changes in any other variables hold strictly for the range of change in size observed. In defense of the rates observed, one might consider how rarely organizations of fewer than 500 persons grow more than 100 or 200 persons per year. For our organizations with a mean size of only 150 to 175 persons, the changes in size we have observed are proportionately large" (p. 120).
Since Dewar and Hage (1978) had longitudinal data and were interested in levels and rates of change using regression analysis, the length of their time period was crucial. For the purposes of the present study on administrative organizational changes, however, the three-year period was seen as a single point in time, not a span of time. The interest was simply in whether or not any one or more of the identified changes in administrative organizational structure had actually taken place, not the levels and rates of change Dewar and Hage studied. Furthermore, the use of non-parametric statistical analysis did not require longitudinal data. The Dewar and Hage (1978) study, however, reinforced the changes identified for the present study as being appropriate for looking at the complexity variable.

Blau and McKinley (1979) studied architectural firms to determine the impact of ideas on organizational innovation. Using the structuralist approach that relates the form of an organization and its size, the structural complexity was an important variable in comparing architectural firms which were successful in winning awards and those which were not. Data from a random sample of 77 firms were analyzed. Regression analysis was used to examine influences of specific variables after controlling for others.
Results showed findings partly supporting structuralist theory and partly in opposition to the theory. Blau and McKinley (1979) found that structural complexity impedes innovation which was opposite to what the theory would predict. Size and innovation, however, were positively related. Explanation for the negative relationship of structural differentiation and innovation brings into question the generalizability of research findings across kinds of organization. Size and structural complexity and task diversity relationships appeared to support earlier research by Meyer (1975). Size had a greater impact on structural complexity in the less innovative firms and appeared to indicate that different processes underlie the dynamics of structural and task differentiation in innovative and other firms. In less innovative firms, size was a major determinant of how the organization and its activities were structured. In more innovative firms, size became less important. The researchers concluded their findings were consistent with theoretical formulations of other organizational research.

Findings from the literature support relationships between organizational size and complexity but suggest that those relationships are in themselves apparently
more complex than early theory supposed. Because of the size/complexity relationships, however, in the present study various measures of size were considered and used in analyzing both complexity variables of changes in administrative organizational structure and the division chairman workload variable. The path model (Figure 6) constructed by Mileti, Gillespie and Haas (1977) described interrelationships of these dimensions. Daft and Bradshaw (1980) developed a proposition that "size has a multifaceted relationship with horizontal differentiation" and supported Kimberly's (1976) argument on the multiple role of size; size is not a global concept.

There is no single theory of complexity which has been clearly developed and stated by researchers. The work cited here represents studies of the complexity issue in organizations, but general theory development is still in progress. Without a clearly stated single theory, the study of organizations is in empirical stages, and any new studies contribute to the development of theory. For the purposes of this research looking at the impact of administrative organizational changes on the division chairman workload, the literature does, however, provide direction. Clearly the complexity variable, seen as structural differentiation can be defined
as horizontal and vertical differentiation and spatial dispersion.

The horizontal differentiation variable is operationalized by span of control indicators, such as the number of divisions in an institution and the number of faculty and programs supervised by the division chairman. Vertical differentiation is operationalized by the hierarchy and other indicators, such as supervisory levels and reporting relationships. Spatial dispersion is operationalized by indicators of single or multiple campus at the institutional level and location of faculty offices relative to the chairman's office at the division level. The literature supports looking at one organizational type even while recognizing problems of generalizability. The theory that has been developed in the extensive organizational literature looking at complex organizations from a sociological perspective supports the notion of looking at a position relative to the organizational structure and using the organization as the unit of analysis. Finally, the use of recall of informants in the organization given a relatively short period of time is supported by other studies of organizations.
The literature of department/division chairmen has dealt primarily with the roles of chairmen by developing lists of functions or responsibilities (Branch, 1982; Palmer, 1984). There is general agreement about the substance of the lists of responsibilities and consensus on the need for training for what has been recognized as a difficult position.

Literature on community college department or division chairs, though relatively sparse, identifies the position as a crucial one (Palmer, 1984; Lombardi, 1974). Department/division chairmen represent the largest administrative position in the community college (Branch, 1982). Although this crucial role has been described normatively since the 1960's and has been called a key and pivotal position in the organization's hierarchy, most studies have examined managerial effectiveness, congruity between referent group perceptions of the role, and needs for training aid and staff development (Palmer, 1984). Little examination has been made regarding the relationship of the position to the structure of the organization. Payne (1973) suggested that neither the role of the chairman nor the chairman's functions should be examined in isolation, but rather must be looked
at in relation to the organization. Studies of the chairman have continued, however, primarily to look at the position without reference to the organization or the organization's structure.

Literature on department chairs, chairs being defined as that position which is the first level of faculty contact with administration from the basic faculty organizational unit, can be useful as a beginning point in looking at the position. Although some of the functions or responsibilities are similar, studies which have examined the role of the department chair in the four-year college or university may not be generalizable to the role of two-year department/division chairman. A division of humanities in even a fairly large community college may consist of disciplines ranging from English to foreign languages. In other cases disciplines in divisions can number in the teens and be as diverse as business and chemistry.

The faculty at a community college are not generally as academically specialized as at a four-year college, fewer have doctorates, and many come to teach at the community college from secondary schools (Cohen, 1980). The chairman may be viewed less as "first among peers" and may be perceived as clearly an administrative position
even when the chairman has considerable teaching responsibilities. In some cases the division chairman may function more like a dean or associate dean in a four-year setting with student development responsibilities along with instructional management. In other cases in the community college the division chairman may have responsibility for regular credit programs and continuing education or non-credit programs as well. The budgetary functions are often different with less responsibility for bringing money into the department at the community college level than for a department chairman and therefore often less discretion in salary negotiations. Division chairmen at the community college level may tend to be more institutionally oriented to their discipline. For example, the chairman would be likely to identify himself or herself as division chair at the community college rather than a sociologist or historian (Cohen, 1980). Although the scope of responsibilities of the community college division head may be considerably broader than in a departmental unit (Brann, 1972), this literature review will look at the broader body of literature on the position of chairman. The review will look at the descriptions which exist regarding the chair role and determine which major variables appear crucial in analyzing
the workload of the division chairman. Briefly reviewed will be those several descriptive and normative studies which provide lists of duties and responsibilities or address in even fairly one dimensional terms what the role ought to be.

Although not addressing the workload of the department chairman explicitly, departmental studies may be useful in looking at the role since, as Payne (1973) suggested, the chairman cannot be explained apart from it. Dressel and Johnson and Marcus (1970) described the influential department chairman as one who was both articulate and respected by his peers. The individual in that leadership position was expected to strengthen the department both in terms of gaining national recognition for colleagues and younger faculty and in representing the interests of the department for gaining institutional resources. Essentially the department chairmen served as a faculty oriented leader in the academic organization. Particularly in times of organizational change, however, the question became whether organizational press would dramatically alter models of the role. Dressel and Reichard (1970) did not do more than hint at the relationship of organizational press and change in the role, but the notion of such a possible relationship between what a
position does and how the organization might change that is suggested.

Brann (1972) reported that the role was entering a period of critical reexamination and suggested why it was necessary: "Thus, the seat of the chairman is an uneasy one in an era of societal change. He must make the existing system function while keeping an open ear and mind toward the cries for academic reform. Rushing toward him from one direction is the puzzling and somewhat alarming spector of unionism and from another, the oftentimes ill-informed political representatives of a dissatisified public. Central administrations aided by computers and long-overdue applications of management principles are becoming increasingly powerful and efficient, leaving the chairman little room to maneuver or juggle budgetary categories. His faculty is insecure and resistant to change."

In his examination of the evolution of departments in colleges and universities, Murray (1964) considered variables such as size, complexity, and prestige, and Baldridge, Curtis, Ecker, and Riley (1978) stated that these variables continue to be crucial in looking at differences in academic organizations and the conditions of the workplace. Even in studies focusing primarily
on departmental structure, the figure of the department chairman and the chairman's relationship to the department were consistently suggested as key to a full understanding of the structure of the organizational unit. Andersen (1968) called the chairman the key administrative officer of the university and viewed this position as a policy making one with the dean and one which should have total budgetary discretion, including the right to adjust salaries to market fluctuations. Andersen's (1968) view is that the formal administrative power of the department head should be considerable but fulfill responsibilities in instruction and research. In examining workload, the need for administrative assistance becomes an issue.

In an attempt to explain how academic departments worked and to add some theoretical framework for academic organization, Hobbs and Andersen (1971) built a model of the organization of academic departments. Asking the questions, "Who runs academic departments, and how?" they used a method of generating theory from data. An important finding in the study is that not only do departments vary between themselves, but they also vary within depending on the task to be done and depending upon whether the task basically requires an administrative or governance process. This finding relates to the
previously discussed Daft and Bradshaw (1980) study which looked at differences in the creation of technical or administrative departments in the university.

In the descriptive and normative literature about the chairman role, often written by a present or former chairman, essays have described duties and responsibilities and suggested what institutions might do to make the position less conflict ridden or more effective. Roach (1976) wrote an article describing the functions and responsibilities of a department chairman and suggesting ways to improve leadership. In a tongue-in-cheek article in the Chronicle of Higher Education, Engle (1974) discussed the responsibilities and limitations of leadership of the department chairman and suggested methods for successfully developing a leadership style. In still another opinion article, Heimler (1967) provided an overview of the responsibilities of the chairman, and McKeachie (1968) wrote a "Memo to a New Department Chairman." Ehrle (1975) discussed the selection and evaluation of the chairman. Zorn (1978) reviewed the problems of the chairman's return to teaching following his tenure as chairman and how the chairman should prepare for such a return. John Lombardi (1973) described the
role of the department chairman in improving community college instruction. One of the functions of the chairman was to prevent anarchy and help maintain the position of the department among other departments. In carrying out the responsibility for the instructional program through monitoring the health of the department and the welfare of the instructors and supporting personnel, and watching progress of students, the department chairman was also expected to maintain cordial relationships with the administration. The conflicting aspect of role emerged when the chairman balanced the cordial relationship without being labeled a tool of administration. Lombardi also noted other aspects of role ambiguity in the differences in authority of chairmen in some colleges, their indefinite instructor/administration status, and ambivalence in the attitudes of deans and presidents toward the role. The extent of success or failure in the organization Lombardi suggested may be ascribed to the ability of the department chairman to assess the perceptions of the dean, president and faculty and to adapt to them.

In a series of studies of the department chairman in two-year colleges, the role was examined in light of several variables. O’Grady (1971) examined the role
in two-year colleges in Missouri and Illinois by size of institution in terms of role status, qualifications for the position, budget administration, personnel, academic administration and general functions. In another study, also in Missouri and Illinois, Smith (1972) studied department chairmen in twelve two-year colleges using systems theory of Katz and Kahn. On a questionnaire containing 46 activity statements believed to be important job responsibilities, faculty, chairmen, and upper echelon administrator's grouped job responsibilities of the department chairman into six categories from Katz and Kahn. Although there are methodological weaknesses in Smith's study, the categories developed from the Katz and Kahn systems model may provide a useful conceptual framework for looking at the role of the department chairman. In a national survey Pierce (1971) sampled regionally accredited junior colleges which used science division heads rather than department heads and examined 123 job descriptions. Conclusions showed science division chairmen in closer agreement to faculty than central administration in perceiving duties as primarily administrative, contrary to 85 percent of the job descriptions which described duties as less administrative than either faculty or chairmen perceived them. Even
with methodological problems and with conclusions beyond the scope of the data, the study supported role ambiguity in terms of differences perceived by faculty, chairman, and administrators.

Stull (1974) looked at differences in the perception of the chairman's role between faculty, chairman, and deans and whether those perceptions differed based on size of institution in the Virginia Community College System. College size was shown to have little effect, and all referent groups perceived chairmen as currently placing major emphasis on establishing and maintaining working relationships with faculty, assigning teaching loads, dealing with problems and complaints, interacting with the administration on behalf of the division, making recommendations for personnel and hiring, decisions, and completing routine reports. Bromerly (1971) studied the role of the two-year faculty in the decision making at the departmental level and the influence of the chairman in relation to faculty influence, morale, and departmental objectives. Combs (1972) in a dissertation study looked at the leadership role of the chairman, suggested areas for future study in differences that may exist in terms of department chairman authority, perceptions of students and other administrators to the role, and the potential for departmental influence in overall governance.
These basic functions synthesized from the studies reviewed are the responsibilities of division chairmen in the public two-year colleges: faculty interaction, recommendations for promotion and tenure, assignment of teaching responsibilities, responsibility for faculty development, student contacts, interdivisional coordination, and the representing function to administration.

In the most thoroughly developed study reviewed to date Branch (1982) analyzed nineteen studies specific to the division chairman responsibilities and developed a comprehensive list of responsibilities of chairmen in public two-year colleges. Using a delphi technique, a method for calculating a division chairman workload was developed. The list developed by Branch and the division chairman workload functions which identified workload variables were used as a basis for the workload functions specified in the present study of the impact of administrative organizational changes on workload of division chairmen.

RELATIONSHIP OF DIVISION CHAIRMAN WORKLOAD AND ADMINISTRATIVE ORGANIZATIONAL CHANGES

A wide reading of both the organizational literature and the division chairman literature suggested a link
between the workload of division chairmen and administrative organizational changes in their institutions. While this link had not been previously made nor some indicators of variables previously studied, conceptual relationships could be made. The theoretical frameworks for studies differed, but organizational context emerged as relevant. In looking at department chairman power, Hill and French (1967) described the hierachial structures of departments as a factor. Ryan (1972) looked at academic departments and decision making in relation to organizational patterns. Darkenwald (1970) used organizational differentiation as a conceptual framework in examining the department chairman role and looked at ways the department chairmanship was affected by variations in the organizational structure of the university. Even in a study using Holland's theory of vocational choice/personality, Smart (1976) showed that variations in time spent of various duties could be partially accounted for by organizational structure and size. Bragg (1980) identified length of service as related to role definition and socialization and offered the explanation that differences in environmental factors over the years might have accounted for the interaction.
The division/department chairman literature clearly identified the complexity of the role of the department chairman and has identified the department/division chairman as an important role in the college organizational setting (Tucker, 1984). Images repeatedly have described the chairman's role as multiple or at a minimum, dual: neither fish nor fowl (Smith, 1972); Janus like (Baldridge, 1978). Although role may be defined as broader conceptualization than workload, workload can also be described as a significant aspect of role. Role has been previously researched and described by lists of duties and responsibilities and looked at by referant groups. The present study looked at how the administrative organizational structure (the complexity variable) related to the workload of the division chairman. As the review of organizational literature has indicated, no specific theory exists to be tested. The study did not examine cause and effect but determined the relationships that existed between administrative organizational structure and the workload of division chairmen.
CHAPTER III

METHODOLOGY

INTRODUCTION

In Chapter III the methodology used for gathering and analyzing data is presented. First, population and sample issues are discussed. Then, procedures used for data collection are described.

Treatment of the data is organized by four categories: Administrative organizational structures, workload issues, relationships between workload and structure, and profile of the division chairmen. It is under these categories that the five research questions and research hypotheses fall.

How the data were secured to answer each research question is specified. Treatment of the data includes what hypotheses were posed, what statistical tests were used and why, and how analyses were made.

Instrumentation is described including the development and pilot study of the questionnaire.

The design of the study is specified and the basis for statistical analysis is discussed.

Finally, the methodology is briefly summarized.
POPULATION AND SELECTION OF SAMPLE

The population for this study were individuals holding position as chairmen of academic and technology divisions offering credit degree, certificate, or career studies programs in the 23 community colleges of the Virginia System. Those incumbents in winter 1985 serving in a supervisory capacity over full time faculty or instructional programs of such divisions were defined as division chairmen. Titles varied from division chairman but did not include assistant division chairmen or program heads. Acting division chairmen were included in the population. Those individuals holding the position titles of director and coordinator were not included in the population because it was assumed that the supervisory criteria would not be met. The 98 division chairmen in the Virginia Community College System in winter 1985 were the entire population for this study. For certain analyses sample groups of this population consisted of those division chairmen at community colleges which had made specified changes in administrative organizational structure since 1981.

The population was identified by using the Directory of Administrative Officers in the Virginia Community College System, 1984. Since the directory was published during the 1983-84 academic year and division chairmen might have
changed, a telephone check was made in December 1984 to obtain the incumbents for the winter quarter 1985, and update the directory listing.

PROCEDURES

Prior to collecting data, permission was granted by the Virginia Community College System for research to be carried out at the community colleges in the State of Virginia. The process required obtaining permission through the Assistant Vice Chancellor for Research and Planning of the VCCS. Since presidential approval was required to conduct research within the individual colleges, endorsement was sought and subsequently obtained from each college president to conduct research in the individual college through a letter to each president, (see Appendix C).

Data on division chairmen background characteristics, changes in administrative organizational structure, and workload were obtained using a survey questionnaire. Although institutional documents such as catalogs, master plans, or organizational charts might have been used to gather data on administrative organizational changes, document searches were judged not to be the most efficient nor the most reliable sources for this data. Collecting multiple documents from the 23 community colleges to cover
the three-year period would have been expensive and time consuming and would have resulted in an extremely large number of documents to consider. Content analyses would have also been time consuming and complex since these documents were found not to have common formats or to be published on the same time cycles. Organizational charts were found not to be timely nor to include the same data across the colleges. Inquiries also revealed there was no single source for the data required from the Virginia Community College System Office or other statewide office.

Blau and Schoenherr (1971) found that organizational charts required contacting a knowledgeable official from the organization to clarify issues. Division chairmen in the colleges in the VCCS were assumed to have the knowledge to answer accurately questionnaire items on administrative organizational change since those items dealt with administrative positions, titles, and responsibilities directly or closely related to the division chairman. Items pertaining to overall administrative areas were expected to be within the chairman's knowledge of the college structure, and items on divisional organizational changes referred to the respondent's own division. This assumption held even when the chairman had not been the incumbent during the entire period covered by the study. It was assumed that a
recent occupant of the position would have a knowledge of institutional history.

Institutional and divisional characteristics were obtained through items on the questionnaire when division chairmen were assumed to be reliable sources and the data was readily available to them. In an attempt to simplify the questionnaire, characteristics which would have required the division chairman to check another source for accuracy and were readily available through VCCS documents or consultation with VCCS staff were obtained and recorded on the Institutional Characteristics Profile Sheet.

Division chairmen were assumed to report accurately their perceptions about workload (Bragg, 1980). Some items on workload required chairmen to respond with relative amounts of time spent on various types of work. Although the actual percent of time or actual hours spent may have varied from individual to individual on a continuum of much time to little time, each respondent was asked to answer those workload items relative to the individual interpretation on the continuum. Such a scale was deemed appropriate for comparative purposes. The respondent was then asked whether the time changed or did not change, again based on that individual's own point of reference.
Since the period of study was only three years, it was assumed that such a period would be in recent memory of incumbent chairmen and would be within the expected historical background knowledge of new chairmen. Further, questions were asked only about events which were of significant import to the college or the division, and the division chairman was not expected to recall events or numbers so precisely as to be frustrating or inaccurate.

Questionnaires were mailed in late January 1985 with a cover letter explaining the study and specifying the endorsement from the chairman's college president and the VCCS. A follow-up questionnaire and letter was mailed to non-respondents within three weeks of the initial mail-out, and a telephone follow-up was made to non-respondents within two weeks of the second letter. It was anticipated that response would be at a high rate since the study had the support of the presidents and the VCCS, the division chairmen were responding to a colleague's request, and division chairmen workload was an issue of interest in Virginia and across the nation (Palmer, 1984). To encourage participation and to protect privacy, questionnaires were coded so as not to identify respondents individually. Individuals were assured personal anonymity and that data would be reported in such a way that individual institutions would be anonymous as
well. The questionnaires were examined to determine completeness and readability of responses and an identification code was placed on the questionnaire. The identification code, used for the purposes of determining response and clarification of insufficient or unreadable responses, was stored apart from questionnaire responses to assure anonymity of respondents.

SPECIFIC TREATMENT OF THE DATA

The specific treatment of the data includes what data were needed, how the data were secured, how the data were organized for reporting findings, and how analyses were made. The treatment of the data is broken down into four segments: administrative organizational structure, workload, relationship of structure and workload, and profile of division chairman characteristics.

To examine the relationship between changes in administrative organizational structure and division chairman workload, four major research questions were posed.

1. What were changes in administrative organizational structures at community colleges in Virginia in the period 1981 to 1984?

2. To what degree did division chairmen perceive their workload to have changed? and,

3. How did division chairman workload change?
4. What changes in administrative organizational structures did division chairmen perceive to have impact on their workload?

In order to understand the nature of the division chairman position a related question was explored.

5. What were demographic characteristics and employment patterns of division chairmen in the community colleges in Virginia?

To answer the research questions raised by this study, various analytical approaches were taken. For example, it was appropriate that some data be analyzed and inferences drawn without the use of statistics, and statistical hypotheses were not developed. In other cases, simple descriptive statistical techniques were used, such as frequencies, percentages, and contingency tables (Kerlinger, 1983). In still other cases, nonparametric statistical techniques were employed to test hypotheses developed from data that is ordinal at best. Hypotheses are listed later in this chapter.

