ADMINISTRATOR AND FACULTY SUPPORT FOR ASSESSMENT AT VIRGINIA PUBLIC COLLEGES AND UNIVERSITIES

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(ABSTRACT)

In 1987, public colleges and universities in Virginia began complying with state-mandated outcomes assessment requirements. Administrators and faculty were expected to assume the responsibility for conducting assessment planning/activities, and substantial administrator and faculty support for formal assessment was expected to develop gradually over a ten-year period.

The purpose of this study was to investigate administrator and faculty support after three years of compliance. The objectives were (1) to investigate across-time involvements and understandings related to institutional/departmental assessment planning and activities; (2) to investigate across-time perceptions of the importance of formal assessment; and (3) to identify factors which had influenced these involvements, understandings, and perceptions of importance.

A total of 1,101 administrators and faculty from 37 of the 39 public colleges and universities in Virginia participated in this study. Results indicate that, by 1990,

administrator and faculty involvements, understandings, and perceptions of importance had increased significantly. Respondents expected future levels of perceived importance would decline significantly if external reporting requirements were eliminated. The most prevalent external factors which had influenced administrators and faculty were the State Council of Higher Education for Virginia (SCHEV) and the Southern Association of Colleges and Schools (SACS). The most prevalent internal factors were chief academic officers, assessment coordinators, and resource constraints.

The findings of this study suggest that after three years of compliance, momentum for formal assessment among administrators and faculty had been generated. While this momentum did not represent administrator and faculty "ownership" of assessment, without doubt more administrators and faculty had become involved in assessment, more had begun to better understand assessment, and more had begun to perceive of formal assessment as important. If SCHEV were to remove its requirements, this momentum would be lost. If SCHEV requirements remain, wider administrator and faculty involvements and understandings should be accompanied by higher levels of perceived importance as more departments begin the process of assessing learning outcomes. By 1990, however, future widespread administrator and faculty "ownership" of formal assessment in Virginia remained uncertain.

DEDICATION

This paper is dedicated to my father and to Elaine, Stephanie, and Tracy.

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CHAPTER ONE

Introduction

The current assessment movement in higher education possesses the potential to alter the content, process, and product of one of the most independent institutions in American culture. Since the 1700s, colleges have experienced "a protracted struggle with authorities" (Brubacher & Rudy, 1976, p. 32), for throughout the history of American higher education, legislators, governors, and/or state higher education officials have periodically attempted to force colleges and universities to be more responsive to concerns for fiscal accountability and quality of learning (Brubacher & Rudy, 1976). Because the adjudications of such struggles tended to favor institutional/academic autonomy, strong, independent college and university boards, administrations, and faculties gradually developed (Brubacher & Rudy, 1976; Brubacher, 1982; Hutchings & Marchese, 1990; Millet, 1984; Westmeyer, 1985).

In the late nineteenth century, business and industry leaders began building coalitions with governmental leaders to insure that manpower training needs were addressed. As the sophistication and use of technology in business and industry increased, so too did the number and strength of these coalitions (Altbach & Berdahel, 1987; Apps, 1988; Hutchings & Marchese, 1990; Lindley, 1981; Lewis, 1975; Jarausch, 1983;

Roizen & Jepson, 1985; Wallenfeldt, 1986). The current assessment movement, then, is largely the result of continuing uncertainty about the quality of the product of American higher education and of new concerns about American economic competitiveness in a global marketplace (Allen, 1989; Ashworth, 1979; Association of American Colleges, 1985; Ben-David, 1981; Chaffee, 1985; Council on Post Secondary Accreditation, 1986; Elman & Lynton, 1985; Hacker, 1986; Hutchings & Marchese, 1990; Katchadourian & Boli, 1985; McClain, 1987; Pusey, 1978; Report of the Task Force on College Quality, 1986; Resnick & Goulden, 1987; Robbins, 1980; Smith, 1987; Stadtman, 1980; Wildman, 1976). Today, policy-makers are anxious to know what colleges are doing, how well they are doing it, and at what cost. They often see an entrenched higher education administration and faculty who have been slow to recognize global changes and who have been reluctant to create "self-regulating institutions" (Ewell, 1984; Bennett & Peltason, 1985; Halpern, 1987; Hartle, 1986; Heywood, 1988; Hoy & Berstein, 1982). In essence, researchers have observed that policy-makers and state higher education officials often appear to view new assessment requirements as a way to infuse new life into administrators and faculty, a way to force public higher education to reexamine itself, be more responsive, and make adjustments as it enters the twenty-first century (Alfred and Weissman, 1988; Astin, 1985;

Bennett, 1985; Bennett & Peltason, 1985; Bloom, 1982; Bok, 1986; Coombs, 1985; Delattre, 1988; Ewell, 1984; Ewell, 1985; Ewell, 1987a; Ewell, 1989; Ewell, 1990; Hogarth, 1987; Hutchings & Marchese, 1990; Jaques & Richardson, 1984; McClenney, 1990; National Governor's Association, 1986; Newman, 1985; Sanchez, 1987; Wagner, 1989).

There are many unanswered questions regarding this movement. Initial questions have focused on the intent of assessment. Is this movement an attempt to encourage internal motivation, or it is an attempt to control what is being taught and how it is being taught? More concretely, is it a movement that will lead eventually to a highly structured, standardized reporting system tied to a reward/punishment funding outcome? For different states, there appear to be different answers to these initial questions, but it is simply too early to determine with certainty what overall national pattern will emerge in the coming decade (Boyer, Ewell, Finney, & Mingle, 1987; Broadfoot, 1984; Cross, 1987; Ewell, 1987a; Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990; Manning, 1987; Marchese, 1987; McMahon, 1987; Murphy & Torrance, 1988).

Other questions have begun to emerge which address more substantive issues relating to this movement. Those questions relating to campus-wide involvement, understanding, and perceived importance have been frequently seen as the most

crucial (Dutton, Fahey, & Narayanan, 1983; Edgerton, 1990; Ewell, 1987b; Ewell, 1989; Hutchings, 1987; Hutchings & Marchese, 1990; Krueger & Heisser, 1987; Levin, Lazorack, & Sears, 1988; Lumsden, 1988; McClenney, 1990; Tierney, 1989; Wilkinson, 1988). The following four sets of questions focus on groups of critical campus personnel. First, how involved are college and university chief academic officers in the development and revision of their institution's overall assessment plan? Is their understanding of assessment such that they can lead other administrators and faculty through the broad guidelines of assessment? Do they perceive that formal outcomes assessment activities are important and should be conducted regardless of external reporting requirements? Second, how involved are college and university assessment coordinators and department heads in the development and revision of both their institution's overall assessment plan and their respective department assessment plans? Is their understanding of assessment such that they can lead faculty through the specific complexities of formal assessment? Do they perceive that formal outcomes assessment activities are important and should be conducted regardless of external reporting requirements? Third, how involved are faculty in the development and revision of both their institution's overall assessment plan and their own department's assessment plan? Is their understanding of assessment such that they can

conduct outcomes assessment activities, interpret findings, and make appropriate curriculum improvements? Do they perceive that formal outcomes assessment activities are important and should be conducted regardless of external reporting requirements? Fourth, what have been the critical factors influencing administrator and faculty involvement, understanding, and perceived importance related to formal outcomes assessment? Where campus-level momentum for this movement has been generated, what measures are needed to sustain and/or increase this momentum?

Statement of the Problem

The State of Virginia officially entered the current assessment movement in 1985 with the passage of Virginia Senate Joint Resolution 125 which directed the State Council of Higher Education for Virginia (SCHEV) to conduct a study "to investigate means by which student achievement may be measured to assure the citizens of Virginia the continuing high quality of higher education in the Commonwealth." The report of this study appeared in January 1986 as Senate Document 14. Then and frequently since, legislators, SCHEV officials, outside consultants, and national observers have stressed the crucial roles of campus administrators and faculty in the eventual success of this movement (Chandler, 1987; Ewell, 1987b; Ewell, 1989; Ewell, 1990; Hutchings, 1987;

Hutchings & Marchese, 1990; Levin, Lazorack & Sears, 1988; Miller, 1989a; Miller, 1989b; Miller, 1990; Roesler, 1989).

Formal assessment planning at Virginia public colleges and universities began in 1987. Three underlying assumptions regarding administrator and faculty support for assessment were developed early on. First, by 1987 it was assumed that many Virginia public college and university chief academic officers already possessed high levels of involvement and understanding related to assessment as a result of their close working relationships with SCHEV officials. Likewise, it was assumed that by this time many of these chief academic officers already perceived that formal assessment was or should be an important part of higher education. Finally, it was assumed that an activity as complex as formal outcomes assessment would take at least a decade before substantial levels of administrator and faculty involvement, understanding, and perceived importance were reached (Edgerton, 1990; Marchese, 1987; Miller, 1989a; Miller, 1990). The problem was that by 1990, there was no empirical evidence to support or refute these assumptions.