Administrative Organizational Structure

The period of study was one which represented a changing period in the community colleges in Virginia. A research question was posed which asked about changes in administrative organizational structures. Although it was
assumed that changes had occurred at the colleges in administrative organizational structures, specifically in administrative positions and division organization, question one was designed to find out which changes the population of division chairmen had actually experienced. Research question one: What were changes in administrative organizational structures in community colleges in Virginia in the period 1981 to 1984? Since this question one was exploratory in nature, it did not generate a research hypothesis.

Research question one was designed to elicit data about particular changes in administrative organizational structures which the literature suggested might relate to workload of the middle manager of an organization. Although Virginia has a System of Community Colleges, the data required to answer research question one was not readily obtainable at the System level. Data were required from the individual colleges. It was assumed that, although division chairmen would not necessarily have been directly involved with the process, they would have been aware of both campus and college level changes in administrative positions and could be assumed to report accurately. To provide the data needed, division chairmen were surveyed to determine which changes in a selected list of administrative positions
actually occurred at the colleges in Virginia during the period of the study. Further data were needed about changes in organizational structures within divisions. Division chairmen were asked which changes in organizational structures had occurred in their own divisions during the period of study. In this case, division chairmen were determined to be uniquely qualified. It was assumed that even if the division chairman had not been an incumbent during the entire period of 1981 to 1984, a division chairman new to a division would have been aware of the changes specified.

To answer question one an indication of whether the colleges had undergone changes in administrative organizational structure since 1981 was needed. Responses to items 30 and 31 on the Division Chairman Questionnaire indicated whether there had been changes in administrative organizational structure using those indicators of changes identified for this study. Any response of an impact from minimum to maximum to sub-items a-j in item 30 or k-w on item 31 indicated some administrative organizational change for a college since 1981. Data were examined to determine responses of "does not apply" for each sub-item in items 30 and 31 which indicated no administrative organizational changes had occurred. Specific changes in administrative
organizational structure were determined by responses to questionnaire items 30 and 31. Subitems a-j in item 30 asked about changes in administrative positions at the college level. Item 31 grouped changes within divisions by changes in divisions at the campus level, changes in personnel within the chairman's own division, and changes in programs within the division. A response of 1-5 indicated that the modification had occurred at the institution, campus, or division. A response of "does not apply" indicated the change had not occurred. Responses were aggregated by frequency and percentage of response and rank ordered. 

Workload

Data on workload were gathered to answer research questions two and three by indicating how much division chairmen thought workload had changed and in what ways workload functions had changed. Since the workload issue required a framework, data were also needed to describe current divisions. These data were gathered in questionnaire items 17-27. Responses were aggregated and reported in a narrative description of divisions. Responses to item 28 determined whether division chairmen perceived their workload to have increased, decreased, or remained the same. Responses to item 29 determined whether division chairmen
perceived their workload to have changed substantially, moderately, some, or little. These changes were reported as number and percentage of responses.

Although statistical hypotheses for research question two were stated in null and alternative forms, standard statistical tests were not used for analysis. Acceptance or rejection of hypotheses was determined by analysis of the basic statistics reported as frequency and percentage of response.

Then, data were needed to show workload distribution at present and how that workload distribution had changed since 1981. In item 32 division chairmen were asked to indicate the relative amount of time spent on each workload element and whether that relative amount of time had changed or had not changed since 1981. Responses were reported as frequency and percent of chairmen on each workload element. Responses were also reported by frequency and percent reporting changed and had not changed.

Data on relative amount of time spent were rank ordered, and acceptance or rejection of statistical hypotheses was based on analysis of rank order. Contingency tables were developed for workload functions to examine differences in the distribution of responses controlled for institutional characteristics, division chairman characteristics, and
divisional characteristics. Institutional characteristics were established from Institutional Characteristics Profile Data Sheet and division chairman and divisional characteristics from questionnaire items 3, 13, 21-25, and 27. X² tests were used to determine significant differences in responses to item 32 when controlled for these characteristics variables.

Change in workload functions was rank ordered and statistical hypotheses were accepted or rejected based on analysis of these rank orders. The association between change in workload functions and characteristics was determined by X² tests of distribution of responses controlled for characteristics variables.

Relationship of Structure and Workload

To answer research question four data were needed to determine what changes in administrative organizational structure division chairmen perceived contributed to change in their workload.

Responses to items 30 and 31 on the Division Chairman Questionnaire indicated administrative organizational changes and the impact of those changes on workload. Division chairmen were asked to rank the impact on their workload of specified changes in the college administrative organization
or divisional organization since 1981. An open-ended "other" item permitted division chairmen to specify unique changes which were not listed in the structured sub-items. Data were reported to indicate where changes occurred, that is, in administrative component or divisional component. Any response of 1-5 for item 30 was an indication of a change in the administrative component; any response of 1-5 for item 31 was an indication of a change in the divisional component. The divisional component was grouped into "Divisions," sub-items k-m; "Personnel," sub-items n-s; and "Programs," sub-items t-w. The impact scores reported as number and percent of chairmen responding were tabulated and displayed in rank order.

Responses to items 30 and 31 were also grouped by institutional characteristics and division chairmen and divisional characteristics.

Several analytical approaches were taken to examine the relationship between changes in administrative organizational structures and impact on division chairman workload. The Kolmogorov-Smirnov One-Sample test was used as a goodness-of-fit test for the administrative organizational structures specified in items 30 and 31. The mean impact scores for each subitem of these questionnaire items were rank ordered. Differences between the extremes of high and
low scores for each were also rank ordered. Acceptance or rejection of statistical hypotheses was based on these multiple analyses.

Contingency tables were developed for impact scores on the changes in administrative organizational structures for controlled characteristics variables. Statistical hypotheses were tested using the $X^2$ test.

Responses to items 30 and 31 were also grouped in cross tabulations with responses to items 28 and 29. These tabulations showed frequency and percent of division chairmen reporting relative impact of administrative organizational changes with frequency and percent of chairmen reporting ways workload changed (item 28) and degree of workload change (item 29). Hypotheses were tested using the $X^2$ test.

Profile of Division Chairman Characteristics

Related research question five did not generate testable hypotheses because the question was exploratory in nature, but to provide a perspective for workload issues and understanding of the position studied, a profile of division chairmen in the community colleges in Virginia was developed. Items 3-16 on the Division Chairman Questionnaire asked chairmen to describe professional background and to provide demographic data. Responses to these items were reported by
frequency and percent of response. Analyses of these data were made by comparison of selected demographic characteristics and employment patterns with data collected about division chairmen from a previous study in the VCCS (Stull, 1974).

Contingency tables were developed for questionnaire items 3-16 and institutional characteristics, and statistical hypotheses were tested using the $X^2$ test.

ETHICAL SAFEGUARDS AND CONSIDERATIONS

Reports were submitted regarding ethical safeguards and considerations to the appropriate human subjects committees at the College of William and Mary. Respondents were assured of anonymity of responses. Data were aggregated and questionnaire responses coded so that neither individuals nor specific institutions were identified. Assurances of this level of anonymity were given to the Systems Offices and presidents as well as to division chairmen asked to complete the questionnaire.

Since the issue of organizational restructuring might be a sensitive one at the college level, data were reported without identifying individual colleges or division chairmen. Furthermore, questionnaire items dealt with what administrative organizational changes had taken place, factual public information, and did not explore the
potentially sensitive area of how the decisions were made. All participants were invited to receive results of the research.

INSTRUMENTATION
Division Chairman Questionnaire Development

The questionnaire was developed using advice from a panel of experts including community college division chairmen, deans, and faculty. Modifications were made to the questionnaire, and items added and deleted as recommended by this panel. The panel also reviewed items for clarity, especially in terms of understanding to the population of community college division chairmen in Virginia. Following modification of the instrument based on recommendations of the panel, the questionnaire was pilot tested for validity and reliability with a sample of division chairmen prior to being mailed to the study population.

Each of the administrative organizational changes identified in items 30 and 31 related to one of the variables used in the literature to describe organizational complexity: horizontal and vertical differentiation and spatial dispersion. Items looked at span of control, supervisory issues and physical location of division personnel. Items 28-30 dealt with chairman perceptions of workload in general.
Item 32 looked at specific elements of workload, relative time spent on each element, and whether that relative amount of time had changed since 1981.

There was an open-ended comment section provided in the Division Chairman Questionnaire designed to elicit comments from respondents on points which may not have been addressed in specific items (Hogville, 1978).

Part II, items 17-27, and Part III, items 28-32, asked for data which described the college, the individual division, and the division chairman workload. These items were suggested primarily by Branch (1982) in a study of division chairman workload which developed a method for determining chairperson workload. Responses to these items were used to describe divisions in the VCCS and to answer questions about workload. Branch (1982, pp. 202-203) determined that the following activities were routine responsibilities and should be included as factors in determining chairman workload: number of full time faculty; geographic contiguity of division personnel; general curriculum duties; advisory committees; general duties related to students; complexity of budget; teaching and learning aids; number of non-teaching personnel; quantity of administrative duties. There were other occasional factors determined: participating in the planning and formatting of
a new or remodeled facility; developing a new curriculum; preparing for specialized accreditation; other responsibilities—either routine or occasional—and time for professional development.

Items 17-20 and 25-27 were specifically designed to help explain differences in divisions in order to interpret data about workload in questionnaire item 32.

Description of Division Chairman Questionnaire

The instrument used to gather data was a survey questionnaire composed of 32 items to be answered by all division chairmen in the Virginia Community College System (VCCS). A copy of the Division Chairman Questionnaire is in Appendix A. The questionnaire was typeset and printed to enhance the appearance and improve return rate. The survey instrument was mailed to the population of division chairmen in the VCCS accompanied by a cover letter requesting the assistance of the division chairmen in gathering data about division chairmen workload. A copy of the cover letter is in Appendix C.

Part I of the Division Chairman Questionnaire was composed of items asking personal and professional data of the division chairmen. These are items routinely asked on mail surveys, and respondents can be assumed to be able to recall this personal information and to respond accurately.
The format of items was derived from the instrument developed by Stull (1974). The purpose was twofold: (1) the items from the present study could be compared with similar items from the Stull (1974) study to provide some longitudinal data on characteristics of division chairmen in Virginia over a ten-year period; (2) most of the items in the 1974 study were clearly written and were in an acceptable format.

Items on division chairman characteristics and employment patterns were modified from a questionnaire used by Stull in a study of division chairmen in the VCCS (1974). Items were modified slightly from Stull for clarity, and items were added to include data relevant to 1984 or of particular interest to this study. Permission was granted in writing to use or modify the Stull instrument. The Division Chairman Questionnaire asked chairmen to give exact position titles to determine if there was variation from the title, Division Chairman, across the State. In the present questionnaire, chairmen were also asked to indicate race and marital status as a further definition to the characteristics profile. The Division Chairman Questionnaire also asked chairmen to indicate types of professional development activities within the past two academic years. This data supplemented descriptions of educational background and
experience and was presumed to have some relationship to perceptions about workload. Additional items were suggested by Branch (1982) in a study of chairmen workload and Bragg (1980) in a study of department chairmen.

Workload factors developed by Branch (1982) served as a basis for the workload portion of the questionnaire. In a very comprehensive review of 46 doctoral dissertations identified in the literature as pertaining to department chairmen, Branch did a content analysis of 14 studies that specifically examined division chairman workload. Factor analysis of the resulting lists of workload functions grouped the functions into the six areas specified in item 32 on the questionnaire. Although a listing of the tasks making up the categories would probably elicit responses indicating considerable variation in the time spent at those tasks, the variation could be presumed to be a function of individual style or institutional emphasis rather than a measure of overall workload. For the purposes of this study, then, the broad categories rather than specific tasks have been used to describe workload.

The time period of three years, 1981-82 through 1983-84, was established because many administrative organizational changes occurred in community colleges in Virginia during
that period, and the period was within the reasonable memory of the division chairmen. Daft and Bradshaw (1980) used a time period of six years in looking at the formulation of new departments because informants could recall events with considerable accuracy. When the informants are persons in a position to observe key events, it can be assumed that they will recall events.

Items on institutional and divisional characteristics could have been obtained through institutional documents or a knowledgeable college official. Since information needed to respond to these items was known by division chairmen, the questionnaire was determined to be the simplest way to obtain that information. Additional data which the division chairman may or may not have readily accessible about the individual college was obtained independently of the questionnaire through document analysis and tied into the responses of the division chairman from that college in the coding process for the Institutional Characteristics Profile.

A Pilot Study of Division Chairman Questionnaire was undertaken in summer 1984. Eight division chairmen in the VCCS were contacted by telephone and asked to participate by answering the questionnaire items and by filling out a brief comment sheet on the questionnaire and the sample cover letter. Of the eight, all except one were currently serving
division chairmen with the one having been a chairman through 1983-84 but not planning to serve as division chairman in 1984-85.

In order to determine validity of the items regarding changes in the administrative position component of the college, three participants were division chairmen at a single institution. Those division chairmen would have been expected to give responses indicating either "does not apply" or some range from minimum to maximum. Three of the seven chairmen were from multi-campus institutions to determine if the multi-campus structure caused confusion in answering items. The division chairmen were from divisions with program areas in both technology and transfer. The division chairmen were from small, medium and large institutions. The division chairmen were both male and female. Responses of the eight chairmen were later compared to their responses on comparable items on the final questionnaire to confirm questionnaire reliability.

The pilot study was designed to determine reliability and validity of the instrument, to determine clarity of items, to discover if there were items that should be added or deleted, and to evaluate layout (Hogville, 1978). Pilot study respondents were also asked to comment on a sample of the cover letter inviting participation. Respondents were
further asked to indicate whether indications in the letter of support from a VCCS officer would help or hinder response. Respondents were asked to indicate the length of time it took to complete the questionnaire. General comments were invited.

Using the phase approach of Daft and Bradshaw (1980), questions were revised following the first phase of the pilot study until they captured the required information and were clearly understood. Items 28 and 29 were identified by five of eight respondents as presenting some problems. Telephone interviews were conducted to explore areas of confusion and to obtain suggestions for rewording. The eight division chairmen were asked to respond again to the reworded items.

Other minor wording revisions were made. Although one respondent failed to give age, it was determined to retain this item and the other personal characteristics items (12-15) as given because such information, even if not 100 percent complete, would be helpful in developing a division chairman profile. Furthermore, these are routine items in questionnaires and could be assumed to be answered by most respondents.

Item 23 was clarified by giving a range of responses rather than "yes" or "no" and rewording item 24 accordingly.

An additional item was suggested regarding appointment. This item was added. An item seeking to identify the
philosophical attitude toward the division chairman position was recommended. Although a similar item was in the Stull (1974) instrument, this item was not added because it was not relevant to the study. Several other suggestions for additions were made but were not incorporated because of being outside the scope of the study or adding to the length of the questionnaire. These recommendations will be discussed in recommendations for further study since they were pertinent to the larger question of division chairman role.

Since identification of the college was crucial to data collection, and identification of the individual was necessary to determine whether a division chairman had responded, methods of identification were developed. Each envelope and cover letter had an identification number for easy tracking of returns and coding of individual college data. The final page contained an additional statement about anonymity at the individual and institutional level in addition to the statement in the cover letter. Although individuals were asked to write name and address if they wished a copy of results, this page was to be removed and stored separately from the questionnaire.

Reliability and Validity

Although statistical reliability and validity analyses were not made for the Division Chairman Questionnaire, the
validity and reliability of the instrument were evaluated informally throughout the development stages. Content validity addresses the question of whether the items sample a significant aspect of the purpose of the study. Are the right questions phrased in the least ambiguous way? Results of the review of the Division Chairman Questionnaire by a panel of experts and the pilot study suggested that content validity was reasonable. Reliability was inferred by a comparison of responses by the questionnaires of participants in the pilot study with their responses when the second questionnaire was analyzed.

Description of Institutional Characteristics Profile Data Sheet

The Institutional Characteristics Profile was developed as an instrument to classify and to describe the colleges. In order to answer research questions, the following institutional characteristics needed to be identified: a) size of institution; b) location of institution; c) structure (single or multi-campus); d) type of organizational structure. An institutional profile was developed for each of the 23 colleges in the Virginia Community College System, and the profile was coded into the returned questionnaires from division chairmen. (See Appendix B for the Institutional Characteristics Profile Data Sheet).
Data to complete the institutional profile was compiled from content analysis of VCCS and SCHEV documents and entered on an Institutional Profile Data Sheet. The items identified as variables for the institutional characteristics profile were derived from the organizational literature and modified to reflect characteristics unique to the Virginia Community College System.

Each of the (23) colleges was assigned a code number. The campus was coded as a single campus, or in the case of a multi-campus college, by a campus designation showing each separate campus. The purposes of these items were twofold. First, the profile of the college and of the campus was matched with the responses of the division chairmen from that college and campus. Although anonymity at the college and individual levels was maintained, the variation by institutional characteristics was considered in the aggregate. Secondly, by coding the colleges and campuses and matching those with the division chairmen responses, questionnaire items were checked for reliability.

The size of the institution will be measured according to productivity standards used in the VCCS based on full time equivalent students.

a. Category I  < 1500 FTE
b. Category II  1500-2499
c. Category III  2500-4999
d. Category IV  5000-9999
e. Category V  >10,000.
Size is a complex variable (Daft and Bradshaw, 1980) and could be operationalized as size of administrative component or faculty, numbers of different academic division or numbers of different programs. Since this productivity measure of size is one commonly used for differentiating the community colleges within the VCCS, it was assumed to be appropriate for developing the institutional characteristics profile. Other measures of size were used in the questionnaire.

The location of the college was assumed to be a relevant variable in a description of institutional characteristics. Two designations were used to describe the location of the college: urban and rural. Urban colleges were defined as those colleges within 20 miles of a city or town over 5,000. Rural colleges were defined as those located away from large population centers in clearly rural areas. Individual campus locations were not defined separately. The urban/rural college description in the VCCS is one in common usage within the state and tends to relate to the size of the college. Several of the colleges commonly referred to as urban have a main campus located just outside rather than within city limits and may have campuses located in rural areas. In these cases, however, much of the college enrollment tends to be at other than the rural campuses. These colleges are best
described as urban in character. For the purposes of this study, the actual location of a rural campus was assumed to be less important than the perception of the college itself as urban or rural.

Campus structure was defined as single campus or multi-campus. Single campus institutions have college administration and faculty identified with a single primary location. Multi-campus institutions have some college administration and faculty identified with two or more locations described as the college itself. The actual number of different campuses is not relevant. Excluded from this characteristic is the idea of off campus locations for classes. Most colleges conduct some classes in facilities off the primary campus or campuses, but these are considered off-campus sites rather than a campus.

Administrative organizational structure conceptualized as complexity and described by horizontal differentiation and vertical differentiation drives the use of titles in an organizational chart to describe the function of the position. Thus, several models were developed for type of organizational structure describing the college's structure for carrying out the administrative functions for instruction and student services as practiced in the Virginia community colleges. The type of organizational structure on the
Institutional Characteristics Profile is modeled as shown by titles of dean or above in the Directory of Administrative Officers in the Virginia Community College System 1984. There were five models described with an additional category of "other."

**Model A** describes a college or campus provost only with no officer titled Dean of Student Services or Student Development.

**Model B** describes a college or campus provost with a campus officer titled Dean of Student Services or Student Development and a college Dean of Instruction.

**Model C** describes a college organizing with administrative officers titled Dean of Instruction and Dean of Student Services or Student Development.

**Model D** describes a college organized with an administrative officer titled Dean of the College or Dean of Academic and Student Services.

**Model E** describes a college organized with an administrative officer titled Dean of Student Services but with no officer titled Dean of Instruction or Provost.

An "other" category describes colleges organized with some variation of the models above.
DESIGN

The study was a descriptive survey. Data were gathered using a mail survey and document analysis. The data consisted of background information about respondents which they knew and could be expected to report accurately. The data consisting of factual information about the institution of each respondent were gathered from documents. Some data on workload required chairmen to report conditions or perceptions prior to the time of completing the questionnaire. While this data depended on memory, it was expected to be reported accurately since the period of time was relatively short and since chairmen could be expected to recall the information and be aware of their perceptions about their workload. Chairmen were considered the most reliable sources of information about their workload since the research interest was in their perceptions of role and not necessarily their actual role.

The design was ex post facto. "In ex post facto research one cannot manipulate or assign subjects or treatments because the independent variable or variables have already occurred, so to speak. The investigator starts with the observation of the dependent variable and retrospectively studies independent variables for possible effects on the dependent variable." (Kerlinger,
Changes in administrative organizational structures, the independent variables in this study, had already occurred and cannot be manipulated. The dependent variable, division chairman workload, was looked at to see what effects the independent variables had. Following Kerlinger, (1973) inferences will be made "without direct intervention, from concomitant variation of independent and dependent variables" (p. 379).

The purpose of the study was to find out what had happened organizationally and what perceptions division chairmen had about their workload. The intent of the study was not to predict but to describe. The association of variables was examined but there was no attempt to relate them in a cause-and-effect relationship.

**STATISTICAL ANALYSIS**

The data gathered for this study were analyzed using several approaches. The question of how to analyze the data required consideration of the nature of the population and what assumptions could be made about that population, the intent and formulation of the research questions, and how the data were measured.

Since some data were ordinal at best, and in other cases only nominal, assumptions underlying parametric tests could not be made. Clearly the data were not
appropriate for testing and inference based on parametric statistical techniques requiring at least interval data. Rather, the non-parametric techniques described sometimes as "distribution-free" were most appropriate (Siegel, 1956). Following Siegel (1956), Conover (1980), and Kerlinger (1973) then, non-parametric techniques were employed for analyzing much of the data. Most importantly, however, whether using specific non-parametric tests or other types of analyses, reasoning was guided by the principle of obtained results compared with chance or theoretical results (Kerlinger, 1973).

Since two of the research questions were essentially exploratory in nature and did not require hypotheses development and testing, some data were analyzed simply by comparing basic statistics reported as frequencies and percentages. Rank ordering was useful in some cases. In at least one instance, it was possible to make inferences without statistical tests because the data were obvious. Kerlinger (1973) suggests that it is sometimes appropriate for the researcher to invent tests because range, distribution, and rank order, among other properties, are also useful. Furthermore, to use various methods of looking at the same data provides a more thorough understanding of the data for interpretation.
How questionnaire data distributed by frequency and percentage of responses was a first step in analyzing results. Crossbreaks were developed. In grouping responses to form crossbreaks, scores were sometimes grouped as appropriate to assure a more conservative test of relationships. For example, where scores were grouped into high and low, level three responses, out of a possible one through five, were weighted toward the low end of the scale. Responses were also grouped to afford numbers sufficiently large to be meaningful for the test, retaining obviously a logic to the grouping. When numbers of responses were not sufficiently large for logical groupings to use standard non-parametric statistical tests, other means for looking at data were employed.

Although a number of non-parametric tests were considered, the $X^2$ test, the test usually associated with frequencies, proved to be the most useful test of significance, and the $C$, the coefficient of contingency, the most useful measurement of the strength of association. Statistical hypotheses were developed in null and alternate forms and tested using the $X^2$ test to determine the significance of differences between two groups which were independent of each other. Since the $X^2$ test is a test of independence of variables and does not indicate
the magnitude of the relationship, in addition to the $X^2$ test, a coefficient of contingency was calculated.\[^2\]

Although, as Kerlinger (1973, pp. 171-172) suggests, the C or contingency coefficient is not as easily interpreted as some measures of association, such as the more familiar $r$, the measure can be useful in interpreting data in combination with other measures. Tables report the $X^2$ difference and levels of significance and the C or contingency coefficient. Only those differences that were significant at the $p < .05$ or above were reported because of the numbers of variables and hypotheses.

Another non-parametric statistical test which was especially useful was the Kolmogorov-Smirnov One-Sample Test, a test of goodness-of-fit which compared the observed distribution of scores with a theoretical distribution (Siegel 1956). In the case of the administrative organizational structures variables, it was useful to compare the observed and theoretical responses to the level of impact for each of the variables. In the Kolmogorov-Smirnov test, theoretically, the perceived impact of each of the variables (changes in administrative organizational structure) should distribute equally from minimum to maximum impact if the null hypothesis is true.

\[^2\] \[ C = \sqrt{\frac{X^2}{X^2 + N}} \]
That is, if chance only is operating, just as many chairmen will perceive that the impact is little as will perceive that the impact is great for any of the changes in structure. The alternate hypothesis assumes that the distribution of the level of impact will not be the same; that more chairmen will perceive a given change to have a greater impact than will those who perceive the change to have less impact. The results then determine whether the observed number of responses in each level of impact are significantly different from the expected number of responses.

To compute the Kolmogorov-Smirnov test a difference between the expected frequencies and observed frequencies was obtained. Significant differences were determined.

Let \( F_0(X) \) = a completely specified cumulative frequency distribution function, the theoretical cumulative distribution under \( H_0 \). That is, for any value of \( X \), the value of \( F_0(X) \) is the proportion of cases expected to have scores equal to or less than \( X \).

And let \( S_n(X) \) = the observed cumulative frequency distribution of a random sample of \( N \) observations. When \( X \) is any possible score, \( S_n(X) = k/N \), where \( k \) = the number of observations equal to or less than \( X \).

Now under the null hypothesis that the sample has been drawn from the specified theoretical distribution, it is expected that for every value of \( X \), \( S_n(X) \) should be fairly close to \( F_0(X) \). That is under \( H_0 \) we would expect the differences between \( S_n(X) \) and \( F_0(X) \) to be small and within the limits for random errors. The Kolmogorov-Smirnov test focuses on the largest of the deviations. The largest value of \( F_0(X) - S_n(X) \) is called the maximum deviation, \( D \):

\[
D = \text{maximum} \left| F_0(X) - S_n(X) \right|
\]

The sampling distribution of \( D \) under \( H_0 \) is known. (Siegel, 1956, p. 48).
using a standardized table. The significance level chosen for rejecting the null hypothesis was at least at the \( p < .05 \) level. The \( N \) varied for each variable based on the number of chairmen reporting that the particular change in administrative organizational structure had occurred at their institution.

Rank order was used frequently to compare responses within a grouping of variables especially when the same individuals had not responded to each item but the relative rating was needed. For example, the rank order of the mean was used to rate the impact of administrative organizational structure.

Although variance of means was not used, means of scores were useful as a basis for developing rank order. Differences in high and low scores were used for rank order as well. Since the mean score was an average, the extremes of rating were not readily apparent in the mean score of each variable. Furthermore, a five level Likert-type scale is likely to contain a response-set variance (Kerlinger, 1973, p. 496) making it difficult to determine whether a middle rating tends toward the high or low end of the scale. Thus, to look at the extremes of impact, for example, those scores of one and two were ranked low and those of four and five were ranked high. Impact scores of three were omitted. The
difference between high and low impact scores was determined, and variables were then rank ordered by those differences.

SUMMARY OF METHODOLOGY

A mail questionnaire was used to survey all division chairmen in the public community colleges of the Virginia Community College System. Data were grouped by college or by institutional characteristics but reported without identifying individual institutions. Characteristics were collected from document analysis and entered on a profile sheet.

The questionnaires were mailed to chairmen in the winter quarter 1985, with a cover letter asking for their assistance. The cover letter included an endorsement of the research by the institution's president and by the Assistant Vice Chancellor of the VCCS. A second questionnaire was mailed to non-respondents after three weeks. After another two weeks a phone call was made to division chairmen who had not returned the questionnaire.

Data were gathered to determine what changes in administrative organizational structures had occurred during a three year period in the VCCS. Division chairmen reported the degree to which their workload had changed, on what workload functions they spent most time, and how the time spent on the function had changed. Division
chairmen rated the impact that changes in administrative organizational structure had on their workload. Finally, a profile of division chairmen in the VCCS was drawn.

These data were analyzed using non-parametric tests, primarily $X^2$, and by rank ordering. Care was taken during data gathering to maintain anonymity of respondents and in reporting data not to identify either individuals or institutions.

Data were gathered using the mail questionnaire which had been previously pilot tested with division chairmen and other community college experts in Virginia.
CHAPTER IV

FINDINGS

INTRODUCTION

In Chapter IV the findings of the study are reported, and results of the analysis of the data are presented and discussed. First, the rate of questionnaire return was reported. Rate of return was also shown by institutional characteristics to provide a reference point for understanding the population since the data were often grouped by these characteristics for reporting and analysis.

Findings and analyses were reported in four categories. In Administrative Organizational Structure data were reported to answer research question one: What were changes in administrative organizational structures at community colleges in Virginia in the period 1981 to 1984? Data were aggregated to provide background about divisional organization and workload in the Workload section where research questions two and three were answered: To what degree did division chairmen perceive their workload to have changed? and, How did division chairmen workload change? In the Relationship section, the longest section, data were presented which explored relationships between organizational changes and workload issues to answer research question four: What changes in administrative
organizational structures did division chairmen perceive to have impact on their workload? In the final section of data presentation, a profile of division chairmen was developed to answer research question five: What were demographic characteristics and employment patterns of division chairmen in the community colleges in Virginia?

Finally, data were summarized.

QUESTIONNAIRE RETURN AND INSTITUTIONAL CHARACTERISTICS PROFILE

At the beginning of winter quarter 1985 a survey questionnaire was administered to division chairmen of the VCCS. Division Chairmen Questionnaires were returned from all 23 colleges of the VCCS with a return rate of 93 percent of those surveyed. Of the 97 chairmen surveyed, 90 returned questionnaires which were then coded by institutional characteristics. Institutional characteristics had been previously identified for each of the 23 colleges, and an Institutional Characteristics Profile was developed for each college. This Institutional Characteristics Profile was coded with the appropriate division chairman questionnaire, and these characteristics were used as controlling variables in making analyses. To provide a frame of reference and to describe the population, rate of questionnaire return was also reported by institutional characteristics.

Since the 23 colleges and 33 campuses of the VCCS vary considerably in size, an important variable was size.
Division chairmen questionnaire returns were examined in relation to several measures which help describe size. In considering size of colleges, an important distinction was made between single and multiple campus types also because the five colleges which are multi-campus represent both the very large colleges and the very small colleges. A majority (56 percent) of division chairmen were from single campus institutions.

Another important measure of size was the number of divisions at the college, as shown by Table 1.

**TABLE 1**

QUESTIONNAIRE RETURN BY SIZE OF COLLEGE AND NUMBER OF DIVISIONS

<table>
<thead>
<tr>
<th>Number of Divisions</th>
<th>Number of Colleges</th>
<th>Number of Chairmen</th>
<th>Number and Percent of Questionnaires Returned&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>11</td>
<td>22</td>
<td>17 81</td>
</tr>
<tr>
<td>3-5</td>
<td>7</td>
<td>28</td>
<td>28 100</td>
</tr>
<tr>
<td>More than 6</td>
<td>5</td>
<td>48</td>
<td>45 94</td>
</tr>
<tr>
<td>Totals</td>
<td>23</td>
<td>98&lt;sup&gt;a&lt;/sup&gt;</td>
<td>90 93</td>
</tr>
</tbody>
</table>

<sup>a</sup> There were 98 incumbents; 97 were surveyed. One chairman was eliminated from the survey because of possible research bias.
Although the percent of chairman response from the smallest colleges in terms of numbers of divisions was not 100 percent, the return of 81 percent of the division chairmen from those colleges was determined to be sufficiently representative. Of the five colleges with more than six division chairmen, only two of those had between ten and twenty chairmen. The two were also multi-campus colleges with some of the campuses having few divisions and considered small by any of several measures.

When the colleges are grouped by numbers of divisions, nearly one-half of the 23 colleges have only two divisions and only 22 percent have six or more divisions. The numbers of division chairmen distribute differently, however, with nearly one-half of division chairmen being from large colleges of six or more divisions rather than from two division colleges. To deal with yet another measure of size, and one which is important in the workload issue, a questionnaire item asked numbers of divisions on campus. When this measure of size is used, still another distribution emerges. These data are reported in a later section of this chapter.

Number of students per college another measure of size which was used. Since the VCCS routinely uses a grouping of five categories based on full time equivalent student
enrollment (FTE) called productivity standards, division chairmen questionnaires were grouped by percent of total division chairmen in each of the productivity standard size categories used in the VCCS for 1984.

TABLE 2
QUESTIONNAIRE RETURN BY PRODUCTIVITY STANDARD

| Category I  | <1500 FTE | 26 |
| Category II | 1500-2499 | 24 |
| Category III| 2500-4999 | 13 |
| Category IV | 5000-9999 | 20 |
| Category V  | >10,000   | 17 |

N=90.

For the purposes of analysis, combinations of these categories were made. Fifty percent of questionnaires were from division chairman at colleges with fewer than 2,500 FTE students. Of the remainder, 33 percent were from colleges with fewer than 10,000.

In addition to measures of size, division chairmen questionnaires were grouped by location, urban or rural.
Although this grouping was initially thought to be a useful distinction, location of the college was not helpful. In the case of the multi-campus college, for example, individual campus locations differed by urban or rural location. Using the main campus location as the descriptor, however, nearly three-fourths (74 percent) of the division chairmen questionnaires were from chairmen at urban colleges (that is, within twenty miles of a city or town over 5,000).

The final institutional characteristic was the type of organizational structure describing the deanship responsibilities. The percent of division chairman responses is shown in Table 3 by the types of deanship organization previously described in Chapter III.

<table>
<thead>
<tr>
<th>TABLE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUESTIONNAIRE RETURN BY TYPE OF DEAN STRUCTURE</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Percent Division Chairman Responding $^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provost only</td>
<td>4</td>
</tr>
<tr>
<td>Provost, Dean of Instruction, and Dean of Student Services</td>
<td>19</td>
</tr>
<tr>
<td>Dean of Instruction and Dean of Student Services</td>
<td>32</td>
</tr>
<tr>
<td>Dean of the College</td>
<td>21</td>
</tr>
<tr>
<td>Dean of Student Services only</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
</tr>
</tbody>
</table>

$^a$ N=90.
In summary, although most colleges (70 percent) were single campus institutions, 58 percent of division chairmen responding were from single campus institutions. Nearly one-half (48 percent) of the colleges had only two division chairmen, represented by 19 percent of the total number of chairmen returning the questionnaires. On the other hand, only 22 percent of the colleges with more than six division chairmen were represented by 50 percent of the respondents. There can be an argument that campus size would be a more discriminating factor than college size, and this issue is addressed by an item in the Division Chairman Questionnaire.

When looking at size of the college by numbers of students as measured by FTE students, over one-fourth (26 percent) of the chairmen were at institutions with fewer than 1,500 FTE students, and 17 percent were at very large institutions. One-half of division chairmen were from institutions with fewer than 2,500 students. The category from 2,500 to 4,999 had the least percent of division chairmen responses. Most of these colleges were located in an urban setting.

More colleges had both a dean of instruction and dean of student services or that combination with a provost than had a dean of the college, although a single dean or a single provost was the arrangement at over one-fourth of the colleges.
Division chairmen responses controlled for institutional characteristics were reported in the analysis of data for each research question, as appropriate. Institutional characteristics were reported and discussed where they aided understanding of data from the questionnaires.

**ADMINISTRATIVE ORGANIZATIONAL STRUCTURES**

Research question one: What were changes in administrative organizational structures at community colleges in Virginia in the period 1981 to 1984?

Research question one did not generate an hypothesis because question one was exploratory in nature. To answer research question one to find out whether or not changes in administrative organizational structures had taken place at the colleges, questionnaires were examined to determine if all subitems of questionnaire items 30 and 31 had been answered as "does not apply" which would indicate that none of the changes in administrative organizational structures specified had taken place at the institution. Two questionnaires were eliminated from the reporting and analysis for questionnaire items 30 and 31 because the respondents failed to respond at all to any subitems. Other chairmen from their college had done so, indicating
administrative organizational changes had, in fact, occurred at the colleges. Of the remaining questionnaires, at least one subitem had been ranked as 1-5 indicating that the change had taken place at the respondent's college.

In questionnaire item 30, division chairmen ranked changes in administrative positions in terms of their contributing to change in workload from 1981. Items were ranked on a scale from 1 to 5, with 1 being minimum impact and 5 being maximum. If the change had not occurred at the institution during the period under study, chairmen were asked to respond "Does not apply." The total number of chairmen responding to most subitems was 89. If no response was made, a response of does not apply was assumed. In questionnaire item 31, division chairmen ranked on a similar scale changes within their divisions in order of importance in contributing to changes in workload. Again, if the particular change had not occurred, chairmen were to use the response "Does not apply."

Of the nine changes listed in questionnaire item 30, a slight majority of division chairmen responding (53 percent) identified the reassignment of responsibilities of administrators as occurring during the period under study. Two other changes were identified by 42 percent and 32 percent, respectively, of the division chairmen responding: a new provost or dean was hired; division chairmen or
coordinator positions were decreased. Since only four chairmen reported that division chairmen or coordinator positions were increased, the subitem was excluded from further analysis. A rank ordering of the percent of division chairmen responding with an impact rate of 1-5 is shown in the Table 4.

<table>
<thead>
<tr>
<th>Rank Change in Administrative Positions</th>
<th>Percent of Division Chairmen Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Responsibilities of administrators (provosts, deans, division chairmen, coordinators) were reassigned</td>
<td>53</td>
</tr>
<tr>
<td>2 New provost or dean was hired</td>
<td>42</td>
</tr>
<tr>
<td>3 Division chairmen or coordinator positions were decreased</td>
<td>32</td>
</tr>
<tr>
<td>4 Dean positions were merged</td>
<td>28</td>
</tr>
<tr>
<td>5 A new president was hired</td>
<td>23</td>
</tr>
<tr>
<td>6 Reporting relationships of administrators were realigned</td>
<td>21</td>
</tr>
<tr>
<td>7 Deans positions were increased</td>
<td>17</td>
</tr>
<tr>
<td>8 Deans positions were decreased</td>
<td>13</td>
</tr>
</tbody>
</table>
In Questionnaire item 31, division chairmen were asked to rank changes within their divisions in terms of the importance in contributing to changes in workload from 1981. These within division changes were listed in three groups: structure of divisions; personnel; and programs. Division chairmen were asked to rate impact on the same scale used in item 30 and to use the response "does not apply" if the particular change had not occurred in their division.

Of the three within division changes to which a majority of chairmen gave an impact rate, two were in the area of personnel (increase of full time and of part-time faculty) and one was in program area (disciplines or programs increased). All three items involved an increase in an area of responsibility. The subitems which specify a decrease in those same areas of responsibilities were reported to have occurred by a fewer than 20 percent of division chairmen; that is, decrease in full time and part-time faculty supervised and in number of disciplines or programs within division. A rank ordering of the frequency and percent of within division changes is shown in Table 5.

Since only three division chairmen responded to an "other" item, it was excluded from further analysis. Comments made under "other" are reported in Appendix D. Of the 12 subitems specified, there were also only three
responses indicating that "the number of non-instructional personnel you supervise decreased." This item was excluded from further analysis, leaving 11 subitems to consider.

**TABLE 5**

**RANK ORDER OF WITHIN DIVISION CHANGES REPORTED AS OCCURRING FROM 1981 TO PRESENT BY PERCENT OF DIVISION CHAIRMEN RESPONSE**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Within Division Change</th>
<th>Percent of Division Chairmen Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of part-time faculty you supervise increased</td>
<td>69</td>
</tr>
<tr>
<td>2</td>
<td>Disciplines or programs within division increased</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>Number of full time faculty you supervise increased</td>
<td>54</td>
</tr>
<tr>
<td>4</td>
<td>Number of non-instructional personnel you supervise increased</td>
<td>47</td>
</tr>
<tr>
<td>5</td>
<td>Disciplines or programs within division changed</td>
<td>46</td>
</tr>
<tr>
<td>6</td>
<td>Divisions were rearranged by discipline or program</td>
<td>35</td>
</tr>
<tr>
<td>7</td>
<td>Number of total divisions on campus decreased</td>
<td>22</td>
</tr>
<tr>
<td>8</td>
<td>Number of full time faculty you supervise decreased</td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>Disciplines or programs within divisions decreased</td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td>Number of part-time faculty you supervise decreased</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Number of total divisions on campus increased</td>
<td>10</td>
</tr>
</tbody>
</table>
Since research question one did not generate a statistical hypothesis, the question was answered by a simple analysis of those changes which occurred. A majority of division chairmen reported these changes in administrative organizational structures had occurred:

number of part-time faculty supervised increased (69 percent);
disciplines or programs within division increased (64 percent);
number of full time faculty supervised increased (54 percent); and,
responsibilities of administrators were reassigned (53 percent).

Nearly one-half reported these changes had occurred:

number of non-instructional personnel supervised increased (47 percent);
disciplines or programs changed (46 percent);
new provost or dean was hired (42 percent).

WORKLOAD

The Workload section addresses two research questions. Research question two: To what degree did division chairmen perceive their workload to have changed? Research question three: How did division chairman workload change?
Since the issue of workload was so complex, before data were reported to answer research questions two and three, a description of current workload was provided as background. Research question two generated a research hypothesis: Division chairmen will perceive their workload to have increased to a greater degree than they will perceive it to have decreased. Statistical hypotheses for this hypothesis were stated as findings were reported and analyses done. Research question three also generated a research hypothesis: Division chairmen perceive their workload to have changed in administrative functions. Again, statistical hypotheses were stated with the findings and analyses.

Description of Current Workload

To answer research questions two and three, a description of current workload in the divisions was required. Responses to items 17-27 of the questionnaire described current workload as reported by division chairmen in characterizing their divisions.

In item 17 division chairmen were asked how many divisions were on campus. Although one division chairman reported one division and one chairman reported as many as eight divisions, a majority of chairmen (61 percent) reported four or fewer divisions on campus. Table 6 shows numbers of divisions on campus by percent of chairmen responding.
Division chairmen were asked the title of their divisions. With some slight modifications, 32 different titles reflecting variety in organizational arrangements by disciplines and programs were named.

The most frequently named title was Business (12 percent), but there were eight other titles which included "business" in their titles:

Business, Engineering, Math;
Business and Science;
Business, Math, Natural Science Technology;
Business and Technology;  
Business and Secretarial Science; and  
Business and Public Service Technology.

The next most frequently listed was Engineering and Industrial Technology (11 percent) and Humanities and Social Sciences (8 percent) and Science and Math (7 percent).

Nearly all division chairmen (94 percent) held the title Division Chairman. The remainder were called academic chairman, a title which appeared to be related to the type of contract these chairmen had rather than a difference in their function.