Rationale for the Study

In states like Virginia where there has been a tradition of decentralized decision making in higher education, a critical element of the third underlying assumption identified above was that if formal assessment activities were to succeed

in strengthening higher education, the administrators and faculty of each college and university had to assume the responsibility for conducting such activities (Bergquist & Armstrong, 1986; Ewell, 1989; Harris, 1985; Hutchings, 1987; Hutchings & Marchese, 1990). In essence, administrator and faculty "ownership" had to occur. In Virginia, while activities have been developed locally, the mandate was clearly "given to" rather than "generated by" administrators and faculty (Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990). The fact that the Virginia assessment model involved a top-down mandate should not in itself suggest that the goal of local administrator and faculty ownership is unrealistic, but it would seem at least to support the key assumption that sufficient levels of administrator and faculty involvement, understanding, and perceived importance would arise only from a gradual, decade-long process (Edgerton, 1990; Marchese, 1987; Miller, 1989a).

In Virginia, SCHEV officials have encouraged this gradual development by focusing on two groups of college and university personnel: chief academic officers and assessment coordinators (Aper, 1989; Miller, 1989a). By 1990, SCHEV officials had been discussing outcomes assessment concepts, trends, and Virginia's specific model for almost five years with college and university presidents through the General Professional Advisory Committee (GPAC) and with chief academic

officers through the Instructional Programs Advisory Committee (IPAC). Based on the first annual official progress reports (June 1989) from all Virginia public colleges and universities, SCHEV officials concluded that most college and university chief academic officers recognized the potential benefits of outcomes assessment for their institutions (Miller, 1989b).

While perhaps many chief academic officers had always been quite active and many others have become more supportive of assessment, it was the local assessment coordinators who received the most concentrated attention from SCHEV officials during 1987 and 1988. In turn, these coordinators have been the ones who have accomplished the majority of work. Prior to 1986-87, Virginia public colleges and universities did not have full-time professional assessment coordinators, and informal assessment activities had been conducted by offices of institutional research. In 1986-87 at many institutions, personnel from these offices received the responsibility of guiding the development of initial institutional assessment plans. In 1987-88, assessment coordinators became a reality on many campuses, especially at the comprehensive non-doctoral colleges and universities. Eight out of the ten comprehensive institutions (inclusive of Richard Bland College) had an assessment coordinator in place by 1987-88 in contrast to two

out of the six doctoral universities and five of the community colleges.

These new coordinators then became the institutional liaisons that SCHEV officials needed to begin the process of involving department heads and faculty. Statewide annual outcomes assessment workshops and conferences, as well as one-on-one working sessions, became the primary methods SCHEV officials used to educate and encourage these new liaisons. From 1988 on, SCHEV officials encouraged department heads and faculty to attend these workshops and conferences. SCHEV officials theorized that with chief academic officers providing the leadership and with assessment coordinators providing the skills, knowledge, and enthusiasm, department heads and faculty would eventually become involved and knowledgeable and would perceive of formal assessment as an important activity for higher education. Assessment coordinators and, in turn, department heads would assist the faculty in developing and conducting specific assessment activities ranging from initial planning through curriculum improvement (Miller, 1989a).

Since 1985, then, SCHEV officials have given chief academic officers and assessment coordinators information about and encouragement for Virginia's higher education assessment activities. In turn, they assumed that these two groups, and especially assessment coordinators, have worked

hard (1) to communicate assessment knowledge to department heads and faculty and (2) to increase the involvement, understanding, and support of these critical personnel. SCHEV officials also have assumed that through the creation of department assessment planning committees and through the implementation of such planning, assessment coordinators and department heads have annually introduced increasingly larger segments of their faculty to outcomes assessment (Miller, 1989a).

Purpose and Objectives of the Study

Given that formal outcomes assessment has been required at all public colleges and universities in Virginia for the past three years, one would expect to find some evidence of the degree to which administrators and faculty have begun taking ownership of their institution's assessment activities. The purpose of this study, therefore, was to investigate administrator and faculty support for formal outcomes assessment at these public institutions. There were three major objectives related to this purpose: (1) to investigate administrator and faculty across-time involvements and understandings related to institutional/department assessment planning and department assessment activities; (2) to investigate administrator and faculty across-time perceptions of the importance of formal assessment; and (3) to identify

common factors which have influenced these involvements, understandings, and perceptions of importance.

Definitions

In order to better clarify the above purpose and objectives of this study, the following key terms and concepts have been more specifically defined for this study.

1. Formal outcomes assessment was defined as a process by which each Virginia public college and university would measure the effectiveness of curriculum and instruction in terms of actual student learning outcomes. The purpose of formal outcomes assessment was the improvement of learning through the improvement of curriculum and instruction. The findings of assessment activities and subsequent curriculum and instruction improvements were to be annually reported to the State Council of Higher Education for Virginia.
2. The State Council of Higher Education for Virginia (SCHEV) was defined as the state-level agency in charge of overseeing the implementation of formal outcomes assessment at Virginia public colleges and universities.
3. Administrator and faculty across-time support for formal outcomes assessment was defined to be the composite of the above involvements, understandings, and perceptions of importance as defined in the three objectives of this study.
4. Administrators and faculty were defined to be the following critical campus personnel: chief academic officers,

assessment coordinators, department heads, faculty-in-the-department, and faculty-in-general.

5. Types of public colleges and universities in Virginia were defined for this study along the lines of complexity of mission as defined only by programs of study offered and types of degrees awarded. As such, three types of institutions were identified: doctoral universities, comprehensive four-year colleges, and two-year community colleges. Richard Bland College was a two-year college, but its exclusively liberal arts programs of study more closely matched those of the comprehensive four-year colleges. It was, therefore, grouped with these four-year institutions rather than the two-year community colleges. Institutional size and rural verses urban locations were not factors investigated by this study.

6. Administrator and faculty "ownership" of formal outcomes assessment was defined as administrators and faculty conducting formal assessment activities and making subsequent curriculum and instructional improvements as a result of their perceiving that formal outcomes assessment was an integrally important part of their job regardless of external requirements or incentives.

CHAPTER TWO

Review of Related Literature

While a substantial amount of literature covering the history of assessment policies exists, literature covering the development of administrator and faculty involvement, understanding, and perceived importance related to assessment is scant. Within the past five years alone, hundreds of articles and books have addressed the policies of the current assessment movement in American higher education, and many of these have referred to Virginia's assessment policy. Administrator and faculty issues related to assessment, however, have not been addressed so thoroughly, and no empirical studies regarding these issues exist.

The focus of assessment literature, then, has been on what states have done to promote the examination of the content, processes, and products of higher education, not on how administrators and faculty have or have not adjusted to new state mandates. In essence, this literature has reported on what policy changes have occurred at the state level and how these changes have occurred. It has not reported on what changes in administrator and faculty support for assessment have occurred at the campus level nor how these changes have occurred. "Organizational Change" theory literature (i.e., how change/innovation diffuses throughout an organization) also does not address the topic of formal outcomes assessment,

but it does address "change" theory in educational organizations. Theorists have suggested a variety of basic "change" theory principles which would assist in developing the design and in explaining the findings of a study such as this one focusing on administrator and faculty assessment involvements, understandings, and perceptions of importance.

The Importance of Involvement and Understanding

A fundamental "change" theory principle is that long-term, positive change occurs when an organization's personnel possess a basic understanding of (1) the history of the issue at hand, (2) the planning that has occurred, (3) and the activities that have been proposed (Baldridge, 1971; Baldridge, 1978; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bennis, 1985; Clark, 1983, Deal, 1984; Dunn & Swierczek, 1978; Fullen, 1982; Lippett, Langseth, & Mossop, 1985; Timar & Kirp, 1987). When an organization's key personnel are professionals, such as are administrators and faculty in institutions of higher education, this fundamental principle is perceived to be even more critical. It is also theorized that positive change occurs more rapidly among professionals when their understanding is reinforced with involvements in planning and in conducting activities (Baldridge, 1978). Higher education faculty have traditionally demanded involvement in decision-making processes. They have also demanded substantial independence (i.e., academic freedom,

policing of their peers through tenure and other review processes), and higher education decision making has typically been by committee, often requiring time-consuming reviews of extensive information. (Brubacher & Rudy, 1976; Brubacher, 1982; Deal, 1984; Fantini, 1981; Hanson, 1985; Keller, 1986; Olswang & Lee, 1985; Westmeyer, 1985). The Virginia assessment mandate, however, was a top-down state mandate. Public college and university faculty in Virginia had little, if any, involvement in the development of the mandate (Aper, 1989; Ewell, 1989; Miller, 1989a). How much understanding they had of it when it appeared in 1986-87, as well as how much understanding they had of the history of its development, remains uncertain. Assessment literature has not addressed these specific understandings.