Numbers of different degree, certificate, diploma, or career studies programs for which they were responsible were reported by division chairmen in item 18. Nearly 50 percent of division chairmen reported a single transfer degree, but when the AAS degree was offered, over 50 percent of the chairmen were responsible for three to ten different AAS degrees. A large majority (78 percent) of chairmen reported being responsible for certificates while almost fifty percent reported responsibility for career studies awards. The data indicated that division chairmen within a single division may be responsible for multiple awards as well as different types of a single award. Table 7 shows awards for which the division chairman were responsible by percent of chairmen reporting.
<table>
<thead>
<tr>
<th>Award</th>
<th>Percent Responding Not Offered in Division</th>
<th>Percent Responding Number of Different Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Transfer&lt;sup&gt;a&lt;/sup&gt;</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td>AAS&lt;sup&gt;b&lt;/sup&gt;</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Diploma&lt;sup&gt;b&lt;/sup&gt;</td>
<td>76</td>
<td>14</td>
</tr>
<tr>
<td>Certificate&lt;sup&gt;b&lt;/sup&gt;</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Career Studies&lt;sup&gt;b&lt;/sup&gt;</td>
<td>53</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>95</td>
<td>--</td>
</tr>
</tbody>
</table>

<sup>a</sup> N=81.

<sup>b</sup> N=87.

In item 19, division chairmen were asked to name course disciplines within divisions at the present time. Division chairmen responded by listing course disciplines with VCCS prefixes. Ninety-two different course disciplines were named. Of these, 13 were named only once and 53 were named seven or fewer times. Thirty-nine (42 percent) were named from 8 to 24 times as shown in Table 8.
TABLE 6
DISCIPLINES TAUGHT IN DIVISIONS
RANKED BY FREQUENCYa

<table>
<thead>
<tr>
<th>Rank</th>
<th>Discipline</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>English</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>Accounting</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Biology</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Business/management/administration</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>Administration of Justice</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Data Processing</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>Arts</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>Mathematics</td>
<td>19</td>
</tr>
<tr>
<td>7</td>
<td>Electrical Electronics</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>Drafting</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secretarial Science</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>French</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>Automotive</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Physics</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Psychology</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word Processing</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Architecture</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Civil Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mechanical Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>A/C and Refrigeration</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Industrial Engineering</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Natural Science</td>
<td>10</td>
</tr>
<tr>
<td>14</td>
<td>Music</td>
<td>9</td>
</tr>
<tr>
<td>15</td>
<td>Crafts</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philosophy and Religion and Other</td>
<td></td>
</tr>
</tbody>
</table>

a Of the 66 remaining disciplines listed, each was named fewer than seven times.
In item 20, division chairmen were asked to whom they reported. Forty-two percent of chairmen report to the Provost; forty-seven percent chairmen report to the Dean of Instruction. Only six percent chairmen report to the Dean of the College and the same percent report to a position other than those named.

In items 21 and 22, division chairmen were asked the number of full time faculty supervised and an average per quarter of part-time faculty supervised. Responses ranged from four full time faculty supervised by two division chairmen to 45 full time faculty supervised by one chairman. Part-time faculty supervised ranged from two part-time reported by one division chairman to 97 reported by one division chairman. Faculty supervised is shown in Table 9.
TABLE 9
FULL TIME AND PART-TIME FACULTY SUPERVISED BY PERCENT OF DIVISION CHAIRMAN RESPONSE

<table>
<thead>
<tr>
<th>Number of Full Time Faculty</th>
<th>Percent of Division Chairman Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>13</td>
</tr>
<tr>
<td>11-20</td>
<td>38</td>
</tr>
<tr>
<td>21-30</td>
<td>39</td>
</tr>
<tr>
<td>31-45</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Part-Time Faculty</th>
<th>Percent of Division Chairman Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>30</td>
</tr>
<tr>
<td>11-20</td>
<td>12.5</td>
</tr>
<tr>
<td>21-30</td>
<td>12.5</td>
</tr>
<tr>
<td>31-40</td>
<td>10</td>
</tr>
<tr>
<td>41-50</td>
<td>17</td>
</tr>
<tr>
<td>51-60</td>
<td>10</td>
</tr>
<tr>
<td>61-97</td>
<td>8</td>
</tr>
<tr>
<td>Totals</td>
<td>100</td>
</tr>
</tbody>
</table>
In item 23, forty percent of the division chairmen supervised no part-time non-instructional personnel while only eight percent reported supervising no full time non-instructional personnel. Although forty-six percent supervised one to three part-time non-instructional personnel, a majority supervised one to three full time non-instructional personnel. A comment was made indicating that college workstudy and other student employees were included in numbers reported as supervised which may account for one chairman reporting supervising 14, and one supervising 12 part-time non-instructional personnel. Ten division chairmen, however, reported supervising as many as five full time non-instructional personnel; two reported supervising 12; one reported supervising 21. Table 10 shows non-instructional personnel supervision by percent of chairmen reporting.
<table>
<thead>
<tr>
<th>Number of Non-Instructional Personnel</th>
<th>Percent of Division Chairmen Responding&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Part-Time</td>
</tr>
<tr>
<td>None</td>
<td>40</td>
</tr>
<tr>
<td>1-3</td>
<td>46</td>
</tr>
<tr>
<td>4-6</td>
<td>7</td>
</tr>
<tr>
<td>7 or more</td>
<td>8</td>
</tr>
</tbody>
</table>

Note. Percent may not add up to 100 because of rounding.

<sup>a</sup> N=90.

Item 24 was designed to elicit a description of the teaching load of division chairmen. Nearly one-half (49 percent) of division chairmen taught regularly and 20 percent taught occasionally. Eighteen percent never taught and 12 percent taught rarely. Several chairmen commented that teaching by division chairmen was an institutional requirement.

Of those 38 division chairmen reporting teaching, 59 percent (34) reported teaching from one to three hours each quarter. Twenty-five percent (12) taught four to six hours, and eight, from eight to nine hours. One division chairman
reported teaching 10 credits; one, 14 credits. Of those 58 division chairmen who taught, nearly a majority (47 percent) taught up to three contact hours and 28 percent up to six; the remainder reported contact hours from nine to as much as 17 hours, reported by one chairman. Sixty percent of those teaching reported one course preparation and 24 percent, two preparations.

In item 25, division chairmen reported on the arrangements for program heads in the divisions. A majority (69 percent) reported that there were program heads in their divisions. Of the division chairmen reporting program heads, 61 percent said that program heads were faculty with released time while 29 percent reported that program heads were informally designated with no compensation. Only two chairmen identified program heads as faculty having additional compensation and five as having some other arrangements.

Division chairmen were asked to report in item 26 their supervisory responsibility for non-credit or community service activities. A large majority (82 percent) of the chairmen held no supervisory responsibility for non-credit or community service activities.

In Item 27 division chairmen were asked whether all division faculty were housed in a single location, described
as the same building and in fairly close proximity. A majority (63 percent) reported that faculty were not housed in a single location with 58 percent indicating the location of faculty as being in a different building; 20 percent characterized faculty as being in a different area of the same building. Only four chairmen reported faculty on a different campus.

No hypotheses were stated or tested for these data designed to provide a background description of the present divisional organization and workload. When division chairmen responses were grouped by selected divisional characteristics, however, as in items 17-27, the characteristics were identified as control variables.

Degree of Change in Workload

Research question two which asked to what degree division chairmen perceived workload changed during the period of study generated a research hypothesis: Division chairmen will perceive their workload to have increased to a moderate degree. Statistical hypotheses were stated in null and alternate forms:
$H_0 = \text{Division chairmen will perceive workload to have remained the same.}$

$H_1 = \text{Division chairmen will perceive workload to have increased substantially.}$

$H_2 = \text{Division chairmen will perceive workload to have increased moderately.}$

$H_3 = \text{Division chairmen will perceive workload to have increased little.}$

$H_4 = \text{Division chairmen will perceive workload to have decreased substantially.}$

$H_5 = \text{Division chairmen will perceive workload to have decreased moderately.}$

$H_6 = \text{Division chairmen will perceive workload to have decreased little.}$

In item 28, division chairmen were asked whether workload had increased, decreased, or remained the same. A very large majority (86 percent) responded that workload had increased in the period of the study. Only two percent saw a decrease in workload, and 12 percent responded that workload had remained the same. Of those chairmen who saw an increase in workload, all responded to question 29 that the workload had increased either substantially (60 percent) or moderately (40 percent). Table 11 shows how division chairmen rated the degree of workload change and direction of change.
### TABLE 11

**DEGREE OF WORKLOAD CHANGE AND DIRECTION OF CHANGE BY PERCENT OF DIVISION CHAIRMEN RESPONSE**

<table>
<thead>
<tr>
<th>Direction of Change</th>
<th>Degree of Change</th>
<th>Substantial</th>
<th>Moderate</th>
<th>Little</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td></td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Increased</td>
<td></td>
<td>60</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>86</td>
</tr>
<tr>
<td>Remained Same</td>
<td></td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>53</td>
<td>35</td>
<td>6</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

The distribution of responses did not lend itself to analysis by using $X^2$. Several cells contained no responses or fewer than needed for meaningful tests. Combinations which would have increased cell size were not logical and would have distorted data. Since the data were not suitable for a standard statistical analysis and could be assumed to be obvious, distribution of responses as shown in Table 11 were examined. The null hypothesis was rejected and alternate hypotheses one and two were accepted. Division chairmen perceived workload to have increased substantially and to have increased moderately. Clearly, the direction of the workload change perceived by chairmen was in the direction of a high degree of increase. Although it was hypothesized that division chairmen would have perceived workload to have increased, the findings were so extreme in
the direction of increase as to make further analysis using
decrease essentially meaningless.

Relative Time Spent in Each Function

To answer research question three which asked about how
workload had changed, it was necessary to find out how much
relative time division chairmen spent in workload functions
and in which functions there had been a change in the
relative time spent. It was hypothesized that division
chairmen would report that they spent more time in the
administrative functions of supervision and management than
in other functions and that they would report that the time
spent on these administrative functions would have changed
during the period of study.

First, the relative time spent on workload functions
was explored. Statistical hypotheses were developed and
tested using a rank order analysis.

\[ H_0 \] = There will be no differences in percentage of
division chairmen who will report spending a
majority or great deal of time in each function.

\[ H_1 \] = A greater percentage of division chairmen will
report spending a majority of time in management
and supervision than will report spending a
majority of time in other functions.

\[ H_2 \] = A greater percentage of division chairmen will
report spending a great deal of time in management
and supervision than will report spending a
great deal of time in other functions.

\[ H_3 \] = A greater percentage of division chairmen will
report spending a majority and a great deal of
time combined in management and supervision than
in other functions.
In response to item 32, division chairmen reported the relative amount of time they spent in each of eight workload functions. Chairmen were asked to indicate whether they spent a majority of their time on the function, a great deal of time, some time, or little time.

Table 12 shows the relative time spent in each of the workload functions by percent of chairmen reporting.

<table>
<thead>
<tr>
<th>Workload Function</th>
<th>Percent of Division Chairmen Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Majority</td>
</tr>
<tr>
<td>Student Activities</td>
<td>0</td>
</tr>
<tr>
<td>Instruction</td>
<td>10</td>
</tr>
<tr>
<td>Supervision</td>
<td>17</td>
</tr>
<tr>
<td>Leadership</td>
<td>14</td>
</tr>
<tr>
<td>Promotion</td>
<td>6</td>
</tr>
<tr>
<td>Management</td>
<td>18</td>
</tr>
<tr>
<td>College Activities</td>
<td>4</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Percentages may not total 100 because of rounding.

a N=88.
b N=87.
c N=81.
d N=71.
The null hypothesis was rejected.

Of the four workload functions on which division chairmen spent the least amount of time, no division chairman spent a majority of time on student activities and only 26 percent spent a great deal of time on student activities. One chairman reported spending a majority of time on miscellaneous and 20 percent reported spending a great deal of time. The majority of division chairmen spent great deal of time in four areas: instruction, leadership, supervision, and management, in that rank order. Although fewer division chairmen spent a majority of their time in these areas, more spent a majority of time in these same areas than in the other four workload functions: promotion, student activities, college activities not related to the division, and miscellaneous. Alternate hypothesis two was rejected because a greater percentage of division chairmen reported spending a great deal of time in instruction than in supervision and management, although supervision is ranked second along with leadership.

When majority and great deal of time responses were combined, instruction again became the function on which more division chairman spent time. Following instruction in rank were supervision and management, the administrative functions. Alternate hypothesis three was rejected.
A rank ordering of relative amount of time spent reported as majority and great deal of time combined is displayed in Table 13.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Workload Functions</th>
<th>Percent of Division Chairman Responding</th>
<th>Majority</th>
<th>Great Deal</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Instruction</td>
<td>10</td>
<td>70</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Supervision</td>
<td>17</td>
<td>56</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Management</td>
<td>18</td>
<td>52</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Leadership</td>
<td>14</td>
<td>56</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>College Activities</td>
<td>4</td>
<td>37</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Promotion</td>
<td>6</td>
<td>34</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Student Activities</td>
<td>0</td>
<td>26</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous</td>
<td>1</td>
<td>20</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>
Although the largest proportion of chairmen spent a great deal of time on instruction, when the responses reported as majority were rank ordered, the administrative functions of management and supervision ranked one and two respectively, and instruction ranked fourth, after leadership. Alternate hypothesis one was accepted: A greater percentage of division chairmen will report spending a majority of time in management and supervision than will report spending a majority of time in other functions. Table 14 shows a rank ordering of how division chairmen reported spending a majority of time.

TABLE 14
RANK ORDER OF RELATIVE AMOUNT OF TIME SPENT IN WORKLOAD FUNCTIONS REPORTED AS MAJORITY BY PERCENT OF DIVISION CHAIRMAN RESPONSE

<table>
<thead>
<tr>
<th>Rank</th>
<th>Workload Functions</th>
<th>Percent of Division Chairman Reporting Majority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Management</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Supervision</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Leadership</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Instruction</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Promotion</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>College Activities</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Student Activities</td>
<td>0</td>
</tr>
</tbody>
</table>
Furthermore, when the responses reported as majority, excluding miscellaneous functions, are grouped by administrative functions (management and supervision), academic functions (instruction, leadership, and student activities), and development functions (promotion and college activities), a majority of chairmen (52 percent) reported spending a majority of their time in administrative functions.

Workload Functions And Characteristics—Contingency Analysis

Division chairmen responses to questionnaire item 32 were examined to determine how division chairmen responses differed for each function when responses were grouped by institutional, chairmen, or divisional characteristics.

Contingency tables were developed for workload functions in questionnaire item 32 in order to examine differences in the distribution of responses based on characteristics.

Tables were developed for each of the five variables in the Institutional Characteristics Profile: type of campus, size, location, and organizational structure. Tables were also developed for questionnaire items 3, 13, 21, 22, 23, 24, 25, and 27. These items included
characteristics of division chairmen: sex and years of experience. Items 21-27 described characteristics of the division or supervisory responsibilities of the division chairmen: full time and part-time faculty supervised, non-instructional personnel supervised, teaching responsibility, program heads in the division, and relative proximity of faculty in the division.

Statistical hypotheses were tested using the $X^2$ test.

$H_0 = \text{There will be no differences in proportions of division chairmen who report spending a majority or great deal of time in each function and who report some and little time in each function when responses are grouped by institutional, chairmen, or divisional characteristics.}$

The null hypothesis was rejected. There were numerous alternate hypotheses tested since each function was grouped with each combination of the characteristics variables. The general alternate hypothesis stated that a greater proportion of division chairmen will report spending a majority or great deal of time than will report spending some or little time in a given function when grouped by a given characteristic. Those groupings of characteristics and functions which were significantly different and represent the accepted
alternate hypotheses are specified, and Table 15 shows the workload function and the characteristics variables by $X^2$, level of significance, and C scores.

Three workload functions did not show significant differences when controlled for the characteristics variables: instruction, supervision, and miscellaneous.

When controlled for type of campus; that is, multiple or single campus, relative time spent in promotion, management, and college activities differed significantly. A significantly greater proportion of division chairmen at multiple campuses spent a majority or great deal of time in those workload functions than did division chairmen at single campuses. Although it was not significant, a greater proportion of those at multiple campuses tended to spend more time in the leadership function.

Although there were no significant differences when controlling for size, division chairmen at the largest colleges, as measured by number of FTE students and categorized by productivity standards, tended to spend more time in leadership, management and miscellaneous functions than those at the smaller colleges. Those chairmen at the smallest institutions (Category I) and the largest (Category V) tended to
spent more time on college activities not related to the division. In all categories, except Category III, over 80 percent of division chairmen spent more time in instruction than in other functions, and 58 percent of those in Category III spent a majority or great deal of time in instruction.

Significantly more chairmen at campuses organized with a provost, dean of instruction, and dean of student services model than those with other dean models spent a majority or great deal of time in college activities not related to the division. Although not a significant proportion, division chairmen with this model also tended to spend time in the leadership function.

Significantly more division chairmen who supervised more than 20 full time faculty (81 percent) reported spending more time in both leadership and management functions than did chairmen who supervised fewer than 20 full time faculty. Those division chairmen supervising more than 20 part-time faculty also tended to spend more time in instruction and supervision functions than those supervising fewer part-time faculty, and significantly more spent more time on college activities not related to the division.
A significantly large percentage of female division chairmen (95 percent) spent a majority or great deal of time in the leadership function.

When division chairmen had faculty located in a single location, significantly greater proportions spent a majority or great deal of time on student activities.

Table 15 below shows \( X^2 \), levels of significance, and contingency scores by workload functions.

**TABLE 15**

\[ X^2, \text{ LEVELS OF SIGNIFICANCE, AND CONTINGENCY SCORES BY WORKLOAD FUNCTIONS AND SELECTED VARIABLES} \]

<table>
<thead>
<tr>
<th>Workload Function</th>
<th>Variable</th>
<th>( X^2 )</th>
<th>C Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Activities</td>
<td>Faculty Housed in Single Location</td>
<td>4.99*</td>
<td>.23</td>
</tr>
<tr>
<td></td>
<td>Number of Full Time Faculty Supervised</td>
<td>4.33*</td>
<td>.22</td>
</tr>
<tr>
<td>Leadership</td>
<td>Sex</td>
<td>8.01**</td>
<td>.29</td>
</tr>
<tr>
<td>Promotion</td>
<td>Type of Campus</td>
<td>3.06*</td>
<td>.18</td>
</tr>
<tr>
<td>Management</td>
<td>Type of Campus</td>
<td>4.10*</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>Number of Full Time Faculty Supervised</td>
<td>7.84**</td>
<td>.29</td>
</tr>
<tr>
<td>College Activities</td>
<td>Type of Campus</td>
<td>3.82*</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>Organizational Structure</td>
<td>8.00*</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Number of Part-time Faculty Supervised</td>
<td>6.63*</td>
<td>.28</td>
</tr>
</tbody>
</table>

* \( p < .05 \).
** \( p < .01 \).
Change in Time Spent on Workload Functions

After determining the relative amount of time division chairmen reported spending in each of the workload functions, to answer fully research question three about how workload had changed, it was necessary to determine the extent to which chairmen reported that time spent in the function had changed or not changed during the period of study. It was hypothesized that more chairmen would report that time spent in administrative functions of supervision and management would have changed than would report that time changed in other workload functions. Null and alternate hypotheses were tested using frequency and percentage of response and a rank order analysis.

H₀: There will be no differences in percentage of division chairmen reporting change and no change in administrative functions of management and supervision than in other workload functions.

The second part of questionnaire item 32 asked for each workload function whether the relative time spent on that function had changed or not changed in the period under study. The majority of chairmen reported that the relative amount of time spent on five functions had changed since 1981: management (62 percent);
supervision (58 percent); instruction (56 percent); leadership (52 percent); and promotion (51 percent). Except for promotion, the functions which division chairmen reported as having changed were also those on which a majority of chairmen indicated they spent a majority or great deal of time.

A rank order of percent of chairmen reporting change in relative time spent in the workload functions is shown in Table 16.

TABLE 16

RANK ORDER OF CHANGE IN RELATIVE TIME SPENT IN WORKLOAD FUNCTIONS BY PERCENT OF DIVISION CHAIRMEN RESPONSE

<table>
<thead>
<tr>
<th>Rank</th>
<th>Workload Function</th>
<th>Percent of Division Chairmen Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Management</td>
<td>62</td>
</tr>
<tr>
<td>2</td>
<td>Supervision</td>
<td>58</td>
</tr>
<tr>
<td>3</td>
<td>Instruction</td>
<td>56</td>
</tr>
<tr>
<td>4</td>
<td>Leadership</td>
<td>52</td>
</tr>
<tr>
<td>5</td>
<td>Promotion</td>
<td>51</td>
</tr>
<tr>
<td>6</td>
<td>College Activities</td>
<td>43</td>
</tr>
<tr>
<td>7</td>
<td>Miscellaneous</td>
<td>42</td>
</tr>
<tr>
<td>8</td>
<td>Student Activities</td>
<td>36</td>
</tr>
</tbody>
</table>
The null hypothesis was rejected, and the alternate hypothesis accepted. The two administrative functions of management and supervision were ranked one and two by the percent of division chairmen reporting that the relative amount of time spent in the function had changed.

Change in Workload Functions and Characteristics - Contingency Analysis

Division chairmen responses to the second part of questionnaire item 32 were then examined to determine how responses differed for change or no change for each function when responses were grouped by institutional, chairmen, or divisional characteristics.

Contingency tables were developed for the change, no change portion of item 32 and the characteristics variables. Using $X^2$ the null hypothesis was tested:

$H_0 =$ There will be no differences in proportions of division chairmen reporting change or no change in time spent in each function when chairmen responses are grouped by institutional, chairmen, or divisional characteristics.

The null hypothesis was rejected, and several alternate hypotheses accepted. There were numerous alternate hypotheses since each function was grouped with each combination of the characteristics variables. The
alternate hypothesis stated that a greater proportion of division chairmen will report change in a given function than will report no change when grouped by a given characteristic. Those groupings of characteristics and functions which were significantly different and represent the accepted alternate hypotheses are discussed, and Table 18 shows the change in workload function and all of the significant characteristics variables by $X^2$, levels of significance, and C scores.

A significantly greater proportion of division at single campus institutions reported that the relative amount of time spent on instruction had changed.

Size, as measured by number of FTE students and classified by productivity categories, as previously described in Chapter III, was a factor for division chairmen reporting that time spent had changed in instruction, supervision, and leadership, and student activities functions. Table 17 shows responses by percent for chairmen in each productivity category reporting workload functions having changed. In each case, although the percentages varied, a greater proportion of division chairmen in Categories II and IV reported changes in the four workload functions.
TABLE 17
SIZE AND RELATIVE TIME SPENT IN WORKLOAD FUNCTIONS REPORTED AS CHANGED BY PERCENT OF DIVISION CHAIRMEN RESPONSE BY PRODUCTIVITY CATEGORY

<table>
<thead>
<tr>
<th>Function</th>
<th>Percent of Chairmen Reporting Change By Productivity Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>Student Activities</td>
<td>18</td>
</tr>
<tr>
<td>Instruction</td>
<td>46</td>
</tr>
<tr>
<td>Supervision</td>
<td>43</td>
</tr>
<tr>
<td>Leadership</td>
<td>41</td>
</tr>
</tbody>
</table>

A statistically greater proportion of chairmen at colleges with the dean structure model of Dean of Instruction and Dean of Student Services reported that the relative amount of time spent in instruction had changed.

Although there were no statistically significant differences between male and female chairmen responses, a majority of female division chairmen consistently reported that relative amount of time spent in instruction, supervision, leadership, management, and promotion functions had changed.

Significantly greater proportions of division chairmen supervising more than 20 full-time faculty reported that the relative amount of time spent in
supervision and in college activities not related to the division had changed. Significantly more of those supervising fewer than three full time non-instructional personnel reported time spent in supervision had changed. Significantly more division chairmen who taught also reported time spent in supervision had changed.

**TABLE 18**

$X^2$, LEVELS OF SIGNIFICANCE, AND CONTINGENCY SCORES FOR CHANGES IN WORKLOAD FUNCTIONS AND SELECTED VARIABLES

<table>
<thead>
<tr>
<th>Workload Function</th>
<th>Variable</th>
<th>$X^2$</th>
<th>C Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Activities</td>
<td>Size</td>
<td>16.82***</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>Type of Campus</td>
<td>3.24*</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>Organizational Structure</td>
<td>9.51**</td>
<td>.32</td>
</tr>
<tr>
<td>Instruction</td>
<td>Size</td>
<td>10.6*</td>
<td>.33</td>
</tr>
<tr>
<td></td>
<td>Type of Campus</td>
<td>3.24*</td>
<td>.19</td>
</tr>
<tr>
<td>Supervision</td>
<td>Size</td>
<td>10.5*</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>Full Time Faculty Supervised</td>
<td>4.57*</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>Number of Full Time Non-instructional Personnel Supervised</td>
<td>9.83**</td>
<td>.32</td>
</tr>
<tr>
<td>Leadership</td>
<td>Size</td>
<td>9.52**</td>
<td>.32</td>
</tr>
<tr>
<td>College Activities</td>
<td>Number of Full Time Faculty Supervised</td>
<td>4.45*</td>
<td>.23</td>
</tr>
</tbody>
</table>

* $p < .05$.
** $p < .01$.
*** $p < .001$. 

---

---
The section which follows presents data and analyses to answer research question four: What changes in administrative organizational structures did division chairmen perceive to have impact on their workload? It was hypothesized that changes in administrative organizational structures would be perceived by division chairmen to have impact on their workload. To determine which changes in administrative organizational structure contributed to impact on workload, data from questionnaire item 30, where division chairmen were asked to rank the impact of changes in administrative positions, and from questionnaire item 31, where division chairmen were asked to rank the impact of within division changes, were used. Several analytical approaches were taken (Kerlinger, 1973) to examine the relationship between changes in structures and impact on chairman workload.

First, statistical hypotheses were tested using the Kolmogorov-Smirnov One-Sample Test. Then, the mean impact scores for each subitem of questionnaire items 30 and 31 were rank ordered. Differences between the extremes of high and low scores for each subitem were also rank ordered. Differences in impact scores of
chairmen reporting substantial and moderate degrees of workload increase from questionnaire items 28 and 29 were tested with \( X^2 \). Contingency tables were developed for the administrative organizational structure variables and division chairman characteristics and employment patterns, and for divisional characteristics. Statistical hypotheses were developed in null and alternate forms and tested using the \( X^2 \) test.

Kolmogorov-Smirnov One-Sample Test

Questionnaire items 30 and 31 specified those particular changes in administrative organizational structures presumed from the literature, the nature of organizational structures in the community colleges, and familiarity with the division chair position to have a possible impact on division chairman workload. After an analysis of frequency of response for each variable listed in items 30 and 31, the Kolmogorov-Smirnov One-Sample Test, a test of goodness-of-fit, was chosen to compare the observed distribution of scores (frequencies) with a theoretical distribution (Siegel, 1956). In the Kolmogorov-Smirnov Test, theoretically, the perceived impact of each of the variables (changes in administrative organizational structure) should
distribute equally from minimum to maximum impact if the null hypothesis is true. That is, if chance only is operating, just as many chairmen will perceive that the impact is little as will perceive that the impact is great for any of the changes in structure. The alternate hypothesis assumes that the distribution of the level of impact will not be the same; that more chairmen will perceive a given change to have a greater impact than will those who perceive the change to have less impact. The results then determine whether the observed number of responses in each level of impact are significantly different from the expected number of responses.

Since there were a total of 23 variables in parallel format, a general statistical hypothesis was developed and then modified to the specifics of each variable. For example, the null hypothesis was stated:

\[ H_0 = \text{There is no difference in the expected number of choices for each of the five impact scores, and any observed differences are merely chance variations.} \]

Then the alternate hypotheses specify the administrative organizational structure variable. Listed below are the statistical hypotheses and their acceptance or rejection. The computation differences for those hypotheses which were accepted are listed in Table 19.
### Statistical Hypothesis: Acceptance or Rejection Kolmogorov-Smirnov One-Sample Test

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Reject</th>
<th>Accept</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Null</strong>: There will be no difference in the expected number of choices for each of the five impact scores, and any observed differences are merely chance variations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alternative</strong>: The observed frequencies for each of the five impact scores are not all equal when</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A new president was hired</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>A new provost or dean was hired</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Dean positions were increased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Dean positions were merged</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Dean positions were decreased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Division chairmen or coordinator position were increased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Division chairmen or coordinator positions were decreased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Responsibilities of administrators (provosts, deans, division chairmen, coordinators) were reassigned</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Reporting relationships of administrators were realigned</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Number of total divisions on campus increased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Number of total divisions on campus decreased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Divisions were rearranged by discipline or program</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Hypothesis</strong></td>
<td><strong>Reject</strong></td>
<td><strong>Accept</strong></td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Number of full-time faculty you supervised increased</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Number of full-time faculty you supervised decreased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Number of part-time faculty you supervised increased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Number of part-time faculty you supervised decreased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Number of non-instructional personnel you supervised increased</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Number of non-instructional personnel you supervise decreased</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Disciplines or programs within division increased</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Disciplines or programs within division decreased</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Disciplines or programs within division changed</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
TABLE 19

KOLMOGOROV-SMIRNOV ONE-SAMPLE TEST DIFFERENCES AND LEVELS OF SIGNIFICANCE FOR ADMINISTRATIVE ORGANIZATIONAL CHANGES AND WORKLOAD

<table>
<thead>
<tr>
<th>Administrative Organizational Change</th>
<th>N</th>
<th>Kolmogrov-Smirnov Difference Computation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative position changes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A new provost or dean was hired</td>
<td>36</td>
<td>.23*</td>
</tr>
<tr>
<td>Division chairman/COORDINATOR positions decreased</td>
<td>27</td>
<td>.28*</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>.59**</td>
</tr>
<tr>
<td><strong>Within Division Changes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disciplines or programs increased</td>
<td>57</td>
<td>.31**</td>
</tr>
<tr>
<td>Number of total divisions on campus decreased</td>
<td>20</td>
<td>.35**</td>
</tr>
<tr>
<td>Divisions rearranged by programs</td>
<td>31</td>
<td>.25*</td>
</tr>
</tbody>
</table>

Note: Levels of Significance determined from Table E. Table of Critical Values of D in the Kolmogrov-Smirnov One-Sample Test (Siegel, 1956, p. 251).

* $p < .05$.
** $p < .01$.

Of the three variables under changes in administrative positions, the "other" category was the only variable significant at the $p < .01$ level. "Other"
responses were examined for comments specific to changes in administrative positions. Although comments related to impact on workload, many were specific to changes at the divisional level which were addressed in questionnaire item 31, and many were general in nature. All comments are reported in the Appendix D. One comment was perhaps germane to questionnaire item 30 in that it may have referred to an increase in administrative staffing: "Continuing education raised its staff and responsibilities." On the other hand, the increase referred to may not have been with an administrative position but rather to the number of people supervised, an issue for questionnaire item 31. Since the "other" category was not clearly a relevant variable, it was excluded from consideration in further analysis of the results of the Kolmogorov-Smirnov.

Mean Impact Score

To examine further the impact that the changes in administrative organizational structures may have had on division chairman workload, it was determined that an average impact score for each variable would be useful. The mean of the impact score for each variable was calculated. Since the range of possible scores
was 1-5, if there were essentially no differences in the impact of changes in administrative organizational structures, each change variable with a mean impact score above the possible average would then indicate higher impact.

A rank ordering of the mean impact scores for each variable was used to assess the relative degree of impact of each of the variables describing changes in administrative organizational structures. The strength of the impact is measured in its relative position by rank order. Using above 3.50 mean impact as a measure of high, and the rank order as the relative strength of the high impact, Tables 20, 21, and 22 rank order the changes in administrative organizational structure which had a high impact score. Table 20 shows the rank orderings by administrative position changes; Table 21, within division changes; and Table 22 combines those changes.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Change in Administrative Positions</th>
<th>Mean Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reporting relationships of administrators were realigned</td>
<td>3.72</td>
</tr>
<tr>
<td>2</td>
<td>Division chairmen or coordinator positions were decreased</td>
<td>3.67</td>
</tr>
<tr>
<td>3</td>
<td>New provost or dean was hired</td>
<td>3.61</td>
</tr>
<tr>
<td>4</td>
<td>Dean positions were decreased</td>
<td>3.54</td>
</tr>
<tr>
<td>5</td>
<td>Responsibilities of administrators (provosts, deans, division chairmen, coordinator) were reassigned</td>
<td>3.43</td>
</tr>
<tr>
<td>6</td>
<td>Deans positions were increased</td>
<td>3.20</td>
</tr>
<tr>
<td>7</td>
<td>Dean positions were merged</td>
<td>3.17</td>
</tr>
<tr>
<td>8</td>
<td>A new president was hired</td>
<td>3.00</td>
</tr>
<tr>
<td>9</td>
<td>Division chairmen or coordinator positions were increased</td>
<td>2.75</td>
</tr>
</tbody>
</table>
TABLE 21
CHANGES IN ADMINISTRATIVE ORGANIZATIONAL STRUCTURE, WITHIN DIVISIONS:
RANKED BY MEAN IMPACT SCORE

<table>
<thead>
<tr>
<th>Rank</th>
<th>Within Division Change</th>
<th>Mean Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Disciplines or programs within division increased</td>
<td>3.86</td>
</tr>
<tr>
<td>2</td>
<td>Number of total divisions on campus decreased</td>
<td>3.85</td>
</tr>
<tr>
<td>3</td>
<td>Disciplines or programs within division changed</td>
<td>3.76</td>
</tr>
<tr>
<td>4</td>
<td>Number of part-time faculty you supervised increased</td>
<td>3.54</td>
</tr>
<tr>
<td>5</td>
<td>Divisions were rearranged by discipline or program</td>
<td>3.52</td>
</tr>
<tr>
<td>6</td>
<td>Number of full time faculty you supervise increased</td>
<td>3.47</td>
</tr>
<tr>
<td>7</td>
<td>Number of non-instructional personnel you supervise increased</td>
<td>2.88</td>
</tr>
<tr>
<td>8</td>
<td>Number of total divisions on campus increased</td>
<td>2.78</td>
</tr>
<tr>
<td>9</td>
<td>Disciplines or programs within division decreased</td>
<td>2.75</td>
</tr>
<tr>
<td>10</td>
<td>Number of full time faculty you supervise decreased</td>
<td>2.56</td>
</tr>
<tr>
<td>11</td>
<td>Number of part-time faculty you supervise decreased</td>
<td>2.44</td>
</tr>
</tbody>
</table>
For both changes in administrative positions (questionnaire item 30) and changes within divisions (questionnaire item 31), the average impact score for "other" was eliminated in the rankings because an examination of the comments showed they lack relevancy, as discussed previously. The specific comments are listed in Appendix D.

**TABLE 22**

RANK ORDER BY HIGH MEAN IMPACT SCORE: CHANGE IN ADMINISTRATIVE ORGANIZATIONAL STRUCTURES

<table>
<thead>
<tr>
<th>Rank</th>
<th>Change In Administrative Organizational Structure</th>
<th>Mean Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Disciplines or program within division increased</td>
<td>3.86</td>
</tr>
<tr>
<td>2</td>
<td>Number of total divisions on campus decreased</td>
<td>3.85</td>
</tr>
<tr>
<td>3</td>
<td>Disciplines or programs within division changed</td>
<td>3.76</td>
</tr>
<tr>
<td>4</td>
<td>Reporting relationships of administrators were realigned</td>
<td>3.72</td>
</tr>
<tr>
<td>5</td>
<td>Division chairmen or coordinator positions were decreased</td>
<td>3.67</td>
</tr>
<tr>
<td>6</td>
<td>New provost or dean was hired</td>
<td>3.61</td>
</tr>
<tr>
<td>7</td>
<td>Dean positions were decreased</td>
<td>3.54</td>
</tr>
<tr>
<td>7</td>
<td>Number of part-time faculty you supervised increased</td>
<td>3.54</td>
</tr>
<tr>
<td>8</td>
<td>Divisions were rearranged by discipline or program</td>
<td>3.52</td>
</tr>
</tbody>
</table>
Differences in High and Low Scores

To test the research hypothesis in yet another way, differences in extremes of scores were looked at. Since the mean score was an average, the extremes of rating were not readily apparent in the mean score of each variable. Furthermore, a five level Likert-type scale is likely to contain a response-set variance (Kerlinger, 1973, p. 496) making it difficult to determine whether a middle rating tends toward the high or low end of the scale. Thus, to look at the extremes of impact, those scores of one and two were ranked low and those of four and five were ranked high. Impact scores of three were omitted. The differences between high and low impact scores were determined, and variables were then rank ordered by those differences as shown in Tables 23, 24, and 25. Additionally, those variables examined were limited to those reported by as many as 20 percent of the total number of division chairmen rating the particular change in administrative organizational structure. Fewer than 20 percent of the total would have resulted in a number which would tend to distort the data (Kerlinger, 1973, p. 152). The remaining variables, then, including both changes
in administrative positions and within division changes, represented those variables of most interest. To show their relative positions by differences, a rank order was made. Table 23 shows differences and rank orders by administrative position changes; Table 24, by within division changes. The highest percentage range of difference clusters in the 40 percent range. Using the 41 percent difference, then, as the point where considerably more chairmen responded high than responded low, the combined rank order in Table 25 shows the relative strength of the changes in administrative organizational structures.
### TABLE 23

**CHANGES IN ADMINISTRATIVE ORGANIZATIONAL STRUCTURES RANKED BY DIFFERENCE IN HIGH AND LOW SCORES BY PERCENT OF RESPONSE: ADMINISTRATIVE POSITION CHANGES**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Changes</th>
<th>Percent of Total Responding</th>
<th>Percent Responding High</th>
<th>Percent Responding Low</th>
<th>Difference Between High and Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New provost or dean was hired</td>
<td>36</td>
<td>58</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>2</td>
<td>Division chairman decreased</td>
<td>32</td>
<td>63</td>
<td>22</td>
<td>41</td>
</tr>
<tr>
<td>3</td>
<td>Responsibilities reassigned</td>
<td>53</td>
<td>57</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>New president selected</td>
<td>23</td>
<td>50</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Deans positions merged</td>
<td>28</td>
<td>44</td>
<td>35</td>
<td>9</td>
</tr>
<tr>
<td>Rank</td>
<td>Changes</td>
<td>Percent of Total Division Chairman Responding</td>
<td>Percent Responding High</td>
<td>Percent Responding Low</td>
<td>Difference Between High and Low</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Disciplines and programs increased</td>
<td>68</td>
<td>58</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>Disciplines and programs changed</td>
<td>48</td>
<td>61</td>
<td>15</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>Divisions rearranged</td>
<td>31</td>
<td>62</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Number of part-time faculty increased</td>
<td>71</td>
<td>52</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>Divisions decreased</td>
<td>24</td>
<td>60</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>Number of full time faculty increased</td>
<td>58</td>
<td>53</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>7</td>
<td>Number of non-instructional personnel increased</td>
<td>49</td>
<td>29</td>
<td>40</td>
<td>-11</td>
</tr>
<tr>
<td>Rank</td>
<td>Changes</td>
<td>Percent of Total Division Chairman Responding</td>
<td>Percent Responding High</td>
<td>Percent Responding Low</td>
<td>Difference Between High and Low</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------</td>
<td>----------------------------------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Disciplines and program increased</td>
<td>68</td>
<td>58</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>Disciplines and program changed</td>
<td>48</td>
<td>61</td>
<td>15</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>New provost or dean was hired</td>
<td>36</td>
<td>58</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>4</td>
<td>Division chairmen decreased</td>
<td>32</td>
<td>63</td>
<td>22</td>
<td>41</td>
</tr>
</tbody>
</table>
Changes in Administrative Organizational Structures and Increase in Workload

To determine the impact of change in administrative organizational structures on degree of workload change, questionnaires of those responding that workload had increased were examined, and crossbreaks were formed. Since a substantial majority of division chairmen (86 percent) indicated that their workload had increased, and of those, all responded that it had increased either substantially or increased moderately, how those chairmen rated the impact of each of the changes in administrative organizational structure was of special interest. The null hypothesis was rejected:

\[ H_0 = \text{There will be no differences in impact scores of changes in administrative organizational structures between those who reported that their workload increased significantly and those who reported that their workload increased moderately.} \]

Selected alternate hypotheses were accepted. The alternate hypotheses posited that a greater proportion of those who reported substantial increase in workload than those who reported moderate increase in workload would rate the impact high of each change in
administrative organizational structure. Table 26 below shows the $X^2$, levels of significance and C scores for administrative organizational changes specified by alternate hypotheses which were accepted.

**TABLE 26**

$X^2$, LEVELS SIGNIFICANCE AND CONTINGENCY SCORES FOR SUBSTANTIAL CHANGE IN DEGREE OF CHANGE IN WORKLOAD AND ADMINISTRATIVE ORGANIZATIONAL STRUCTURES

<table>
<thead>
<tr>
<th>Change Variable</th>
<th>$X^2$</th>
<th>C Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>New president</td>
<td>4.34</td>
<td>.44</td>
</tr>
<tr>
<td>Responsibilities reassigned</td>
<td>4.00</td>
<td>.30</td>
</tr>
<tr>
<td>Division Chairmen decreased</td>
<td>3.59</td>
<td>.36</td>
</tr>
<tr>
<td>Disciplines/programs increased</td>
<td>4.82</td>
<td>.28</td>
</tr>
<tr>
<td>Number of full time faculty increased</td>
<td>3.31</td>
<td>.26</td>
</tr>
<tr>
<td>Division rearranged by discipline</td>
<td>3.16</td>
<td>.32</td>
</tr>
<tr>
<td>Number of total divisions decreased</td>
<td>3.35</td>
<td>.39</td>
</tr>
</tbody>
</table>

*All $X^2$ significance scores were at $p < .05$.

Changes in Administrative Organizational Structure and Characteristics - Contingency Analysis

To assess how division chairman characteristics or division characteristics might help explain how division chairmen rated impact of changes in administrative organizational structure, questionnaire
items 30 and 31 were analyzed using crossbreaks (Kerlinger, 1956, pp. 157-183) controlling for selected division chairmen characteristics and employment patterns and divisional characteristics.

In grouping responses to form crossbreaks, it was determined that a more conservative test of relationships would be made if scores were grouped into high and low by weighting impact level three responses toward the low end of the scale. The low category consisted of frequency of responses for impact levels one through three, and high was the frequency of responses for impact levels four and five. Furthermore, since the frequencies of response generally tended toward the higher end of the scale, using responses in levels one and two only would not in some cases have afforded numbers sufficiently large to be meaningful for the tests.