The Assessment Issue

During-college and after-college assessments were of major interest to officials and political leaders in many states during the 1970s and early 1980s. Questions about quality of instruction, grade inflation, rising costs of tuition and other ancillary costs, combined with doubt about higher education's self-regulatory capacity had often left state officials and political leaders with what they felt were few options: continue to ignore a rising chorus of complaints or insist on at least encouraging more visible self-regulatory behavior. Regional accrediting associations and especially

the Southern Association of Colleges and Schools (SACS) were also moving to create "institutional effectiveness" criteria (Aper, 1989; Bottum, 1988; Edgerton, 1990; El-Khawas, 1988; Ewell, 1987a; Ewell, 1989; Ewell, 1990; Ewell & Boyer, 1988; Folger & Harris, 1988; Hutchings & Marchese, 1990; Lawrence & Green, 1980; Marchese, 1987; McClenney, 1990; Criteria for Accreditation, 1984). In Virginia prior to the mid-1980s, public college and university presidents and chief academic officers were the only campus professionals who were involved in state-level discussions related to formal assessment. Through the General Professional Advisory Committee (GPAC) and the Instructional Programs Advisory Committee (IPAC) these campus leaders had been aware since at least the early 1980s that SCHEV officials were focusing on the assessment issue (Aper, 1989; Miller, 1989a). How much campus administrators and faculty understood about what was occurring nationally, regionally, and in Richmond regarding assessment at this time remains uncertain. How effective chief academic officers were in conveying an understanding of the history of this movement to their administrators and faculty remains uncertain.

How effective these same campus leaders were in later conveying an understanding of the specifics of the Virginia mandate also remains questionable. When the mandate appeared, national observers and SCHEV officials stressed that it represented a unique approach to formal assessment. Marked

by a strongly and clearly stated desire to encourage institutional review and reform without the use of budgetary penalties, Virginia's model emphasized institutional reporting to a central authority while preserving institutional control over processes, instruments, findings, and analyses. Virginia's decentralized approach to assessment was designed to stimulate innovative institution-specific reform rather than to demand conformity to uniform standards. This approach had the strong support of the Governor, the Secretary of Education, the Department of Planning and Budget, the State Council of Higher Education, and the General Assembly. Most of Virginia's public college and university presidents also appeared to accept this approach (Aper, 1989; Ewell, 1989; Ewell 1990; Ewell & Boyer, 1988; Hutchings & Marchese, 1990; Miller, 1989a). How well the uniqueness of this approach was understood or appreciated by campus administrators and faculty in 1987 remains uncertain. Assessment literature does not address this issue.

Assessment Planning

Once the assessment mandate went into effect, initial institutional assessment planning was the first major task. SCHEV officials encouraged broad-based administrator and faculty involvement in and understanding of this planning, but a communications breakdown and a delay in completing guidelines for developing these initial plans made this first

task even more difficult (Aper, 1989; Miller, 1989a). Through the first part of 1986, assessment seemed to be progressing as SCHEV desired. Through GPAC and IPAC meetings, SCHEV officials had updated presidents and chief academic officers regarding the coming assessment requirements. In mid-1986, unexpected SCHEV staffing changes resulted in a communications breakdown to campus leaders. The results were inaction by institutions and state-wide frustration in November when SCHEV announced its mid-1987 deadline for submission of initial assessment plans (Aper, 1989; Ewell & Boyer, 1988). Worse yet, by the beginning of 1987, SCHEV had not completed specific guidelines for developing such plans. These guidelines would not be officially available until April 1, 1987. SCHEV officials continually emphasized that administrator and faculty involvement in the development of institutional planning was critical to their eventual "ownership" of outcomes assessment (Miller, 1989a). By early spring 1987, one-day drive-in conferences and workshops were set up to assist those administrators and faculty who were chosen to develop and write their institution's initial plan. This comprehensive assessment plan was due on June 30, 1987, and just how much broad-based administrator and faculty involvement and understanding regarding this planning actually occurred remains uncertain.

Since 1987, SCHEV has periodically required revisions of these initial institutional assessment plans. Mid-year deadlines have remained but announcements of these deadlines have occurred well in advance. Institutions have had as much as 12 to 24 months' notice, and SCHEV officials have continued to encourage administrator and faculty involvement in and understanding of these revised plans (Ewell, 1990; Hutchings & Marchese, 1990; Miller, 1989b; Miller, 1990). One might assume that, by 1990, many more administrators and faculty would have become involved in institutional assessment planning.

One might also assume that, by 1990, many more department heads and faculty would have become involved in and better understand department assessment planning and department assessment activities. Institutional assessment findings, many of which have been departmental findings, have been reported to SCHEV since 1989. For the most part, SCHEV officials have been pleased with the growth of assessment activities at Virginia's public colleges and universities, but a key unanswered question remains (Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990; Miller 1989b; Miller 1990). How much of this growth in activities reflects substantial administrator and faculty involvement and understanding? No empirical evidence exists to answer this question.

The Importance of Leadership

A second fundamental "change" theory principle is that an organization's key leaders must assume the responsibility of leading their personnel through the change process until the change has become firmly established. This is especially true for educational organizations. New approaches to curriculum and instruction have appeared frequently in the last half of this century, and theorists contend that when change frequently occurs, the tendency of personnel is to view new change as only temporary and faddish (Baldridge & Deal, 1983; Clark, 1983; Deal, 1984; Fullen, 1982). One might assume that for many public college and university administrators and faculty in Virginia, the current assessment movement may have been perceived as just another "new" approach, a passing fad. National observers suggest that, in Virginia, campus leaders such as chief academic officers had to deal with sizeable resistance from their administrators and faculty in 1986-87. They further stress that these leaders' attitudes were critical to overcoming this resistance (Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990).

Understanding of the Organization

"Change" theorists suggest that change agents frequently have to face cynical subordinates who vigorously resist change. They argue that any organization's top leaders, and especially an educational organization's top leaders, must

first develop their own understanding of how change takes place within their institutions. They stress that understanding the history of the organization should be equal in importance to understanding the history of the proposed change and that both histories should reinforce the relevance of the change for both the organization and its personnel (Baldridge, 1978; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Clark, 1983; Parker, 1980; Weick, 1976; Zaltman, Duncan, & Holbek, 1973). Theorists contend that leaders such as chief academic officers need to remember that organizational change is always relative to a specific situation and to the unique circumstances, special conditions, and historical procedures and perspectives of a given organization. These leaders need to develop an understanding of critical organizational subsystems and processes that change must filter through in order to become established (Baldridge & Deal, 1975; Deal, 1984; Timar & Kirp, 1987). Well-intended change can be rejected or at best half-heartedly accepted by professional personnel when leaders such as college and university chief academic officers ignore the importance of such organizational characteristics as complexity of mission, depth of organizational structure, and traditions of shared governance and control (Baldridge & Deal, 1975; Bennis, 1985; Deal, 1984; Lippett, Langseth, & Mossop, 1985).

In other words, chief academic officers may be far removed from the administrators and faculty who must perceive of the change as an important part of their jobs if the change is to have serious impact. Theorist stress that leaders of complex organizations must realize that the complexity of the organization increases the complexity of the decision process and the multiple chains of command necessary to carry out a decision (Baldridge, 1978; Baldridge & Deal, 1975; Clark, 1983). Chief academic officers of complex institutions have to rely more heavily on mid-level administrators (i.e., deans of colleges, department heads, and program leaders) who may or may not share the same commitment to the change that their chief academic officers have. "Change" theorists observe that leaders such as chief academic officers at such complex colleges and universities must constantly emphasize their commitment to the change to their administrators and as much as possible to the typical teaching faculty member (Baldridge, 1978; Baldridge & Deal, 1975; Deal, 1984; Fullen, 1978; Timar & Kirp, 1987).

Leadership Strategies

Finally, theorists suggest that leaders such as chief academic officers at all types of colleges and universities need to be familiar with basic strategies that can foster support for educational change. These strategies involve (1) the use of shared leadership activities (i.e., administrators

and faculty co-chairing critical committees, or senior, highly respected faculty members serving as directors and coordinators for activities related to the change); (2) the use of program evaluation processes to encourage administrators and faculty to perceive that the change will impact on their program and/or individual performance evaluations; and (3) the use of research staff as a means of providing technical and clerical support for administrators and faculty who might perceive of the change as adding to their already full workloads (Abrell, 1979; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bennis & Nanus, 1985; Bryant, 1988; Conrad, 1978; Cope, 1981; Hage & Aiken, 1970; Hefferlin, 1969; McCabe, 1984; Perlman, 1988; Sieber, 1972; Shirley, 1982; Shirley, 1983; Walker, 1981).

In Virginia, how much the first two strategies have been used remains questionable. Shared leadership activities have probably been extensive, but there is no assessment literature to support or refute this estimate. How often the second strategy has been used to foster administrator and faculty support for formal assessment also remains uncertain. "Change" theory literature suggests that the use of evaluation processes is one of the most important ways that leaders can emphasize their commitment to the change. Often tied to evaluation processes are reward/punishment features such as salary, office assignments, release-time opportunities,

sabbaticals, clerical support, and research funding. Altering these and other similar structural features can encourage attitudinal changes (Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bennis, 1985; Deal, 1984; Fantini, 1981; Hanson, 1985; Herbst, 1982; Martorana & Kuhns, 1975; Timar & Kirp, 1987). It should be noted, however, that knowing which structural features to alter or manipulate is critical. Theorists contend that leaders wishing to generate support for a change in educational organizations need to be aware that while many factors can be altered or manipulated, many other factors are difficult to manipulate. The type of students an institution has, its mission and fundamental goals, and, in fact, the attitudes, opinions, and beliefs of its administrators and faculty are difficult to manipulate. Factors that can be more readily manipulated to encourage attitudinal change include evaluation and reward/sanction systems, administrative organizational structures, and personnel practices such as hiring, firing, and promotion policies (Baldridge & Deal, 1975; Deal, 1984; Hanson, 1985; Kotler & Murphy, 1981). Except for references to institutional incentive funding in Virginia (Ewell, 1989; Hutchings & Marchese, 1990), assessment literature has not specifically addressed the use of structural features to encourage campus administrator and faculty involvements, understandings, and perceptions of importance related to formal assessment.

In contrast, the third strategy identified earlier has been used extensively in Virginia. "Change" theory literature emphasizes that when possible, specialized, technical staff should be employed to assist professional personnel to meet the requirements of the change, especially if the change involves new, time-consuming tasks, new deadlines, new technologies, and/or new expertise. Costs may be an important factor in hiring new technical staff members, but as theorists argue, if coordinated assistance is seen as important to generating support for the change, then money must be found for hiring support staff (Abrell, 1979; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Conrad, 1978; Dill, 1979; Lippett, Langseth, & Mossop, 1985; Parker, 1980). SCHEV officials and chief academic officers recognized early on that implementing this basic "change" theory principle was critical to the eventual success of assessment in Virginia. By 1988-89, funds were made available for all public colleges and universities to hire assessment coordinators to assist administrators and faculty in the planning and conducting of assessment activities (Aper, 1989; Ewell, 1989; Miller, 1989a). These coordinators also assumed responsibility for writing the annual reports to SCHEV. It should be noted that eight out of the ten comprehensive colleges had assessment coordinators (or individuals from their staffs serving as assessment coordinators) as early as 1987-88.

The Importance of a Needs Analysis

A basic "change" theory principle is that before a decision on a change is announced, those in charge of developing the change should conduct a needs analysis to be able not only to develop the specifics of the change but to guide the change through the organization by providing explanation and justification to the professional personnel most directly involved. This principle is further based on the idea that decision makers should not rely on guesses or biases to estimate barriers to the change, nor should they adopt preconceived solutions merely because they are readily accessible. If outside consultants are employed, theorists argue that leaders must also be cognizant of preconceived solutions which have not taken into consideration unique characteristics of the organization. Ideally, expertise from throughout the organization should be involved in this stage, and surface problems should be probed to reveal underlying barriers to change (Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bennis, 1985; Deal, 1984; French & Bell, 1984; Newcombe & Conrad, 1981). For the Virginia assessment mandate, this needs analysis principle could apply to both state level and campus level decision makers.

State Level

The State Council of Higher Education for Virginia (SCHEV) had involved public college and university presidents

and chief academic officers in on-going discussions related to the current assessment movement since at least the early 1980s. National and regional experts on formal assessment of higher education were consulted. The Southern Association of Colleges and Schools (SACS) was moving in the direction of formal assessment with its "institutional effectiveness" criteria (Folger & Harris, 1988). State legislators, the Governor, the Secretary of Education, and other state officials were supportive of the decision to require formal outcomes assessment, but their support was apparently not based on a Virginia-specific needs analysis. In fact, a state-level needs analysis was not conducted, and the decision to mandate formal assessment in Virginia was predominately political (Aper, 1989; Ewell, 1988; Ewell, 1989; Hutchings & Marchese, 1990). Up through 1986-87 then, decision makers in Richmond studied the solutions related to assessment in higher education in Virginia and developed the Virginia assessment model (Aper, 1989; Ewell, 1989). When this model and its mandate were widely announced in 1986-87, were the findings of any needs analysis reported to institutions and, in turn, to the administrators and faculty who were encouraged to support this change? The answer appears to be no (Ewell, 1989; Hutchings & Marchese, 1990). While national and state observers have frequently commented on the Virginia model, no one has specifically commented on the amount of explanation

and justification state-level decision makers provided to the campus administrators and faculty who were to assume responsibility for carrying out the mandate.

Campus Level

When the mandate officially reached the campuses in 1986-87, the first task of administrators and faculty from each institution was to develop an initial institutional assessment plan. As has been discussed previously, difficulties arose which delayed the development of these plans until spring and early summer 1987 (SCHEV staffing changes and plan guideline delays). These plans were due June 30, 1987. Were chief academic officers, other administrators, and faculty able to conduct institution-specific needs analyses prior to developing these institutional assessment plans?

Other questions about conducting a needs analysis prior to attempting to produce a change apply to both the state and campus levels. Were preconceived solutions which did not take into consideration the unique characteristics of Virginia higher education (or individual institutions) employed because they were readily accessible? Assessment literature suggests that the Virginia model attempted to take into consideration the characteristics of Virginia higher education (Aper, 1989; Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990), but this literature is silent regarding how many institutions merely reached out for packaged assessment approaches. Did

administrators and faculty question the need for the mandate, and did their chief academic officers provide needs analysis findings that were conducted by either state officials, outside consults, or the institutions themselves? Did state decision makers prior to the mandate do a needs analysis to determine more accurately probable barriers to change and approaches to deal with those barriers? Did campus decision makers do the same? In essence, the most recent literature on assessment in Virginia suggests that administrators and faculty questioned the basis of the mandate and questioned their own institution's initial assessment planning (Hutchings & Marchese, 1990).

"Change" theory literature also suggests that while a change might be desirable, those seeking to generate support for it must be certain they have measured its political and economic feasibility. If political opposition from within is organized and/or strong, theorists argue that special interest groups and coalitions supporting the change need to be mobilized early (Abrell, 1979; Baldridge & Deal, 1975; Deal, 1984; Hanson, 1985; Keller, 1986; Zaltman, Duncan, & Holbek, 1973). Theorists further observe that costs must be calculated, especially personnel time, talent, and expertise. If existing resources need to be reallocated, those seeking to generate support need to provide explanations and seek ways to calm fears involving job security and program integrity

(Baldridge, 1978; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Clark, 1983; French & Bell, 1984; McCabe, 1984; Walker, 1981). Did state and campus leaders in Virginia consider these concerns? Assessment literature suggests that at least state officials probably considered many of these concerns (Aper, 1989; Ewell, 1989; Ewell, 1990; Ewell & Boyer, 1988; Hutchings & Marchese, 1990). How much campus leaders considered these concerns remains uncertain. Did state and campus leaders mobilize special interest groups and coalitions to provide explanations and seek ways to calm administrator and faculty fears and frustrations? Events suggest the answer is yes. For example, SCHEV officials in conjunction with the newly formed Virginia Assessment Group (a coalition of campus assessment leaders) organized and held the first annual state-wide assessment conference in December 1987 (Miller, 1989a). Assessment literature, however, does not address how much broad-based administrator and faculty support was fostered by this coalition or this initial conference. It also does not address how much support subsequent state-wide conferences and workshops have fostered.

The Importance of External Support

Another basic "change" theory principle is that change within an organization will occur when it is supported by both internal and external forces. For educational organizations, theorists contend that institutional leaders are the primary

internal forces; outside governing and/or reviewing agencies and organizations, as well as lobbying groups, are the primary external forces. For educational organizations, external forces are often the sources of innovation and change (i.e., new ideas, procedures and activities), and whether or not external forces initiate the change, theorists contend that they must support such change if an organization's personnel are to see the broader importance of the change.

"Change" theory literature suggests that such a broader perspective is not always necessary for internal support to develop, but if external forces control sensitive organizational resources (i.e., normal budget allocations, incentive money, number of faculty positions, number of students, organizational prestige, accreditation status), then external support may be critical to developing internal support. Theorists stress that external reward/punishment incentives may be powerful and may be necessary to sustain momentum for change during the early and middle stages of the change (Abrell, 1979; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bryant, 1988; Clark, 1983; Fullen, 1982, Lindquist, 1974; Miller, 1983; Newcombe & Conrad, 1981). As discussed earlier, in Virginia at least two forces external to public colleges and universities have played important roles in developing formal assessment requirements: the

Southern Association of Colleges and Schools (SACS) and the State Council of Higher Education for Virginia (SCHEV).

From 1984, SACS has required institutions seeking accreditation or reaccreditation to conduct periodic "institutional effectiveness" studies as a major part of their institution's overall self-study. Since institutions seek SACS reaccreditation only once every ten years, one might assume that SACS requirements take on heightened significance in the two or three years prior to the SACS Visitation Committee's appearance on campus. While SACS has been consistently strong in its support for "institutional effectiveness" studies since 1984 (Ewell, 1990; Folger & Harris, 1988), how much influence it has had on Virginia administrator and faculty involvements, understandings, and perceptions of importance related to formal assessment remains uncertain.