The groups here were those who had the given characteristic and those who did not. The null hypothesis was rejected:

\[ H_0 = \text{There will be no difference in impact scores for each administrative organizational structure change when division chairmen responses are grouped by characteristics.} \]
Alternate hypotheses stated direction. Since there were numerous alternate hypotheses based on crossbreaks which combined each of the organizational change variables with each of the groupings, the general alternate hypothesis was stated, and the grouping and direction of each of the characteristics variables was indicated. Alternate hypotheses: The proportion of division chairmen rating the impact high for selected change in administrative organizational structure is greater when chairmen these characteristics are present:

- have served fewer than seven years in present position;
- are female;
- teach;
- have program heads in division;
- supervise more than 20 full time faculty;
- supervise more than 20 part-time faculty;
- supervise three or fewer non-instructional personnel;
- have faculty located in more than one location.

Table 27 shows the $X^2$, levels of significance, and C scores for those administrative organizational changes specified by alternate hypotheses which were accepted.

In looking at changes in administrative positions, significantly more division chairmen who had served
in the present position seven or fewer years rated the impact high than did division chairmen who had been in the position longer when a new provost or dean was hired, when dean positions merged, and when administrative positions were reassigned. In considering changes within divisions, those division chairmen who had served fewer than seven years also rated an increase in the number of full time faculty supervised as high impact in significantly greater proportion than chairmen serving longer.

Significantly more of those division chairmen who supervised more than 20 part-time faculty also rated the impact of these three administrative position changes high than did those who supervised fewer part-time faculty. More of those supervising greater numbers of part-time faculty rated high the decrease in the number of division chairmen. This group, when considering within division changes, scored high impact to an increase in number of part-time faculty.

When the number of non-instructional personnel was increased, 70 percent of the chairmen rated the impact low. Significantly more of those supervising fewer part-time faculty gave the low impact rating.

The impact of a new provost or dean being hired was ranked higher by significantly more of the division
chairmen who teach than by those who did not teach. Those who taught also rated the impact high when there was a decrease in the number of divisions on campus and when part-time faculty was increased.

Female division chairmen perceived increase in number of part-time faculty and change in disciplines and programs as a high impact in greater proportion than did male division chairmen.

More division chairmen with program heads rated an increase number of part-time faculty as having a high impact.

Significantly more division chairmen with faculty in more than one location rated a high impact when disciplines and programs changed than did division chairmen whose faculty were housed in a single location.
TABLE 27

$X^2$, LEVELS SIGNIFICANCE, AND C SCORES
FOR SIGNIFICANT ADMINISTRATIVE
ORGANIZATIONAL CHANGES AND CONTROL VARIABLES

<table>
<thead>
<tr>
<th>Administrative Position Change:</th>
<th>Control Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>New provost:</td>
<td></td>
</tr>
<tr>
<td>Years in present position</td>
<td>$4.36^{*}$</td>
</tr>
<tr>
<td>Teach</td>
<td>$7.89^{***}$</td>
</tr>
<tr>
<td>Number of part-time faculty</td>
<td>$5.60^{**}$</td>
</tr>
<tr>
<td>Deans positions merge:</td>
<td></td>
</tr>
<tr>
<td>Years in present position</td>
<td>$3.49^{*}$</td>
</tr>
<tr>
<td>Number of part-time faculty</td>
<td>$3.02^{*}$</td>
</tr>
<tr>
<td>Division chairmen decreased:</td>
<td></td>
</tr>
<tr>
<td>Number of part-time faculty</td>
<td>$2.90^{*}$</td>
</tr>
<tr>
<td>Administrative positions reassigned:</td>
<td></td>
</tr>
<tr>
<td>Years in present position</td>
<td>$3.41^{*}$</td>
</tr>
<tr>
<td>Number of part-time faculty</td>
<td>$3.93^{*}$</td>
</tr>
<tr>
<td>Within Division Changes: Control Variable</td>
<td></td>
</tr>
<tr>
<td>Divisions decreased:</td>
<td></td>
</tr>
<tr>
<td>Teach</td>
<td>$6.28^{*}$</td>
</tr>
<tr>
<td>Full time faculty increased:</td>
<td></td>
</tr>
<tr>
<td>Years in present position</td>
<td>$3.02^{*}$</td>
</tr>
<tr>
<td>Part-time faculty increased:</td>
<td></td>
</tr>
<tr>
<td>Teach</td>
<td>$4.60^{*}$</td>
</tr>
<tr>
<td>Program heads in division</td>
<td>$3.11^{*}$</td>
</tr>
<tr>
<td>Sex</td>
<td>$4.30^{*}$</td>
</tr>
<tr>
<td>Number of part-time faculty</td>
<td>$3.57^{*}$</td>
</tr>
<tr>
<td>Non-instructional personnel</td>
<td></td>
</tr>
<tr>
<td>increased:</td>
<td></td>
</tr>
<tr>
<td>Number of part-time faculty</td>
<td>$4.97^{*}$</td>
</tr>
<tr>
<td>Disciplines/programs changed:</td>
<td></td>
</tr>
<tr>
<td>Faculty location</td>
<td>$4.10^{*}$</td>
</tr>
<tr>
<td>Sex</td>
<td>$3.23^{*}$</td>
</tr>
</tbody>
</table>

* $P < .05$.
** $P < .02$.
*** $P < .01$.  

$X^2$, Levels significance, and C scores for significant administrative organizational changes and control variables.
PROFILE OF DIVISION CHAIRMAN CHARACTERISTICS

In order to define the division chairman population under study, the division chairman questionnaire contained items 3-16 asking about division chairman background and employment patterns. These data were used to develop a profile of division chairman characteristics. Data were grouped by institutional characteristics. Contingency tables were developed and statistical hypotheses were tested using $X^2$.

The average age of division chairmen was 47, ranging from age 32 to 65. The majority of chairmen (74 percent) were male. Most were white (96 percent) and a majority (87 percent) were married.

Fifty-five percent of the division chairmen held the rank of full professor; 40 percent were at associate professor rank; four percent were at assistant professor and none reported holding instructor rank. A majority of division chairmen (56 percent) had a doctorate while 23 percent had a master's degree plus 15 hours. Seven percent reported a master's degree only.

The year the most recent degree was awarded ranged from as long as 40 years ago to as recently as 1984, reported by two division chairmen. A slight majority
(53 percent) received the most recent degree since 1973. A slight majority (51 percent) held the most recent degree in an education field, including higher education and community college administration, with 13 of those holding some type of vocational technical education degree. The remainder of the chairmen held degrees in fields ranging from electronics to history and zoology. The 90 division chairmen responding reported as many as 300 professional development activities they were currently participating in or had participated in within the past two years. Local and national conferences and institutional and regional workshops were most frequently listed. The conferences and workshops accounted for 20 to 30 percent each of the professional development activities. Graduate course enrollment accounted for six percent of the total professional development.

The average length of service as division chairman was seven and one-half years. Forty-nine percent of the division chairmen had served in the present position seven or fewer years; 51 percent served from eight to over 15 years. Of those, six had served more than 15 years. The method of selection for the position varied with 31 percent being selected by dean or provost; 11
percent, by divisional faculty vote subject to the approval of the instructional dean or provost; 20 percent, by the instructional dean or provost after surveying divisional opinion. Other than these methods, 37 percent of the division chairmen specified other methods of selection. Of these, five division chairmen were selected by the president only. The remainder reported variations of selection committee input. The majority (67 percent) of division chairmen were selected from within the institution.

A majority (57 percent) came directly to the division chair position from a two-year college teaching position, and 19 percent came from a two-year college administrative position. Only nine percent came directly from four-year college teaching or administration. Two percent came from secondary or elementary experience. Twelve percent came from other than the positions listed.

A large majority (88 percent) had experience teaching at the two-year college level with the majority of that group teaching from one to ten years. A large majority (78 percent) also had experience in administration at the two-year college level with the majority with one to ten years experience. About one-half had experience teaching at the secondary level (52 percent) or at the four-year college level (50 percent). Only 5 reported
any experience in secondary or elementary administration, but 18 percent had four-year college administrative experience. Slightly more than one-half (53 percent) had professional or occupational experience other than teaching or educational administration.

Comparison of 1974 Data With 1985 Data

To determine changes in the characteristics of division chairmen in the VCCS over a period of time, a comparison was made of data gathered in a study by Stull (1974). In the Stull study, a mail questionnaire was used to gather data from division chairmen at 16 community colleges in Virginia which had then been at least two years in operation. Table 2B compares those characteristics on which data was gathered in both studies by percent of response or by average, as appropriate.

---

4 Permission has been kindly granted by Mr. Stull to use data from his study.
### TABLE 28
Comparison of 1974 (Stull) Data With 1985 Data

<table>
<thead>
<tr>
<th>Descriptive Characteristic</th>
<th>1974</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age by Years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>44</td>
<td>47</td>
</tr>
<tr>
<td>Range</td>
<td>28-59</td>
<td>32-65</td>
</tr>
<tr>
<td><strong>Length of Service as Division Chairman by Years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>under 3</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td>1-7</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>98</td>
<td>74</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td><strong>Academic Rank by Percent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>59</td>
<td>40</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>Instructor</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Educational Background by Percent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>25</td>
<td>56</td>
</tr>
<tr>
<td>MA + 15</td>
<td>55</td>
<td>23</td>
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<tr>
<td>Masters Only</td>
<td>12</td>
<td>7</td>
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<td><strong>Prior Experience by Percent</strong></td>
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<td></td>
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<tr>
<td>Two-year college teaching</td>
<td>48</td>
<td>85</td>
</tr>
<tr>
<td>Four-year college teaching</td>
<td>67</td>
<td>50</td>
</tr>
<tr>
<td>Secondary or elementary teaching</td>
<td>37</td>
<td>51</td>
</tr>
<tr>
<td>Previous two-year college administration</td>
<td>83</td>
<td>78</td>
</tr>
<tr>
<td>Elementary or secondary administration</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Professional or occupational experience outside education</td>
<td>69</td>
<td>53</td>
</tr>
</tbody>
</table>
Division Chairman Characteristics and Institutional Characteristics - Contingency Analysis

To determine the relationship between division chairman characteristics and institutional characteristics, contingency tables were developed for questionnaire items 3-16 and institutional characteristics. Using $X^2$, the null hypothesis was tested:

$H_0$ = There will be no differences in proportions of division chairmen reporting characteristics and institutional characteristics.

The null hypothesis was rejected, and several alternate hypotheses accepted. There were numerous alternate hypotheses since each institutional characteristic was grouped with each combination of the division chairman characteristics variables. The alternate hypothesis stated that a greater proportion of division chairmen by a given institutional characteristics was more likely to hold a given division chairman characteristic. Those groups of division chairman characteristics and institutional characteristics which were significantly different and represent the accepted alternate hypotheses are specified in Table 29 which shows the $X^2$, level of significance, and C scores.
A significant majority of those holding the rank of full professor were at multi-campus institutions and colleges larger than 2,500 FTE students.

Those division chairmen at institutions with the model of provost, dean of instruction and dean of student services were most likely to hold full professor rank.
TABLE 29

$X^2$, LEVELS OF SIGNIFICANCE, AND CONTINGENCY SCORES FOR INSTITUTIONAL CHARACTERISTICS PROFILE AND DIVISION CHAIRMEN CHARACTERISTICS

<table>
<thead>
<tr>
<th>Variables</th>
<th>$X^2$</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Faculty Rank and Type of Campus</td>
<td>10.01**</td>
<td>.32</td>
</tr>
<tr>
<td>Current Faculty Rank and Size of Campus</td>
<td>10.86*</td>
<td>.34</td>
</tr>
<tr>
<td>Model of Type of Organization and Current Faculty Rank</td>
<td>14.52**</td>
<td>.38</td>
</tr>
</tbody>
</table>

* $P < .05$.
** $P < .01$.

SUMMARY OF MAJOR FINDINGS

The summary of major findings is organized into two sections. In section one research questions and research hypotheses are listed. Statistical hypotheses are then restated in null and alternate forms, and their acceptance or rejection indicated. In section two the summary of major findings follows the order of the presentation of findings in Chapter IV. First, data on questionnaire return and on institutional characteristics profile provide background. Then the remainder of the summary is organized by administrative
organizational structures, workload, relationships between structure and workload, and division chairman profile. Major findings for each area are briefly summarized by a listing.

Research Questions, Research Hypotheses, and Statistical Hypotheses

Research question one: What were changes in administrative organizational structures in community colleges in Virginia in the period 1981 to 1984?

No research hypothesis was posed for this question.

Research question two: To what degree did division chairmen perceive their workload to have changed?

Research hypothesis: Division chairmen will perceive their workload to have increased to a moderate degree.

Statistical hypotheses to determine degree of workload change:

\( H_0 \) Division chairmen will perceive workload to have remained the same. Rejected

\( H_1 \) Division chairmen will perceive workload to have increased substantially. Accepted

\( H_2 \) Division chairmen will perceive workload to have increased moderately. Accepted

\( H_3 \) Division chairmen will perceive workload to have increased little. Rejected
$H_4$ Division chairmen will perceive workload to have decreased substantially. Rejected

$H_5$ Division chairmen will perceive workload to have decreased moderately. Rejected

$H_6$ Division chairmen will perceive workload to have decreased little. Rejected

Research question three: How did workload change?

Research hypothesis: Division chairmen will report that they spent more time in the administrative functions of supervision and management than in other functions and that the relative amount of time spent on these functions would have changed during the period of study.

Statistical hypotheses to determine the relative amount of time spent on each workload function:

$H_0$ There will be no differences in percentage of division chairmen reporting spending a majority of great deal of time in each function. Rejected

$H_1$ A greater percentage of division chairmen will report spending a majority of time in management and supervision than will report spending a majority of time in other functions. Accepted

$H_2$ A greater percentage of division chairmen will report spending a great deal of time in management and supervision than will report spending a great deal of time in other functions. Rejected
A greater percentage of division chairmen will report spending a majority and great deal of time combined in management and supervision than in other functions. Rejected

Statistical hypotheses to determine how time spent currently differed when grouped by characteristics:

$H_0$ There will be no differences in proportions of division chairmen reporting spending a majority or great deal of time in each function than those reporting some or little time spent in each function when responses are grouped by institutional, chairmen, or divisional characteristics. Rejected

$H_1$ A greater proportion of division chairmen will report spending a majority or great deal of time in the given function than will report spending some or little time when grouped by a given characteristic. Accepted

Statistical hypotheses to determine change in relative amounts of time spent on workload functions:

$H_0$ There will be no differences in percentage of division chairmen reporting change and no change in administrative functions of management and supervision than in other workload functions. Rejected.

$H_1$ A greater percentage of division chairmen will report change in administrative functions of
supervision and management than in other workload functions. Accepted

Statistical hypotheses to determine those workload functions on which relative time had changed when responses were grouped by characteristics:

\( H_0 \) There will be no differences in proportions of division chairmen reporting change or no change in time spent in each function when responses are grouped by institutional, chairmen, or divisional characteristics. Rejected

\( H_1 \) A greater proportion of division chairmen will report change in a given function than will report no change when grouped by a given characteristic. Accepted

Research question four: What changes in administrative organizational structures did division chairmen perceive to have impact on their workload?

Research hypothesis: Changes in administrative organizational structures will be perceived by division chairmen to have an impact on their workload.

Statistical hypotheses to compare distribution of impact scores with chance:

\( H_0 \) There will be no difference in the expected number of choices for each of the five impact scores,
and any observed differences are merely chance variations. Rejected

H₁ The observed frequencies for each of the five scores are not all equal for a given change in administrative organizational structure. Accepted

Statistical hypotheses to determine the impact scores on changes in administrative organizational structures when responses were grouped by characteristics:

H₀ There will no differences in impact scores of changes in administrative organizational structures between those who reported that their workload increased significantly and those who reported that their workload increased moderately. Rejected

H₁ A greater proportion of those who reported substantial increase in workload than those who reported moderate increase in workload rated the impact high of given change in administrative organizational structure. Accepted

Research question five: What were demographic characteristics and employment patterns of division chairmen in community colleges in Virginia?
No research hypothesis was posed but statistical hypotheses were tested to show differences when grouped by characteristics.

Statistical hypotheses to determine differences in chairmen characteristics when grouped by institutional characteristics:

$H_0$ There will be no differences in division chairmen characteristics when grouped by institutional characteristics. Rejected

$H_1$ There will be differences when grouped by institutional characteristics. Accepted

Summary

All incumbent division chairmen of the Virginia Community Colleges System were surveyed with a mail questionnaire winter quarter 1985, with a return rate of 93 percent. A description of the division chairmen by institutional characteristics follows:

Majority were from single institutions.

One-half were from colleges with six or more division chairmen.

Over one-fourth (26 percent) were from small institutions (1500 students or fewer); 17 percent from very large colleges.

Majority were from colleges in an urban setting.
Majority were from colleges with a dean of instruction and dean of student services; 19 percent with a provost; 32 percent with deans only.

**Administrative Organizational Structure**

Changes in administrative organizational structures were found. Data indicated that during the period of study division chairmen had experienced various changes in administrative organizational structures at the college level, at the campus level, and within divisions. These were the most common changes reported by a majority of division chairmen:

- Responsibilities of administrators were reassigned.
- Increase in the number of part-time faculty supervised and in fulltime faculty supervised.
- Increase in the number of disciplines or programs for which they were responsible.

Although not by a majority, other changes were frequently reported:

- A new dean or provost had been hired. (42 percent)
- Division chairmen or coordinator positions had been decreased. (32 percent)

**Workload**

To answer research question two, current workload was described with a majority of chairmen reporting as follows:

On a campus with two to four divisions had a traditional reporting relationship to the dean of instruction or provost.
Headed divisions which offered multiple awards: that is, transfer, AAS, and certificates, and multiple types of AAS or certificate awards.

Were responsible for multiple disciplines with no discernable pattern in either number of different disciplines or in groupings of disciplines within the divisions.

Held no supervisory responsibility for non-credit instructional and community service activities.

Nearly one-half taught regularly with a majority of those teaching at least 1-3 credits per quarter.

Had extensive supervisory responsibilities: 49 percent supervised more than 30 full-time faculty; 45 percent supervised more than 30 part-time faculty; majority supervised one to three non-instructional full-time personnel and nearly one-half, that many part time non-instructional personnel.

Had faculty housed in different buildings.

Had program heads; 61 percent of whom were faculty with released time. However, almost one-third had program heads who were informally appointed and had no released time or other compensation.

The degree to which chairmen perceived their workload to have changed follows below:

Large majority reported increase in workload.

Majority reported workload had increased substantially.

Although only 40 percent reported workload to have increased moderately, none reported less than moderately.

To show workload change, division chairmen first reported how much time they currently spent in workload functions:
More division chairmen spent a "majority of time" in management and supervision than in other workload functions.

When "majority" and "great deal of time" were combined, most spent time as follows: instruction (80 percent); supervision (71 percent); management (70 percent); leadership (70 percent).

Division chairmen spent more time in student activities when faculty were housed in a single location; that is, in close proximity rather than in different buildings or different areas of a building.

Division chairman at multi-campus institutions spent more relative amounts of time on promotion activities and in the management area than those at single campus institutions.

Female division chairmen spent more time on the leadership function than did male division chairmen.

Division chairmen who supervised more than twenty full time faculty spent more time on the leadership function and in the management area than did their counterparts who supervised twenty or fewer full time faculty.

Division chairmen on campuses with the organizational model of provost, dean of student services and dean of instruction spent more time in college activities not related to the division than those on campuses with different organizational structures for deans.

Then division chairmen reported on whether relative amounts of time spent on workload functions had changed or not changed during the period of study:

Majority of chairmen reported that workload had changed since 1981 for five functions: management (62 percent); supervision (58 percent); instruction (56 percent); leadership (52 percent); promotion (51 percent).
Except for promotion, the functions which division chairmen indicated had changed are also those on which they indicated they spent the most time.

For division chairmen at single campuses time spent on instruction had changed.

More division chairmen at institutions from 1500 to 2499 FTE students and from 5000 to 9999 students consistently reported change in time spent in student activities, instruction, supervision, and leadership than those at other size institutions.

For division chairmen with the dean of instruction and dean of student services model, time spent in instruction had changed.

For division chairmen supervising more than 20 full time faculty, time spent in supervision and college activities had changed. For division chairmen supervising fewer than three non-instructional personnel, time spent in supervision had changed.

For division chairmen who taught, time spent in supervision had changed.

Relationship of Changes in Administrative Organizational Structures to Perceived Impact on Workload of Division Chairmen

Impact scores were greater than chance when these changes occurred:

A new president was hired.

Division chairmen or coordinator positions were decreased.

Number of total divisions on campus decreased.

Division were rearranged by discipline or program.
Disciplines or programs within division decreased.
Rank order analyses of mean impact scores showed these changes in administrative organizational structures of ranking high in the impact.

Disciplines or programs within division increased.
Number of total divisions on campus decreased.
Disciplines or programs within division changed.
Reporting relationships of administrators were realigned.
Division chairman/coordinator positions decreased.
A new provost or dean was hired.

Differences between number of division chairmen perceiving changes as having very high impact and those perceiving changes as very low showed greatest extremes for these changes in administrative organizational structures:

New provost or dean hired.
Division chairmen positions decreased.
Disciplines and programs increased.
Disciplines or programs changed.
When grouped by characteristics, changes which were rated high differed. By characteristics, the changes rated as high impact were as follows:
Served as division chairman seven or fewer years.