The second external force for Virginia public colleges and universities has been SCHEV. From 1986-87, SCHEV officials have assumed the responsibility for verifying that Virginia public colleges and universities have complied with the requirements of formal assessment (Aper, 1989; Hutchings & Marchese, 1990). In contrast to SACS, SCHEV's time frames have been much more immediate. As national and state observers have concluded, from approving each institution's initial assessment plan in summer 1987 to requiring annual

status reports and biannual comprehensive reports, SCHEV officials have been highly involved in supporting institutional formal assessment efforts. Their involvements with annual state-wide workshops and conferences have heightened their visibility among administrators and faculty, and perhaps foremost, their control of incentive funds tied to institutional assessment efforts has been perceived as an important, continuing external influence (Aper, 1989; El-Khawas, 1988; Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990). Just how much SCHEV's involvements have fostered campus administrator and faculty support for formal assessment remains uncertain. Undoubtedly, both SACS and SCHEV played key roles in initiating formal assessment activities at Virginia's public colleges and universities, but how much they have influenced administrator and faculty involvements, understandings, and perceptions of importance regarding formal assessment remains uncertain.

The Importance of Demonstrating the Worth of the Change

One final basic "change" theory principle which would seem to apply to this study is that those seeking to generate support for a change must show that such a change is effective; that is, they must demonstrate that it produces the desired benefit(s) and/or solves the persistent problem(s) identified in the initial needs analysis. In educational

organizations, for example, the change may be designed to produce new levels of administrative effectiveness, student satisfaction, teaching effectiveness, and/or student learning. Theorists point out that even preliminary results supporting the effectiveness of the change need to be disseminated to all parties. Administrators and faculty need to be informed about a variety of issues: (1) whether their initial efforts have been successful; (2) whether the change has the potential to provide lasting benefits; (3) whether it has the potential to be worth the time, money, and effort that has been directed to it; and (4) whether it can be integrated into the structure of the entire institution or whether it is highly dependent on individual personalities or organizational sub units. Many times the proven effectiveness of a change is the critical factor that generates subsequent support and insures the permanence of the change (Baldridge, 1978; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bennis, 1985; Deal, 1984; Fullen, 1982; Keller, 1986; McCabe, 1984; Walker, 1981). How well public colleges and universities in Virginia have addressed these "worth" issues and how much these issues have influenced administrator and faculty involvements, understandings, and perceptions of importance related to formal assessment both in Virginia and other states remains uncertain.

The Importance of a Concerted Effort

In essence, encouraging and guiding change within an educational organization (i.e., generating administrator and faculty support) does not involve secret formulas or tricks. Baldridge contends that support for change can be generated within the most "entrenched professional groups," even the most "privileged oligarchy that enriches itself at the expense of clients, all the while cloaking self-interest under the slogan of 'service to mankind,'" (1978, pp. 378-379). He and other theorists argue that support can be generated even for highly controversial change if decision makers have a sound basis for what should be changed, an understanding of organizational structural features and change strategies, a concentration of internal and external efforts, and a desire to communicate throughout the organization and throughout the entire change process, especially as effectiveness of the change becomes apparent (Abrell, 1979; Baldridge, 1978; Baldridge & Deal, 1975; Baldridge & Deal, 1983; Bryant, 1988; Clark, 1983; Deal, 1984; Dill, 1979; French & Bell, 1984; Hanson, 1985; Lippett, Langseth, & Mossop, 1985; Parker, 1980; Perlman, 1988; Sieber, 1972; Shirley, 1983; Walker, 1981).

In Virginia, state officials appeared to develop their top-down mandated assessment model based on the foreign policy catch phrase of the 1980s: "Trust but Verify." Ewell (1989) observed that Virginia's assessment mandate established a set

of broad, flexible, and unambiguous policies and guidelines. Virginia's public colleges and universities have complied with these policies and guidelines using a wide range of accepted activities and reporting practices. Chief academic officers and campus assessment coordinators have worked closely with SCHEV officials thus far, and their concerted efforts have been initially successful (Aper, 1989; Ewell, 1989; Ewell, 1990; Hutchings & Marchese, 1990; Miller, 1989b; Miller, 1990). Numerous national and regional figures as well as SCHEV officials have emphasized, however, that administrator and faculty support for formal assessment is critical to long-term success (Ewell & Boyer, 1988; Hutchings & Marchese, 1990; Miller, 1989a; Miller, 1989b; Miller, 1990). The problem is that neither national, regional, nor state empirical research activities have been conducted to determine just how much broad-based involvement, understanding, and perceived importance regarding formal assessment presently exists or how these three elements have or have not been generated. In Virginia, this study is the first wide-scale empirical research study to investigate these issues.

CHAPTER THREE

Research Design

The purpose of this study was to investigate administrator and faculty support for formal assessment at Virginia public colleges and universities. To accomplish this purpose, this study was designed to gather administrator and faculty data related to three major objectives:

(1) to identify past and present levels of involvement in and understanding of institutional/department assessment planning and department assessment activities;

(2) to identify past, present, and future levels of perceived importance related to formal assessment; and

(3) to identify common factors which have influenced these involvements, understandings, and perceptions of importance.

The pervasiveness of administrator and faculty across-time support was defined for this study to be the composite of the above involvements, understandings, and perceptions of importance. Administrators and faculty were defined to be the following critical campus personnel: chief academic officers, assessment coordinators, department heads, faculty-in-the-department, and faculty-in-general.

Underlying Assumptions Guiding the Design of this Study

Four basic underlying assumptions guided the design of this study. First, it was assumed that higher involvements in and understandings of institutional/department assessment

planning and department assessment activities would be accompanied by higher perceived importance for formal assessment. Second, it was assumed that participants of this study needed to have been involved in assessment planning or in assessment activities for at least one year in order to determine the perceived importance that they themselves and that various other groups of critical campus personnel had given to and were expected to give to formal assessment. Third, it was assumed that in order to measure accurately the intrinsic importance of assessment, a hypothetical future condition had to be offered to participants of this study. This hypothetical condition was worded as follows:

> Suppose by 1996 SCHEV no longer required official outcomes assessment. How important would the following people at your institution probably perceive formal outcomes assessment to be?

It should be noted that SCHEV officials have never said or implied that assessment requirements would ever be relaxed. Finally, it was assumed that a variety of campus and non-campus factors have influenced administrator and faculty support for assessment.

Instrumentation

Two data collection strategies were used. The first strategy involved two versions of a questionnaire designed primarily to collect quantitative data regarding across-time levels of involvement, understanding, and perceived

importance. Version one of this questionnaire was designed specifically for chief academic officers and assessment coordinators; version two was designed for department heads and faculty. The second data collection strategy involved selected follow-up interviews designed to identify and explore critical factors which have influenced administrator and faculty support for formal outcomes assessment.

The Questionnaires

Both versions of this survey addressed five broad areas (Appendices 1 and 2). The first four areas were designed primarily to collect quantitative data. The first area focused on general information relating to a respondent's length of employment and primary responsibility (items 1-2 on each version). The second area focused on perceptions of past and present respondent involvement in institutional/ department assessment planning and department assessment activities (item 3 on version one and items 3, 4, 6, and 8 on version two). The third area focused on perceptions of past and present respondent understanding of institutional/ department assessment planning and department assessment activities (item 4 on version one and items 5, 7, and 9 on version two). The fourth area focused on past, present, and future respondent and group perceptions of the importance of formal outcomes assessment (items 5-7 on version one and items 10-12 on version two). The final area focused on qualitative

information related to critical factors which have influenced perceptions of importance. A question about other general comments regarding outcomes assessment and a question asking whether participants wished to receive a summary of this study's findings were also elements of this final area (items 8-10 on version one and items 13-15 on version two).

Both versions of this questionnaire primarily used two types of response scales, each with open-ended comment opportunities. The first type of response scale was used for involvement and understanding items (items 3 and 4 on version one and items 4-8 on version two) and was composed of 0 = None; 1 = Low; 2 = Moderate; 3 = High. The second type of response scale was used for perceptions of importance questions (items 5-7 on version one and items 10-12 on version two) and was composed of a range from 1 to 10 indicating low to high, respectively. A panel of two-year and four-year college and university outcomes assessment coordinators, administrators, and faculty were asked to review all questionnaire items for content importance, clarity of expression, ease of response, content validity, and reliability. In addition, field tests were conducted.

This survey strategy provided an efficient method of measuring a large statewide sample. Such surveys have proven to be an effective means of providing adequately detailed demographic and attitudinal data (Kerlinger, 1973). Surveys

have the potential to pinpoint quickly areas which should be addressed more specifically by follow-up research. The use of a quantitative strategy followed by a qualitative strategy has served to provide a desirable quantitative base for qualitative research (Campbell, 1978). The disadvantages of this approach have been well documented and involve such concerns as low return rates; biases of self-selection, item, recall, and emotion; and errors of measurement (Crocker & Algina, 1986; Cunningham, 1986; Gay, 1985).