A new provost or dean was hired.

Deans positions merged.

Administrative responsibilities were reassigned.

Increase in the number of full time faculty supervised.

Supervised 20 or more part-time faculty.

A new provost or dean was hired.

Dean positions merged.

Administrative responsibilities were reassigned.

Decrease in the number of divisions.

Increase in the number of part-time faculty supervised.

Taught.

A new provost or dean was hired.

Decrease in number of divisions.

Increase in number of part-time faculty.

Female division chairmen.

Increase in number of part-time faculty.

Change in disciplines and programs.

Had program heads in the division.

Increase in the number of part-time faculty.

Faculty located in more than one location.

Disciplines and programs changed.
Profile of Division Chairman Characteristics

The majority of incumbent division chairmen in the Virginia Community College System, fall 1985, were described as follows:

Male - (74 percent)

White - (96 percent)

Married - (87 percent)

Average age was 47, ranging from 32 to 65.

Held a doctorate.

Most recent degree was in the education field.

Awarded the most recent degree since 1973.

Had experience teaching at the two-year college level.

Had experience in administration at the two-year college level.

Had experience teaching at the secondary level; exactly 50 percent, at the four-year college level.

Had professional or occupational experience outside of teaching or educational administration.

Served eight years to more than 15 years in present position.

Selected for the position from within the institution coming directly to the division chairman position from a two-year college teaching position.

Held the rank of full professor;

Forty percent held the rank of associate professor.
Division chairmen in the VCCS showed these changes since 1974 (Stull):

More were female; slightly more than 25 percent in 1985; two percent in 1974.

More were older; average age increased three years.

Forty-four percent more held a doctorate.

Twenty-six percent fewer were in lower ranks.

Had more than one-third more experience teaching at a two-year college; less experience in teaching at a four-year college.

More were experienced; average length of service increased by more than four years.

When division chairmen characteristics were grouped by institutional characteristics, there were these differences in the division chairman profile:

Division chairmen at multi-campus institutions were significantly more likely to hold the rank of full professor than assistant professor.

A significantly greater proportion of division chairmen at institutions with over 2,500 FTE students were likely to hold the rank of full professor than associate professor.

A significantly greater proportion of division chairmen at institutions with the provost and three deans model were most likely to hold full professor rank.
CHAPTER V
SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

INTRODUCTION

In Chapter V a brief summary of the study is presented which restates the problem and research questions, describes the procedures, and summarizes and discusses major findings. Conclusions from these findings are drawn. Finally, implications of this research are discussed, and recommendations for further study are made.

SUMMARY OF THE STUDY

A research study was undertaken to determine the impact of changes in administrative organizational structures on the workload of division chairmen in the Community College System in Virginia. During the period studied, 1981-1984, there had been anecdotal evidence that colleges were undergoing many changes, but the particular issue with which this study concerned itself was the extent to which changes in administrative organizational structures were within the experiences of division chairmen and how they perceived changes to impact on their workload. Additionally, the study looked at the nature of the division chairman workload and developed a profile of Virginia's division chairmen by background and employment characteristics.
Complexity was used as the concept around which to look at the community college as an organization. Hall (1982) delineated three components of complexity in the complex organization: vertical differentiation, horizontal differentiation and spatial dispersion. Theoretically it was assumed that there are differences in structure and that the organizational structure can be a major determinant of individual actions in the organization. Thus, the workload of division chairmen was examined in light of changes in the structure of the college, and those particular changes in administrative organizational structure used as variables to explain changes in workload were those changes which represented vertical and horizontal differentiation.

Five questions guided the research:

1. What were changes in administrative organizational structures at community colleges in Virginia in the period 1981 to 1984?

2. To what degree did division chairmen perceive their workload to have changed?

3. How did division chairman workload change?

4. What changes in administrative organizational structures did division chairmen perceive contributed to change in their workload?
5. What were demographic characteristics and employment patterns of division chairmen in the community colleges in Virginia?

The study is a descriptive survey, designed as an ex post facto study rather than an experimental one. The population were the division chairmen in Virginia’s community colleges in 1984-85. A survey questionnaire was mailed to incumbent division chairmen at the beginning of the winter quarter 1985. Findings were reported and analyzed using primarily non-parametric techniques.

SUMMARY AND DISCUSSION OF FINDINGS

The most frequently reported changes in administrative organizational structures were at the divisional level. A majority of chairmen experienced an increase in the number of disciplines or programs for which they were responsible and an increase in the number of both full time and part-time faculty they supervised. In terms of administrative position changes, more than 40 percent of the chairmen reported that a new provost or dean had been hired, and nearly one-third of the chairmen reported that division chairmen positions at their college had decreased. These changes in administrative organizational structures were changes in horizontal differentiation rather than vertical differentiation; that is, the number of services performed
changed but the number of hierarchical ranks did not change. For example, the span of disciplines and programs and numbers of faculty supervised increased the functions and responsibilities for division chairmen. In the case of decrease in division chairmen positions at the college there did not appear to be a corresponding decrease in programs or faculty. Divisional responsibilities were apparently simply reassigned to the remaining division chairmen. Virtually no decrease in faculty or instructional areas supervised were reported by division chairmen.

A very large majority of division chairmen perceived an increase in their workload, and of those, 60 percent perceived a substantial increase in workload. The strength of this finding was surprising. Only 12 percent of division chairmen, for example, reported that their workload had remained the same rather than increasing or decreasing, and 86 percent reported an increase.

Most division chairmen reported directly to the dean of instruction or provost on a campus with two to four divisions. Most chairmen headed divisions which offer multiple awards and they supervised multiple disciplines. Almost one-half taught on a regular basis, but few supervised non-credit or community service activities. Nearly one-half supervised more than 30 fulltime faculty and more than
30 part-time faculty as well as one to three full-time and part-time non-instructional personnel. The majority had program heads in the division and had faculty housed in different buildings. These findings which described the current workload of division chairmen revealed complex supervisory responsibilities in terms of both instruction and faculty.

When workload functions were ranked by how division chairmen reported spending a majority of their time, more division chairmen reported that they spent a majority of time in management and supervision than in other workload functions with the largest percentages also reporting that their workload had changed since 1981 for those two workload functions and for instruction, leadership and promotion. Conservative interpretation of the data adds strength to this finding in the direction of the increase in administrative workload functions since leadership was grouped with the instructional function rather than with the administrative areas of management and supervision.

By all measures used, division chairmen ranked the impact on workload high when the number of division chairmen on campus decreased, when the number of divisions decreased, and when the number of disciplines or programs for which they were responsible increased. The impact was also high
when a new provost or dean was hired and when divisions were rearranged. These findings looked at perception of impact by division chairmen rather than frequency of the particular administrative organizational change. Except for the change of dean or provost who serves as the direct supervisor of division chairmen, all other significantly high impacts on workload indicated consolidation of positions in the organizational structure and increase in the range of functions and responsibilities by division chairmen for both instruction and personnel.

Although some changes in administrative organizational structures were of significant impact in several groupings, there were no clear patterns of division chairmen responses to the questionnaire when grouped by institutional, divisional or chairmen characteristics.

A provost or dean being hired was reported as high impact by a significantly greater proportion of division chairmen who taught, who supervised more than 20 part-time faculty, and who had fewer than seven years experience. A greater proportion of division chairmen who taught also reported that time spent in supervision had changed and that a decrease in divisions and an increase in number of part time faculty supervised had a high impact on workload. A greater proportion of those who supervised
more than 20 part-time faculty also ranked as high these changes in administrative organizational structure: dean positions being merged, administrators being reassigned, a decrease in the number of divisions and an increase in number of part-time faculty supervised. A greater proportion of those with fewer than seven years experience also ranked high deans positions being merged, as well as responsibilities of administrators being rearranged and more full time faculty supervised. Female division chairmen reported in greater proportions that they spent more time in leadership functions and ranked as high impact an increase in number of part-time faculty supervised and change in disciplines or programs supervised. Furthermore, it is of interest that although the data was analyzed in several ways to account for size of institution, campus, and division, no clear patterns emerged to indicate size as a significant variable.

Division chairmen in Virginia were typically white, married, male, and age 47, although there has been an increase in female division chairmen since 1974. The majority of division chairmen held a doctorate with the most recent degree in education awarded since 1973, and an increase in educational level was reflected with a similar pattern of an increase in rank. A considerable majority
had both teaching and administrative experience at the
two-year college level, and about one-half had also taught
at the secondary level or four-year college level. More
than one-half had professional or occupational experience
other than teaching. Most were experienced in the position
with a slight majority having over eight years experience
as division chairman. Most held the rank of full professor
and were selected for the division chairman position from
within the institution and from a teaching position.

CONCLUSIONS

The following are general conclusions which can be
drawn from the findings of this study.

1. Consolidation of positions in administrative
organizational structures in community colleges in Virginia
in the period of 1981-1984 decreased complexity at the
college level by reducing the number of positions in the
overall college organizational structure but increased
horizontal complexity at the divisional level by increasing
functions and responsibilities of the division chairmen.

2. Division chairmen perceived that these changes
in administrative organizational structure had an impact
on their workload through increasing functions and
responsibilities.
3. Division chairman workload increased. Workload change was not simply a change of emphasis but an actual increase in the range and degree of instructional and personnel responsibilities.

4. Division chairmen workload increased most in the administrative areas, both in management and supervision functions.

5. Division chairmen have tended to be stable in the position with increasing education and academic rank and have been appointed from within the faculty ranks. There are more female division chairmen than ten years ago, but there is virtually no representation of minority races.

IMPLICATIONS

The findings of this study which deal with division chairman workload raise some issues to be considered in looking at the position in the Virginia Community College System. The data supported general findings in the literature that division chairman workload is heavy, that the range of responsibilities is broad, and that some conditions seem to contribute especially to workload. If there are to be continued changes in administrative organizational structures which are associated with impact on workload, consideration should be given to the need
to balance teaching by division chairmen with a decrease in other responsibilities. The use of program heads who serve without released time or other compensation also needs to be assessed. The increasingly wide range of curriculum and program responsibility and increasing numbers of both part-time and full time faculty supervised raise questions about the emphasis of the division chairman role in the Community College System. While a large majority of chairman reported a great deal of time spent on instruction functions, for example, the percentages who spend a majority of time on the administrative areas of management and supervision and whose time in those areas appears to have increased stress a role which clearly does not emphasize the instructional function. An additional issue may then be compensation since the division chairman compensation system is developed from faculty compensation and may not be equitable for a position which appears to be increasingly administrative.

Because division chairmen are increasingly drawn from within the teaching faculty of the colleges, there is a need to examine the potential pool for minority and female representation. Additionally, there is an excellent opportunity to provide preservice training for the position, especially in areas data showed were significant to newer division chairmen.
If there is any pattern in the changes in administrative organizational structures, it appears to be toward consolidation of administrative positions and increase in the span of control at the divisional level. No data were gathered on the methods used by colleges in making decisions regarding changes in administrative organizational structures, but because of the association of some changes on the division chairman workload, input by division chairmen into the decision making process would be highly appropriate.

RECOMMENDATIONS FOR FURTHER STUDY

This study was designed to find out what changes in administrative organizational structures had occurred in the community colleges in Virginia and how those changes impacted on the workload of division chairmen. Although this study was limited to a statewide system of community colleges, many new questions were raised which need further study.

A position in an organization can be described by the incumbent or by job descriptions, and the position can also be described by subordinates or supervisors. In light of the findings that division chairmen in the Virginia Community College System perceive that changes in administrative organizational structures impact on workload, how faculty perceive the impact of those changes
on the workload of the division chairman as well as the relationship of the division chairman to the faculty would add to understanding of the position, especially in a time when further changes in administrative organizational structures might be anticipated.

The present study was limited to division chairmen in Virginia. Despite differences among individual colleges in size, administrative structures, location, and presidential styles of management, among others, division chairmen perceptions about workload increase and even about the impact of administrative organizational changes were remarkably similar. It would be interesting to replicate this study in other state systems or community colleges in other states to determine if there are patterns of changes in administrative organizational structures and whether division chairmen perceptions of the impact on workload will differ from those of chairmen in Virginia.

The profile of division chairmen by demographic characteristics and employment patterns adds to the general literature on careers of administrative positions in community colleges. Further study of career paths of division chairmen, however, would add considerably to the very sparse literature on career paths of middle managers in community colleges.
The division chairman position itself continues to be of interest with many questions about the nature of the position. Much of the literature assumes the community college division chairman position to be the same as the traditional department chairman position in the four year college. Are there, in fact, basic differences? Are there implications for the uniqueness of the division chairman position in the multi-discipline supervision of faculty and programs? Some state systems use other terms, such as instructional dean, for example, for a similar position to that called division chairmen in Virginia. A clearer understanding of the role of the division chairman may bring about a more standard title and one which differs from department chairman. Finally, the question of whether the division chairman is primarily a faculty role, "first among peers," or is an administrative role continues to be an issue in collective bargaining.
APPENDIX A

DIVISION CHAIRMAN QUESTIONNAIRE
Thank you for taking a few minutes of your time to complete this questionnaire.

DIRECTIONS: Please check boxes or write in appropriate responses. Note that when checking "Other (Please specify)" you are asked to write in a response.

Respond to the best of your knowledge about the position of division chairman at your institution regardless of the length of time you have actually been serving as chairman. Your responses will, of course, remain completely confidential. In reporting data both individual and institutional anonymity will be maintained. You may, however, omit any questions you would rather not answer.
PART I—PROFESSIONAL AND PERSONAL DATA

1. What is the exact title of your division?
   ________________________________
   (Title of Division)

2. What is your position title?
   ________________________________
   (Title)

3. Excluding the present academic year, how many years have you served in your present position?
   ________________________________
   (Years)

4. Presidential approval on personnel matters aside, how were you selected for your present position? (Please check one)
   □ By instructional dean or provost
   □ By divisional faculty vote subject to the approval of the instructional dean or provost
   □ By the instructional dean or provost after surveying divisional opinion
   □ Other (Please specify) _____________________________

5. Did you assume your present position coming from within the institution? (Please check one)
   □ Yes
   □ No

6. What is your current faculty rank? (Please check one)
   □ Professor
   □ Associate Professor
   □ Assistant Professor
   □ Instructor
   □ Other (Please specify) _____________________________

7. Which of the following best describes the position you held immediately prior to your present position? (Please check one)
   □ Two-year college instructor
   □ Four-year college or university instructor
   □ Secondary school teacher
   □ Elementary school teacher
   □ Two-year college administrator
   □ Four-year college or university administrator
   □ Secondary or elementary school administrator
   □ Other (Please specify) _____________________________

8. In each appropriate category listed below, please indicate the number of years of experience you have had. Do not count time twice.

<table>
<thead>
<tr>
<th>Type of Experience</th>
<th>Number of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Years of teaching experience at the two-year college level</td>
<td></td>
</tr>
<tr>
<td>b. Years teaching experience at the secondary or elementary school level</td>
<td></td>
</tr>
</tbody>
</table>
Number of Years of Experience

Type of Experience

c. Years teaching experience at the four-year college or university level

d. Years of administrative experience at the two-year college level

e. Years of administrative experience at the four-year college or university level

f. Years of administrative experience at the secondary or elementary school level

g. Years of professional or occupational experience outside of education following college graduation

9. Which of the following best describes your current educational background? (Please check one.)

- □ Less than a bachelor's degree
- □ Bachelor's degree
- □ Bachelor's degree plus 15 or more semester hours
- □ Master's degree
- □ Master's degree plus 15 or more semester hours
- □ Educational Specialist
- □ Doctorate
- □ Other (Please specify) ______________________

10. In what year did you complete your most recent degree?

(Year)

11. What is your major field of study of your most recent degree?

(Major Field)

12. Indicate the type(s) of professional development activity you have participated in (within the past two academic years) or are presently participating in which relates to your present position as division chairman. (Check as many as appropriate.)

- □ Graduate course(s)
- □ Conference attendance (local)
- □ Conference attendance (national)
- □ Regional workshop
- □ Institutional workshop
- □ Other (Please specify) ______________________
- □ Other (Please specify) ______________________
- □ Other (Please specify) ______________________

13. What is your sex?

- □ Male
- □ Female

14. What is your age?

(Years)

15. What is your race?

- □ White
- □ Black
- □ Other
PART II—INSTITUTIONAL AND DIVISIONAL CHARACTERISTICS

16 What is your marital status?
- Married
- Never been married
- Other

17 How many instructional divisions are on your campus at the present time?
(Number of Divisions)

18 Please characterize your division at this time by indicating how many different degree, diploma, and certificate programs for which you are responsible

<table>
<thead>
<tr>
<th>Number of Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Transfer (Associate in Arts, Associate in Science, Associate in Science Arts) Degrees</td>
</tr>
<tr>
<td>b. Associates in Applied Science Degree</td>
</tr>
<tr>
<td>c. Diploma</td>
</tr>
<tr>
<td>d. Certificate</td>
</tr>
<tr>
<td>e. Career Studies Certificate</td>
</tr>
<tr>
<td>f. Other (Please specify)</td>
</tr>
</tbody>
</table>

19 Which course disciplines are in your division? Please specify using VCCS prefixes

20 To whom do you report? (Please check one)
- Provost
- Dean of Instruction
- Dean of College
- Other (Please specify)

21 How many full-time faculty do you presently supervise? (A full-time faculty is defined here as teaching twelve or more credit hours or fifteen or more contacts per quarter and having a full-time contract)
(Number of full-time faculty)

22 How many part-time credit faculty reported to you in this fall quarter? (Part-time faculty is defined as faculty holding an adjunct contract)
(Number of part-time faculty – average per fall quarter holding adjunct contract)
23. For fall quarter, how many non-instructional personnel reported to you? (Include Community College Instructional Assistants)

(Number of full-time)

(Number of part-time)

24. Do you teach? (Please check one)

☐ Regularly
☐ Occasionally
☐ Rarely
☐ Never

If you teach, please complete the following

Number of credit hours (average) taught per quarter

Number of contact hours

Number of different course preparations

25. Are there program heads in your division? (Please check one)

☐ Yes ☐ No

If yes, please characterize (Check as appropriate)

☐ Program heads are faculty with released time
☐ Program heads are faculty with additional compensation
☐ Program heads serve informally with neither compensation nor released time
☐ Other (Please specify)

26. Do you have supervisory responsibility for non-credit or community service activities? (Please check one)

☐ Yes ☐ No

27. Are all faculty in your division housed in a single location, that is, in the same building in fairly close proximity? (Please check one)

☐ Yes ☐ No

If no, characterize location (Please check as appropriate)

☐ Different building
☐ Different area(s) of a single building
☐ Different campus
☐ Other (Please specify)

28. Considering the years 1981-82 to the present, in what ways do you feel your workload as chairman has changed? (Please check one)

☐ Increased
☐ Decreased
☐ Remained the same

PART III—DIVISION CHAIRMAN WORKLOAD
29. How would you characterize the degree of workload change in this period? (Please check one)

- □ Substantial change
- □ Moderate change
- □ Little change
- □ No change

30. On a scale from 1 to 5 with 1 being minimum and 5 being maximum impact, rate the following changes in administrative positions in terms of their importance in contributing to any change in your workload as division chairman from 1981-82 to the present.

Please respond to each item. If the modification did not occur at your institution, respond "Does not apply."

<table>
<thead>
<tr>
<th>Minimum Impact</th>
<th>Maximum Impact</th>
<th>Does Not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. A new president was hired □ □ □ □ □ □ □
b. A new provost or dean was hired □ □ □ □ □ □ □
c. Dean positions were increased □ □ □ □ □ □ □
d. Dean positions were merged □ □ □ □ □ □ □
e. Dean positions were decreased □ □ □ □ □ □ □
f. Division chairmen or coordinator positions were increased □ □ □ □ □ □ □
g. Division chairmen or coordinator positions were decreased □ □ □ □ □ □ □
h. Responsibilities of administrators (provosts, deans, division chairmen, coordinators) were reassigned □ □ □ □ □ □ □
i. Reporting relationships of administrators were realigned □ □ □ □ □ □ □
j. Other (Please specify) □ □ □ □ □ □ □

31. On a scale from 1 to 5 with 1 being minimum impact and 5 being maximum impact, rate the following changes within divisions in terms of their importance in contributing to any change in your workload as division chairman from 1981-82 to present.

<table>
<thead>
<tr>
<th>Minimum Impact</th>
<th>Maximum Impact</th>
<th>Does Not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

k. Number of total divisions on campus increased □ □ □ □ □ □ □

(Question continued on next page)
### Minimum Impact | Maximum Impact | Does Not Apply
--- | --- | ---
1 | 2 | 3 | 4 | 5

1. Number of total divisions on campus decreased.

2. Divisions were rearranged by discipline or program.

#### Personnel

n. Number of full-time faculty you supervise increased.

o. Number of full-time faculty you supervise decreased.

p. Number of part-time faculty you supervise increased.

q. Number of part-time faculty you supervise decreased.

r. Number of non-instructional personnel you supervise increased.

s. Number of non-instructional personnel you supervise decreased.

#### Programs

1. Disciplines or programs within division increased.

u. Disciplines or programs within division decreased.

v. Disciplines or programs within division changed.

w. Other (Please specify)

---

32. The items below require two answers. First, using a typical week as a measure, please indicate the relative amount of time you spend on each of the functions specified below. (Include time spent at college, at home, on weekends, etc.) Answer by checking the appropriate description of amount of time.