The Interviews

Follow-up interviews were conducted at six of the thirty-seven public institutions involved in this study. These interviews addressed four broad areas (Appendix 3). The first area focused on general information relating to specific institutions and interviewees (item 1). The second area focused on how an individual had been encouraged to regard formal outcomes assessment as an important part of his or her job (items 2, 3, and 4). The third area focused on institutional/department assessment activities, procedures, and measurement instruments (items 5-12). Questions were asked relative to what activities, procedures, and instruments have been used; how they came into use; how well they have been supported by administrators and faculty as being workable, reliable, and valid; how much of an impact resulting data have had on curriculum improvement; and how much

influence they have had on perceptions of the importance of outcomes assessment. The final area focused on institutional/ department activities which have been or were being designed to sustain or enhance existing perceptions of importance (items 13 and 14). This final area also addressed any additional comments on assessment which an interviewee might have wished to offer (item 15).

The interview strategy provided the interviewer with opportunities to probe more deeply and specifically into situations which had existed at those institutions where formal assessment had been viewed by its administrators and faculty as either very negative or very positive. Institutional means scores related to administrator and faculty perceived importance for assessment for 1990 were developed by combining scores from item 6 on version one with scores from item 11 on version two. The lowest and highest institutional means scores for each of the three types of public institutions were identified. These six public colleges and universities, therefore, represented the extremes from each of the following three categories: doctoral universities, comprehensive colleges, and community colleges.

The interview questions were open-ended. Such one-on-one probes focused on the hows and whys of administrator and faculty perceptions of the importance of assessment. Beginning with a set of questions, the interviewer had the

opportunity to ask follow-up questions to insure greater accuracy, clarity, and understanding. Interviewees were encouraged to explore freely and in detail their knowledge and feelings about assessment at their institutions and elsewhere. When unusually restrictive bounds have not imposed, such interviewing has allowed for a more flexible, comprehensive, detailed, insightful analysis (Helmstadter, 1970; Majchrzak, 1984; Measor, 1985; Spradley, 1979).

A panel of two-year and four-year administrators, assessment coordinators, and faculty were asked to review each interview question for content importance, clarity of expression, and potential for generating non-ambiguous responses. Their goal was to determine interview questions that would provide the most relevant information, that would create efficient and effective interview sessions, and that would allow for cross validation of interview data with questionnaire data. Since multiple interpretations are possible in qualitative research, this comparison of data was seen as critical and has long been advocated by many qualitative methodologists. These methodologists have argued that validation in qualitative research involves necessary, time-consuming, and careful cross-checking of collected data to insure accuracy of interpretation. The goal has always been twofold: (1) to identify consistent facts, impressions, and theories; and (2) to develop reasonable, intelligent,

logical, coherent, and verifiable interpretations (Campbell, 1978; Carr, 1983; Guba & Lincoln, 1981; Kirk and Miller, 1986; Krathwohl, 1985; Laudan, 1977; Measor, 1985; Miles & Huberman, 1984; Patton, 1980; Phillips, 1987; Saran, 1985).

Participants

The participants for this study were full-time Virginia public college and university administrators and faculty who were employed during the 1989-90 academic year. All Virginia public college and university assessment coordinators and/or chief academic officers were asked to approve the participation of their administrators and faculty (Appendices 4 and 5). They were also asked to provide a list of their department heads and faculty whose programs had been involved in assessment activities for at least one year. Approvals for participation and lists of names were received from 37 (95%) of the 39 public colleges and universities. The number of administrators and faculty from each institution that agreed to participate in this study varied from six to over 300 (Appendix 6). All identified individuals from each school, with the exception of the institution that provided over 300 names, received a questionnaire. From the over 300 names provided by that one institution, 102 names were randomly selected to participate. In total, 1,101 administrators and faculty received questionnaires.

After questionnaires were returned, 74 individuals from six schools were subsequently selected for follow-up interviews. Interviewees were selected on the basis of their perceptions of past, present, and future importance of formal assessment. Individuals representing a wide range of perceptions were interviewed. Their questionnaire responses suggested that they could provide substantive information about the development of perceptions of the importance of assessment on their campuses.

Although chief academic officers, department heads, and faculty were the main focal points of this study, assessment coordinators also completed the questionnaire, the main purpose of which was to provide an important comparison group. It was assumed that assessment coordinators would have the highest involvements, understandings, and perceptions of importance regarding formal assessment due to the fact that outcomes assessment had been the emphasis of their professional activities.

Procedures

Both data collection strategies of this study were completed within a three-month period. The first mailing of the questionnaire occurred on April 2, 1990. A second mailing to non-responders occurred on May 2, 1990. Follow-up interviews were conducted throughout May and June 1990.

Interviews were conducted on a one-on-one basis in person or by telephone.

Research Questions and Analyses of Data

This study's three major objectives were embodied in the following two research questions. Following each question are the data analysis procedures that were employed to generate evidence to answer each question.

Research Question #1

> What are past, present, and predicted perceptions of involvement, understanding, and importance related to formal assessment within and across critical personnel groups (i.e., chief academic officers, assessment coordinators, department heads, and faculty) and within and across types of Virginia public institutions of higher education (i.e., doctoral universities, comprehensive colleges, and community colleges)?

To answer this question, quantitative data generated from the questionnaire were arrayed in frequency tables. Tables of means and standard deviations for the dependent variables were developed, and graphs of means were also developed to examine possible trends. Finally, Three-Way Analysis of Variance with Repeated Measures was employed to examine YEAR main effect data as well as TYPE * YEAR, PRIMARY RESPONSIBILITY * YEAR, and TYPE * PRIMARY RESPONSIBILITY * YEAR interaction effect data.

Research Question #2

> What common factors (campus and non-campus) across types of institutions and critical personnel groups have influenced administrator and faculty involvements, understandings, and perceptions of importance regarding formal assessment at Virginia public colleges and universities?

To answer this question, an operational definition for the term "common factor" was developed. Then the qualitative data from the interviews and questionnaires were summarized, categorized, and cross-referenced under appropriate subsections. Finally, these data were cross-validated with the questionnaire quantitative data to determine consistent facts, impressions, and common factors.

CHAPTER FOUR

Results and Discussion

Data addressing administrator and faculty support for assessment and the common factors influencing this support were collected from individuals from all 37 participating public colleges and universities. These institutions included six doctoral universities, eight comprehensive colleges, and 23 community colleges.

Demographic Data

For the first part of this study, a total of 1,101 questionnaires were distributed to chief academic officers, assessment coordinators, department heads, and faculty; 810 questionnaires were returned (73.6%). The number and percent of returned questionnaires by institution are found in Appendix 6; percentages ranged from 64.3% to 87.5%. The frequencies and percentages of responses to each item on this questionnaire are summarized in Appendix 7. Respondents included 27 (3%) chief academic officers, 31 (4%) assessment coordinators, 216 (27%) department heads, and 536 (66%) faculty. The majority of all 810 respondents were senior administrators and faculty (60% had been employed at their institutions for at least ten years; 38% had been employed for 16 or more years). The majority of the 752 department head and faculty respondents were from departments that by 1990 had been involved in both the planning (72%) and conducting (71%)

of departmental assessment activities. Finally, a majority (52%) stated that curriculum improvement had occurred as a result of assessment findings. In essence, the respondents to the first part of this study had sufficient assessment experience in order to give estimates of administrator and faculty past, present, and future involvements, understandings, and perceived importance related to formal assessment on their campuses.

For the second part of this study, a total of 74 respondents were identified for follow-up interviews. Sixty-seven (67) respondents were interviewed.

Analysis of Variance Findings

The first research question concerned the examination of dependent variables related to administrator and faculty past and present involvements and understandings and past, present, and future perceptions of importance regarding formal assessment. The independent variables of interest were years, critical groups of personnel, and types of institutions. It should be remembered that perceptions of importance for 1996 involved a hypothetical condition (i.e., how would perceived importance be affected if SCHEV requirements were relaxed). It should also be remembered that SCHEV officials have never said or implied that assessment requirements would ever be relaxed and that this hypothetical condition was offered to respondents of this study in an attempt to measure how

intrinsically important they perceived assessment might be in the future.

Involvement, understanding, and perceived importance dependent variables were of two broad types. COMMON dependent variables were those variables found on both versions of the questionnaire; all 810 respondents addressed these COMMON variables. ADDITIONAL dependent variables were those found only on the version distributed to department heads and faculty. Of the four personnel groups, the two smallest groups (chief academic officers and assessment coordinators) were primarily responsible for the initial planning and development of institution-wide assessment. For purposes of data analyses of the COMMON variables, these two smaller groups were combined into one category called administrators. COMMON dependent variables included the following:

1. INVOLVEMENT--Institutional Assessment Planning
   1987 1990

2. UNDERSTANDING--Institutional Assessment Plan
   1987 1990

3. IMPORTANCE--Chief Academic Officer
   1987 1990 1996

4. IMPORTANCE--Assessment Coordinator
   1987 1990 1996

5. IMPORTANCE--Department Head
   1987 1990 1996

6. IMPORTANCE--Faculty-in-General
   1987 1990 1996

ADDITIONAL dependent variables included the following:

1. INVOLVEMENT--Department Assessment Planning
   1987 1990

2. UNDERSTANDING--Department Assessment Planning
   1987 1990

3. INVOLVEMENT--Department Assessment Activities
   1987 1990

4. UNDERSTANDING--Department Assessment Activities
   1987 1990

5. IMPORTANCE--Faculty-in-the-Department
   1987 1990 1996

6. IMPORTANCE--Respondent
   1987 1990 1996

All quantitative data were analyzed using the Statistical Analysis System (SAS Version 5.128). For all dependent variables, within-YEAR results have been presented first, followed by across-YEAR results, followed by brief discussions. Since the focus of the quantitative portion of this study was on across-time results, the ANOVA design was a three-factor within-subjects design with repeated measures on one factor:

1) TYPE of Institution
   DOCTORAL universities
   COMPREHENSIVE colleges
   COMMUNITY colleges

(2) PRIMARY RESPONSIBILITY of Respondent
   ADMINISTRATOR
   DEPARTMENT HEAD
   FACULTY

(3) YEAR (the repeated measure)
   1987 1990 1996

The hypotheses of interest, consequently, were the within-subjects effects: the YEAR effects and the interactions with the YEAR variable--TYPE * YEAR; PRIMARY RESPONSIBILITY * YEAR; AND TYPE * PRIMARY RESPONSIBILITY * YEAR. For all significant YEAR main effects and two-way and three-way interaction effects with YEAR ($p < .05$), means and standard deviation tables and graphs of means have been provided within this chapter. Summary ANOVA tables and Q-Value (Tukey/Krammer Post Hoc Procedure) tables have been provided in Appendices 8-31.

COMMON Dependent Variables

Summary ANOVA tables and post hoc testing results for all COMMON dependent variable significant YEAR main effects and two-way and three-way interaction effects with the YEAR variable are found in Appendices 8-19. All 810 respondents addressed these COMMON variables.

YEAR Main Effect Analyses

The YEAR main effect was statistically significant ($p < .01$) for each of the six analyses. The means and standard deviations for each significant YEAR main effect are found in Table 1; these means are plotted in Figures 1a-b. Post hoc testing results are found in Appendix 9.

INVOLVEMENT and UNDERSTANDING Variables

Within YEAR (Figure 1a) for 1987 and 1990, understanding of institutional assessment plans was substantially higher than involvement in the development of these plans. Across

TABLE 1

MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

	1987 mean st.d.	1990 mean st.d.	1996 mean st.d.
Dependent Variables:			
INVOLVEMENT--INSTITUTIONAL PLAN	1.246 (1.165)	1.892 (1.047)	
UNDERSTANDING--INSTITUTIONAL PLAN	1.518 (1.083)	2.272 (0.799)	
IMPORTANCE--CHIEF ACADEMIC OFFICER	6.951 (2.805)	8.245 (1.933)	6.219 (2.839)
IMPORTANCE--ASSESSMENT COORDINATOR	7.983 (2.372)	9.016 (1.457)	7.326 (2.744)
IMPORTANCE--DEPARTMENT HEAD	5.426 (2.652)	7.093 (2.313)	5.388 (2.721)
IMPORTANCE--FACULTY-IN-GENERAL	3.654 (2.032)	5.168 (2.148)	4.035 (2.311)

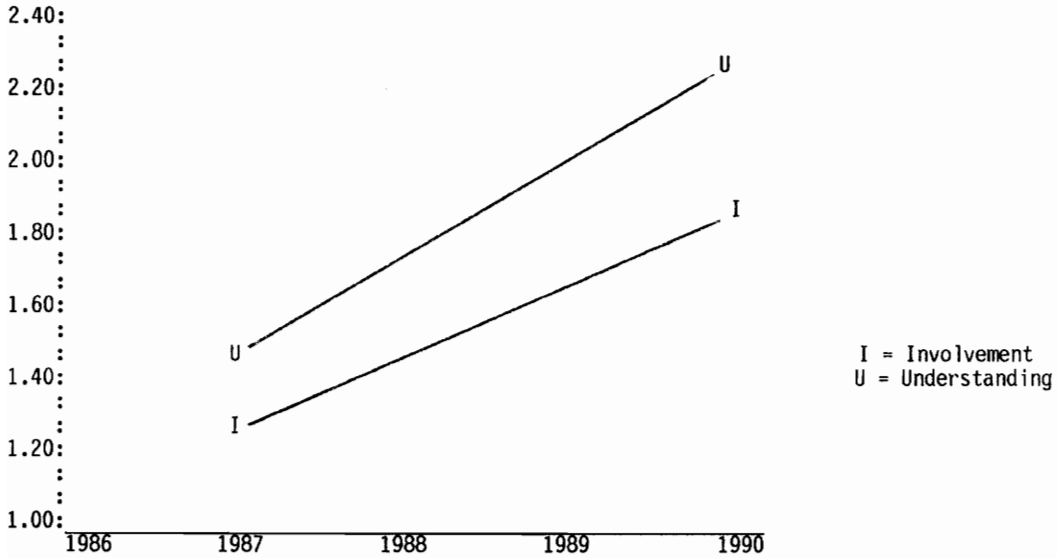

FIGURE 1a. GRAPH OF MEANS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
COMMON DEPENDENT VARIABLES: INVOLVEMENT--INSTITUTIONAL PLAN
UNDERSTANDING--INSTITUTIONAL PLAN

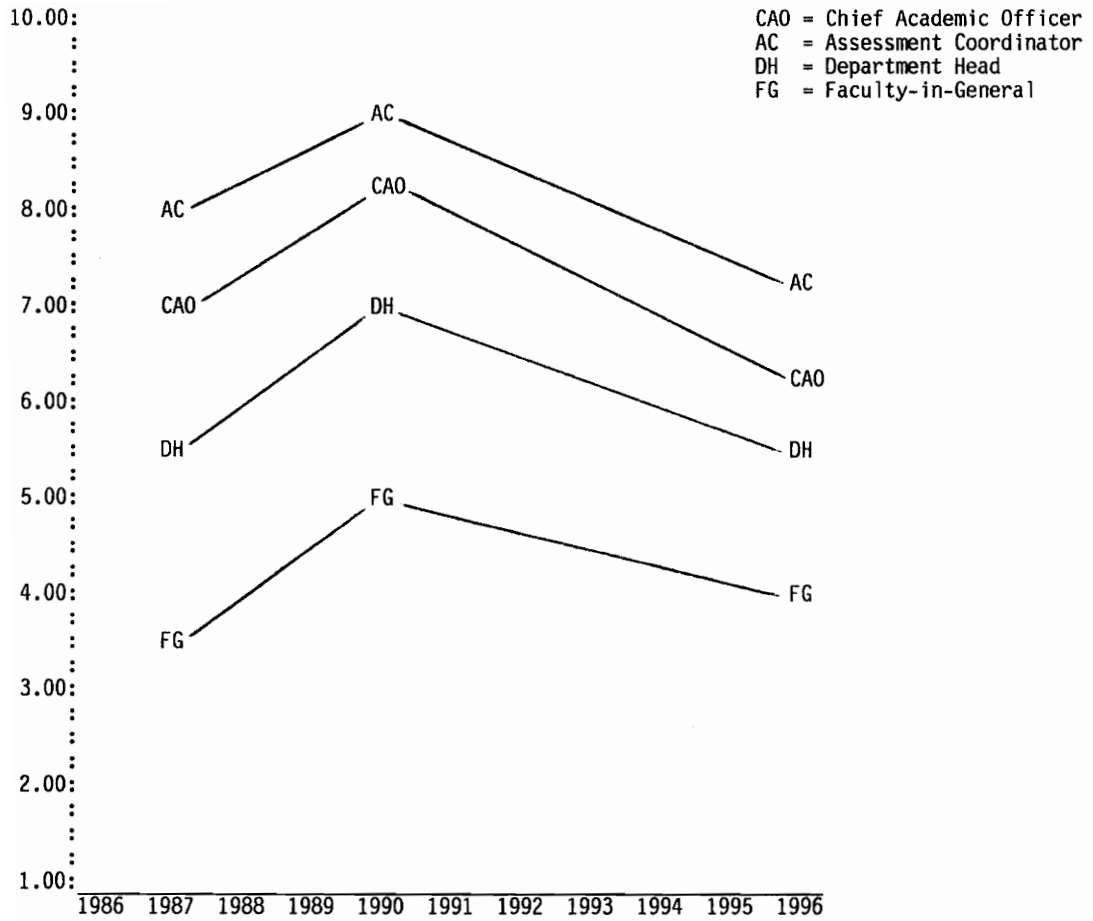

FIGURE 1b. GRAPH OF MEANS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
COMMON DEPENDENT VARIABLES: IMPORTANCE--VARIOUS CAMPUS GROUPS

YEAR (Figure 1a and Appendices 9a and 9b), 1990 means for involvement and understanding (1.892; 2.272) were significantly higher than 1987 means (1.246; 1.518). These data suggest that campus efforts to bring more administrators and faculty into the mainstream of the assessment process have produced significant, positive results.