Second, considering the years 1981-82 to the present, indicate whether the relative amount of time you spend in a typical week performing the functions specified below has changed appreciably or has remained generally the same. (Please check one)

<table>
<thead>
<tr>
<th>Relative Time Spent</th>
<th>Has</th>
<th>Changed</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Majority</td>
<td>Great Deal</td>
<td>Some</td>
</tr>
<tr>
<td>a. Student: Student related activities (student advising, counseling, tutoring, conferences, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Time Spent</td>
<td>Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **b. Instruction Curriculum and instructionally related activities, curriculum and course planning, development, revision, evaluation, scheduling, etc.**
  - Has Changed: □
  - Not Changed: □

- **c. Supervision Personnel and staffing activities (recruiting and interviewing prospective faculty, evaluating faculty performance, making faculty assignments, faculty development, etc.)**
  - Has Changed: □
  - Not Changed: □

- **d. Leadership Providing leadership, facilitating communications, developing and reviewing short and long-term goals and objectives, etc.**
  - Has Changed: □
  - Not Changed: □

- **e. Promotion Maintaining good public relations, recruiting students, articulation, development, etc.**
  - Has Changed: □
  - Not Changed: □

- **f. Management Administration and financially related activities (preparing requisitions, budget, routine correspondence, planning for facilities and equipment needs, etc.)**
  - Has Changed: □
  - Not Changed: □

- **g. College activities not related to your division**
  - Specify types of activities:

- **h. Miscellaneous job-related activities not included above.**
  - Has Changed: □
  - Not Changed: □
Please make any further comments about the position of division chairman which you feel would be helpful to this research.

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

Will you be so kind as to quickly review your responses to be sure that each question has been answered.

Do you wish a summary of the results of this study?

☐ Yes  ☐ No

If so, please give your name and address.

________________________________________________________________________________________

COMPLETE INDIVIDUAL AND INSTITUTIONAL ANONYMITY WILL BE MAINTAINED

THANK YOU VERY MUCH FOR YOUR COOPERATION IN COMPLETING THIS QUESTIONNAIRE.

Please return to:

Sandra H. Anderson
Division Chairman
Rappahannock Community College
South Campus
Glenns, VA 23149
APPENDIX B

INSTITUTIONAL CHARACTERISTICS PROFILE DATA SHEET
INSTITUTIONAL CHARACTERISTICS
PROFILE DATA SHEET

College Code:

Size of Institution:  a b c d e
Location:  a b
Campus Structure:  a b
Type of Organizational Structure:  a b c d e
APPENDIX C

COVER LETTERS

Letter to VCCS Presidents
Cover Letter to VCCS Presidents
Cover Letter to Division Chairmen
Follow-up Letter to Division Chairmen
To VCCS Division Chairmen:

In the interest of gathering information about division chairmen in the Virginia Community College System, I am asking you as a colleague to spend a few minutes responding to the enclosed questionnaire. I am interested in assessing your perceptions of the workload of division chairmen in relation to administrative organizational changes and in developing a profile of the characteristics of division chairmen in the State.

This research is part of my dissertation study at the College of William and Mary. As a part of such a study, naturally, all responses will be completely confidential, and data will be aggregated and reported to maintain individual and institutional anonymity. Your institution's president and the VCCS have previously approved your participation in this research. Furthermore, I am pleased that Dr. Elmo Roesler of the System's Office is serving as a member of my dissertation committee at William and Mary.

Your return of the completed questionnaire indicates your consent to participate in this important study. I have enclosed a stamped self-addressed envelope for your convenience and would greatly appreciate your prompt return of the questionnaire. At the completion of my study, I will share the results with the Chancellor and the Presidents, and with you, should you wish. You may indicate your interest in a space on the final page of the questionnaire.

Thank you very much for your time and assistance.

Sincerely,

Sandra Anderson
Division Chairman, South Campus
Rappahannock Community College
Glenns, Virginia 23149

cc: Dr. (college President)
    Dr. Elmo Roesler
A couple of weeks ago I sent you a questionnaire asking about your workload as division chairman. As you may recall from my letter, I am completing a dissertation study at the College of William and Mary with the assistance of Dr. Elmo Roesler who is a member of my committee. My topic, the workload of the division chairman and administrative organizational changes in colleges in the VCCS, has interested me in my five years as a graduate student and should be of value, I believe, to understanding our division chairman role within the colleges.

In case you have misplaced the earlier questionnaire, I am sending you another. I hope you will take just a few minutes to complete it. A high response rate is crucial to a useful study. Although many chairmen have already responded, your input to the data I am collecting about division chairmen will be extremely valuable.

If you have already mailed your questionnaire, please disregard this letter and accept my thanks.

Should you have any questions, please feel free to call me.

Sincerely,

Sandra Anderson
Division Chairman

Enclosures:

Division Chairman Questionnaire
Return envelope

virginia community college system
Dear (College Presidents)

See page 238, cover letter to division chairmen.

A copy of the questionnaire was attached to a copy of the letter to each division chairman on the President's campus.
Dear (College Presidents)

As a doctoral student at the College of William and Mary and a division chairman at Rappahannock Community College, I have become interested in the changes in the administrative organizational structures in the community colleges in Virginia. Specifically, my dissertation will study the relationship between those changes and the workload of division chairman. This research will examine the issue and develop a profile of characteristics of division chairmen in the VCCS.

Through Dr. Elmo Roesler, who is serving as a member of my committee at William and Mary, I have received permission to conduct this research in the VCCS. I am asking also for your cooperation in completing this study.

In mid-January, I propose to survey all division chairmen in the VCCS through a mail questionnaire, a copy of which is attached. In my letter to the chairmen inviting their participation and assuring them of complete anonymity at both individual and institutional levels, I would like to be able to say that I have your cooperation in their responding to the questionnaire. I will, of course, copy that letter to you and will share the results of the study with you and with the division chairmen.

In the interest of time I will assume your willingness for me to survey division chairmen at your institution unless I hear differently from you by January 21, 1985. Should you have any questions, please feel free to contact me.

Thank you for your support.

Sincerely,

Sandra Anderson
Division Chairman, South Campus
Rappahannock Community College
Glenns, Virginia 23149

cc: Dr. John H. Upton, President Rappahannock Community College
Dr. Elmo Roesler, Assistant Vice Chancellor, Research and Planning (VCCS)
Dr. Donald E. Puryear, Deputy Chancellor (VCCS)
APPENDIX D

QUESTIONNAIRE NARRATIVE RESPONSES AND COMMENTS

Comments - Item 30
Comments - Item 31
Comments - Item 32
Open Ended Comments
QUESTIONNAIRE ITEM 30 "Other"

Cut backs in budget and personnel.
Higher administrators and their secretaries pass their work done.
Growth of specialized training programs.
Constant increase in paperwork – program evaluations, faculty, etc.
Own personal interests at college expanded. Thus increase in workload was (is) self-inflicted.
During past three years have added allied health programs and a computer science degree program.
When I took over this division 6 years ago, it was 45 percent of campus fte; it is now 75-80 percent and the campus has doubled in size with all growth in this division.
Increase in bureaucratic demands by VCCS in part added to increase in workload.
Continuing ed. raised its staff and responsibilities.
Involved with more activities.
Now supervising two separate divisions.
Division grew.
The bureaucracy grows and grows and the new deans must make work for themselves which increases our work.
Split my division.
Increasing college and VCCS regulations.
Increasing of marketing activities, recruitment, articulation within college and local high schools.
Technological change.
Administrative complexity.
Program head position in major curriculum vacant for 5 months; responsibility placed on division chairman plus 63 advises.
Additional assignments.
Reporting/planning requirements.
New programs.
Most pressure is in development of ways to increase FTES with few resources.
I have two jobs and they have both grown in responsibility.
Two new full time faculty hired; turnover of adjusts.
Much off-campus activity: classes, programs, planning, topics for business and industry.

Diversity of programs causes problem.

Expanded scope of division in terms of community outreach/visibility.

Split by division -- made English a separate division.

Facilities planning/providing lab equipment.

Developing entrance requirements for programs that will increase students' chances of success and administering those.

Have more responsibility in advising, placing, and registering students.
Questionnaire Item 32 "Other" provided both boxes to check relative time spent and whether there had been a change or no change. There was a space to specify a workload function or activity.

<table>
<thead>
<tr>
<th>M</th>
<th>Majority</th>
</tr>
</thead>
<tbody>
<tr>
<td>GD</td>
<td>Great deal</td>
</tr>
<tr>
<td>S</td>
<td>Some</td>
</tr>
<tr>
<td>L</td>
<td>Little</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NC</th>
<th>No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Change</td>
</tr>
</tbody>
</table>

- **Committees**
- **College committees**
  - Self-study steering committee
  - **Scheduling**
  - Richmond, etc.
- **Student functions**
  - Ground breaking
  - Open house
- **Support Activities of others**
- **GD**
  - Often handle higher administrators' jobs when they are at meetings or conferences
- **M**
  - Directed institutional self-study
  - Publishing, speaking engagements
  - Campus/college projects
- **GD**
  - Extra curricular; foundation; committees
- **L**
  - Spring festival chairman; ad hoc committee assignments
- **S**
  - Governance committee; articulation work sessions
  - Committee work
- **GD**
  - Self-study committee; SCHEV reports; additional committee assignments
<table>
<thead>
<tr>
<th>GD</th>
<th>Committees; special projects; staff support for dean</th>
</tr>
</thead>
<tbody>
<tr>
<td>GD</td>
<td>Committee work</td>
</tr>
</tbody>
</table>
|          | (but temporary, I hope)  
| S        | Committee work |  
| S        | Science fair; math contest; administrative staff responsibilities |  
| GD       | Committees |  
| GD       | Speakers' series; fund raising |  
| GD       | Convocation; curriculum development procedures |  
| GD       | Reports; meetings with central staff persons |  
| S        | Member-steering committee for SACS self study; personal service committee |  
| GD       | Committees |  
| GD       | College/campus committees |  
| GD       | College committees; assistant to provost |  
| S        | College wide policy |  
| GD       | College senate; many committee assignments |  
| GD       | Academic planning; personal - college committee |  
| GD       | Governance; committees - college/campus; off-campus activities |  
| GD       | Task forces; committee assignments |  
| S        | Cultural activities; study activities |  
| GD       | Special reports, etc; committees; chaired special projects (many self-initiated) |  
| GD       | Procuring administrative work processing and computer equipment for college; assisting provosts |  
| GD       | Public information officer |  


<table>
<thead>
<tr>
<th></th>
<th>Committees</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>College Committees</td>
<td>NC</td>
</tr>
<tr>
<td>S</td>
<td>Meetings</td>
<td>V</td>
</tr>
<tr>
<td>S</td>
<td>Committee Work</td>
<td>NC</td>
</tr>
<tr>
<td>GD</td>
<td>Institutional self study; college committees</td>
<td>NC</td>
</tr>
</tbody>
</table>
I serve as Chairman of the Natural Sciences and Engineering Technologies Division and as Acting Chairman of the Health Technologies Division.

The Division Chair in the VCCs is expected to be involved in an absurd amount of petty paperwork which should not involve a person at this level, i.e., Drop-Add approvals, credit to Audit forms, approval of faculty textbook orders, etc.

I feel that I need to acquire a little more experience in the position before giving valid, helpful comments for research purposes, since I have been serving as division chairman less than one year.

Over the last few years our college has undergone several reorganizations but no matter what my title or who I report to my job remains the same -- responsibility for everything related to credit instruction on the campus.

As with middle management in most business establishments, I feel that the division chairman is "between a rock and a hard place" on many occasions. As in many small schools, we have to wear many hats and at times make decisions that at a larger school we would not have a voice.

The activities of division chairman vary from college to college. In our situation we are not only division chairmen but also program heads who have the responsibility of program development in numerous areas. This requires considerable study because one cannot develop a program unless he is knowledgeable about that field. Another activity that adds to my work load is recruitment and public relations. This is a major part of my job.

Size of institution not factored into study -- a big issue within VCCS.

The Division Chairman position often becomes the "Jack of all trades" position and the catch-all do-all position for any unfilled positions or missing links within the institution.
Role of division chairman highly dependent upon administrative philosophy of chief executive officer and the delegation of authority to and by immediate supervisor (dean).

The role of division chairman has changed from one of managing, creating, innovating to one of paper-shuffling and fighting fires.

It's a very difficult job. It took a long time to learn how to do well. Tension is high. No extrinsic rewards. Little recognition by faculty.

Budget impacts cause most of the work because they affect everything.

At a recent workshop, a presenter said of the division chairman, this position is where "the rubber meets the road." Tough job but I feel that I can make or facilitate meaningful change and enjoy administrative support for new and different projects.

The faculty and staff of this division has remained practically unchanged since 1981. We have employed only 3 full time faculty during this time and only a few new part-time faculty.

The division chairman, through faculty, was a principal agent for change/development. The experience of time and resources have, in my view, caused an "internalization" of the chairman and of the division. Relationships with the "outside world" are by necessity, being reduced.

Comparing my job here with that of Standard-Brand chairmen is not the apples and oranges cliche. It's more like comparing turnips with black holes in space. It's impossible to give much detail, but here's an example. In the public info. thing, I usually write more news releases than full time . . . make photographs, do . . . stuff, do layout for ads, etc., while teaching lit and comp and doing the administrative things.
Since 1981-1982 there has been increased pressure to bring in students and increase FTES through program and course development.

Don't see any benefit of this line of questions to improving the VCCS or individual colleges. How. I'm the only Div. Chair in VCCS with this set of answers. This type of survey is what has given education a bad name. 75-85% of the information asked for is already available through VCCS and should have been identified elsewhere.

We are assuming more responsibility and increased workloads because of declining enrollments and monies.

Definitely a full time + position -- I am becoming increasingly concerned about workload vs. quality.

My position is 3-fold:

(1) division chairman = 50% = 7.5 credits workload
(2) director of sponsored programs = 40% = 6 credits
(3) teaching = 10% = 1.5 credits

A major requirement for consideration as a candidate for a community college division chairman's position should be a minimum of three years as a teaching faculty in a comparable type division.

A good job -- excellent opportunity to lead, shape, contribute -- but always the prospect of faculty leadership and creativity being overrun by necessary but mundane administrative demands -- the division chairman is at once pathfinder and chief clerk.

I believe the Division Chairman should be placed in a salary schedule independent of 9-month faculty, such as was done for presidents, deans and provosts. Division Chairmen also need to be recognized for their contributions particularly at the VCCS level.

The position involves a great deal of responsibility without commensurate authority. As financial situation has become more critical over past three years, the degree of authority has decreased. Decisions are being made without division chairmen having appropriate input.
I feel this position is one of the most important in the VCCS structure; yet it is probably appreciated the least of administrative positions. I'm glad a study is being conducted. The Division Chairman is the "go between" faculty and administration -- with a terrific responsibility. Frequently we are looked upon as faculty, other times administrators -- at whim of top administrators.

Division Chairmen occupy the rule as middle managers at NVCC. We are constantly caught in between faculty/staff and upper management. Sometimes . . . almost untenable.

Paperwork always increases. Every now and then there comes a new form to fill out. Extant paperwork requirements are never deceased to compensate. As enrollments and budgets decline, everyone tries harder to manage what is left. Both the VCCS and NVCC are very "... down" managed institutions. Div. Chairs have little freedom, but are expected to account to higher management on numerous reports for all activity.

Div. Chairmen need to be consulted earlier in planning management processes. Their working calendars are unreal during some months of the year. Specifically, not enough time is allowed for the formal process of faculty evaluation -- one of the most important tasks they perform.

For my position -- would like to have an administrative assistant. Frequently find myself tied down with detail. Need time to attend professional meetings and conferences.

Mine is a unique case of gross error in judgment. Division split not necessary. But then -- things are at a standstill on this campus just now.

The VCCS and NVCC have become administrative papermills. I am continually bombarded with last-minute requests for reports that have little to do with the instructional program. "The Administration" of VCCS and NVCC have forgotten why we are here.
It is always interesting and often very difficult having to explain faculty to higher level administrators and vice versa.

At other institutions this position would be at the Associate Dean level of responsibility.

The first three years as division chairman included the merger of the ... divs. with math and natural science (30 faculty, 15 curr). In 1983 the ... Tech division was separated (10 faculty, 8 programs). Faculty vacancies and loss of positions probably created the greatest workload coupled with the lack of adequate funding for technical labs created faculty and student unrest. The number of laboratories in a division should be considered in the workload assessment.

Out position continues to be a precarious one: balancing the needs of faculty/students within our division with the goals of the institution. Workload has increased due to an unnecessary (in my opinion) proliferation/duplication of tasks/paperwork within the college and some duplication of effort due to the undesirable (in my opinion) extension of functions of the Director of Continuing Education role in credit courses ... non-traditional types of instruction.

The position is overburdened and each year becomes even more so. We should have an academic dean's title (and money).

Reduction in the amount of released time for program heads has resulted in increased demands of Div. chair time.

Your study might be "too" uni-dimensional and only ... touches on the ... of the "problems" in and with reorganization and change -- Resulting authority is a key!

Middle management was never an easy job. Work never slows down. The position should not pay the same as a faculty position of equal rank. I often wonder what the position would be like at a single campus, normal size community college. How can other administrators spend so much time in meetings, on leave, in library?
Workload increase is mainly the result of an ever-increasing bureaucracy that requires more and more paperwork to accomplish the same thing.

It may be interesting to note that in the VCCS division chairmen are not provided salary differentials to reflect their responsibilities for . . . and administration. The chairmen are paid at the same rate as the faculty. If I were to return to the faculty, it would have no bearing on my annual salary (with the exception that I would be going from a 12 month contract to a 9 month contract.

Reorganization at this college has clearly shifted position away from an administrative with teaching position to an almost completely administrative position.

I feel that a premium pay of approximately 10% should be applied beyond normal faculty salaries for this type of supervisory position. Also feel multi year contracts should be . . . .

Title changed to academic chrm. because of contract period 9 vs. 12 months. Jobs of all chrm. are entirely different, this humanities vs. math/science.

1. This school does not use that title because it implies a 12-month position, while "academic chairman" does as much work but is 9 month.

2. Chairmen are viewed as "Faculty" when that need arises and "Administrators" when that need arises according to the whim of the President.

I usually work 50-60 hours a week, including Sunday afternoons. Your questionnaire did ot include things such as advisory committees (I attend 20 night meetings per year).

As indicated earlier, I am not called a "division chairman." However, I schedule classes, evaluate faculty, recommend faculty for employment, and sit on the Dean's Council and the President's Administrative Council. Although my area has fewer full time faculty than most of the 5 divisions, I tend to have more administrative responsibility than the division chairmen who teach part-time.
It is my opinion that mid-management is the "backbone" of the VCCS. Few Deans or Presidents have risen thru the ranks and really understand the demands of scheduling, supervision, and leadership needed to make a community college viable and cost effective.

We are both faculty and administrative. We are considered faculty when it best suits for us to be faculty and administrator when it best suits for us to be administrator. We have little or no control over the budgeting process.
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ABSTRACT

AN EXAMINATION OF THE IMPACT OF CHANGES IN THE ADMINISTRATIVE ORGANIZATIONAL STRUCTURE OF SELECTED COMMUNITY COLLEGES ON WORKLOAD OF DIVISION CHAIRMEN

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The purpose of this study was to examine the relationship between changes in the administrative organizational structure in community colleges and the workload of division chairmen. Changes in administrative organizational structures were characterized by structural complexity variables, primarily horizontal and vertical differentiation. Division chairman workload was analyzed, and division chairmen were described by demographic characteristics and employment patterns.

The division chairman has been identified in the literature to be a critical middle management position whose increasing workload is an issue. Reflecting a time of change in higher education in general, organizational changes have been taking place in community colleges in Virginia, particularly in the direction of consolidation, that were hypothesized to impact on this crucial position. The three year period from 1981-82 to 1984-85 was identified for study. The entire population of division chairmen in Virginia's Community College System was surveyed by a mail questionnaire in January 1985 to determine to what degree they perceived their workload to have changed, what workload functions actually changed, and what changes in administrative organizational structures they perceived contributed to change in their workload.

Using non-parametric statistical tests to analyze the data, it was concluded that changes in community colleges in Virginia had occurred which decreased complexity in the college organizational structure but increased complexity at the divisional level. The increase in horizontal differentiation at the divisional level was perceived by division chairmen to increase workload. More relative amount of time was being spent by division chairmen in
the administrative areas of supervision and management than other functions. In examining the division chairman cohort in Virginia's community colleges over a ten year period, it was found that the division chairmen were stable in the position and tended toward increasing education and academic rank as well as prior experience in the two-year college.

There are implications from the study to suggest a further look at the nature of the division chairman position, particularly in Virginia, in terms of workload issues, teaching expectation, compensation, and preservice training for an applicant pool that is increasingly drawn from within the teaching faculty, with special attention to the female and minority representation. The level of involvement of division chairmen in the decision making process when changes in administrative organizational structure are made is an issue also raised by this study.

Future study is recommended to determine how faculty perceive the increase in workload of division chairmen. Particularly in light of the expectation that consolidation of the administrative organizational structure is likely to continue, further study is needed on the implications of the impact on the role expectations for the position. Further research on middle managers would add to the general literature on careers of administrators in the community colleges. Finally, the question of whether the division chairman is primarily a faculty role, "first among peers," or is an administrative role continues to be an issue in collective bargaining.