IMPORTANCE Variables

Within YEAR (Figure 1b) for each of the three years, assessment coordinator support and chief academic officer support were substantially higher than department head support and faculty-in-general support. Across YEAR (Figure 1b and Appendix 9c-f) for all four variables, 1990 means (9.016; 8.245; 7.016; 5.168) were significantly higher than 1987 means (7.983; 6.951; 5.426; 3.654); 1996 means (7.326; 6.219; 5.388; 4.035) were significantly lower than 1990 means; and 1996-1987 means comparisons produced varied results. The 1996 chief academic officer and assessment coordinator means (6.219; 7.326) were significantly lower than their corresponding 1987 means (6.951; 7.983); the 1996 department head mean (5.388) was not significantly lower than its corresponding 1987 mean (5.426); but the 1996 faculty-in-general mean (4.035) was significantly higher than its corresponding 1987 mean (3.654).

These data reveal that, across time, assessment coordinator perceived importance for assessment was consistently the highest. Chief academic officer perceived

importance was the second highest. Department head perceived importance was substantially lower than the perceived importance of chief academic officers. Faculty-in-general perceived importance was substantially the lowest for all four dependent importance variables.

These involvement, understanding, and importance data reflect the fact that assessment coordinators and chief academic officers from 1987 onward were more involved in planning assessment programs and thus better understood the process than did department heads and faculty-in-general. Further, significant increases in perceived importance for formal assessment from 1987 to 1990 perhaps have been substantially the result of SCHEV's persistent emphasis of the assessment mandate. Also illustrated is the fact that, if SCHEV's emphasis does not continue, the perceived importance of formal assessment will wane. Increases from 1987 to 1990 and perceived declines for 1996 were recurring patterns throughout all of the IMPORTANCE data that have been presented in subsequent sections of this chapter.

TYPE * YEAR Interaction Analyses

The TYPE * YEAR interaction effect was statistically significant ($p < .05$) for five of the six dependent variables. It was not statistically significant for the dependent variable related to department head perceived importance. The means and standard deviations for the significant interactions

are found in Table 2; these means are plotted in Figures 2a-e. Post hoc testing results are found in Appendices 10 and 11.

INVOLVEMENT and UNDERSTANDING Variables

For both involvement in and understanding of institutional assessment planning, the pattern of interaction was the same. Within YEAR (Figures 2a and 2b; Appendix 10a-d) for 1987, COMPREHENSIVE means (1.588 and 1.829) were significantly higher than COMMUNITY means (1.264 and 1.528), which, in turn, were significantly higher than DOCTORAL means (1.074 and 1.362). For 1990, no significant means differences were found among the three types of institutions (INVOLVEMENT: 1.818; 1.941; 1.936; UNDERSTANDING: 2.245; 2.370; 2.283). Across YEAR (Figures 2a and 2b; Appendix 11a-f) for all three types of institutions, 1990 means (DOCTORAL: 1.818; 2.245; COMPREHENSIVE: 1.941; 2.370; COMMUNITY: 1.936; 2.283) were significantly higher than 1987 means (DOCTORAL: 1.074; 1.362; COMPREHENSIVE: 1.588; 1.829; COMMUNITY: 1.264; 1.528).

These data reveal that, across time, COMPREHENSIVE respondent perceptions of their involvement in and understanding of institutional assessment planning were the highest. Both COMMUNITY and DOCTORAL respondent perceptions were significantly lower than COMPREHENSIVE when assessment began, but COMMUNITY and DOCTORAL perceptions increased significantly by 1990. One possible explanation why COMPREHENSIVE respondents perceived they had significantly

TABLE 2
MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

	1987 mean st.d.	1990 mean st.d.	1996 mean st.d.
Dependent Variables:			
INVOLVEMENT--INSTITUTIONAL PLAN			
Doctoral	1.074 (1.126)	1.818 (1.073)	
Comprehensive	1.588 (1.167)	1.941 (1.028)	
Community	1.264 (1.167)	1.936 (1.032)	
UNDERSTANDING--INSTITUTIONAL PLAN			
Doctoral	1.362 (1.129)	2.245 (0.837)	
Comprehensive	1.829 (1.003)	2.370 (0.711)	
Community	1.528 (1.059)	2.283 (0.793)	
IMPORTANCE--CHIEF ACADEMIC OFFICER			
Doctoral	5.956 (2.877)	7.469 (2.212)	5.234 (2.698)
Comprehensive	8.412 (2.156)	8.906 (1.593)	6.941 (2.556)
Community	6.952 (2.757)	8.488 (1.725)	6.525 (2.847)
IMPORTANCE--ASSESSMENT COORDINATOR			
Doctoral	7.521 (2.447)	8.716 (1.700)	6.900 (2.745)
Comprehensive	8.876 (1.551)	9.087 (1.359)	7.882 (2.245)
Community	7.919 (2.486)	9.201 (1.293)	7.450 (2.835)
IMPORTANCE--FACULTY-IN-GENERAL			
Doctoral	3.206 (1.809)	4.410 (1.944)	3.374 (1.946)
Comprehensive	3.632 (1.949)	5.090 (2.109)	3.925 (2.266)
Community	3.891 (2.137)	5.641 (2.141)	4.458 (2.425)

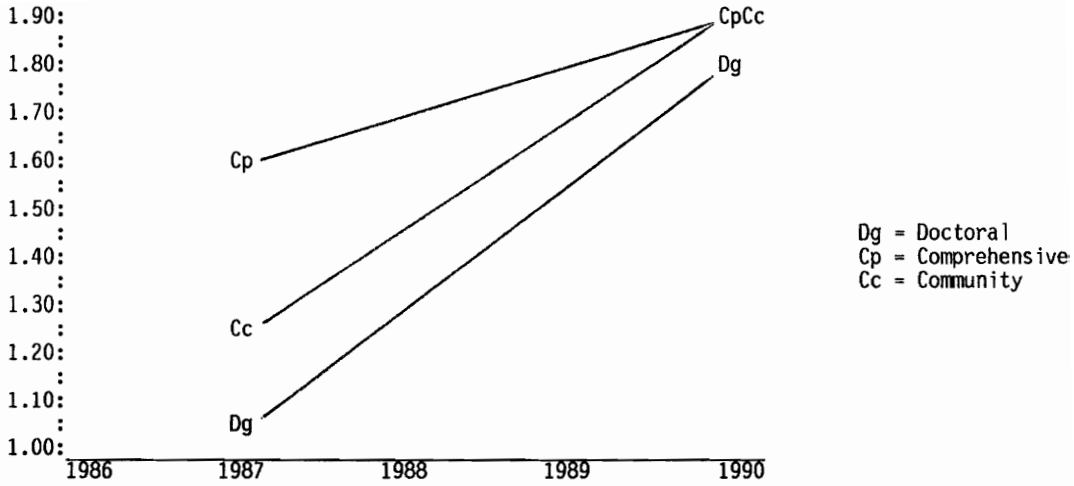

FIGURE 2a. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLE: INVOLVEMENT--INSTITUTIONAL PLAN

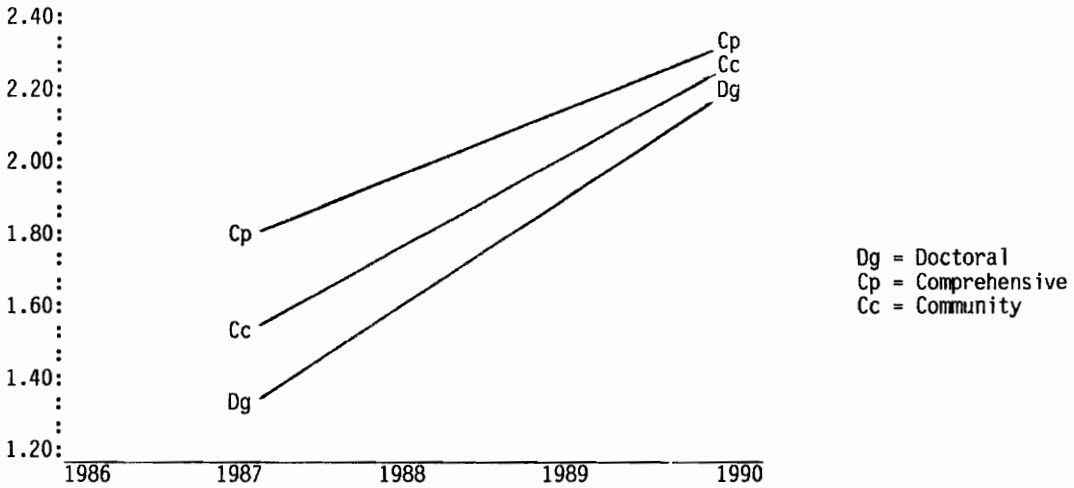

FIGURE 2b. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLE: UNDERSTANDING--INSTITUTIONAL PLAN

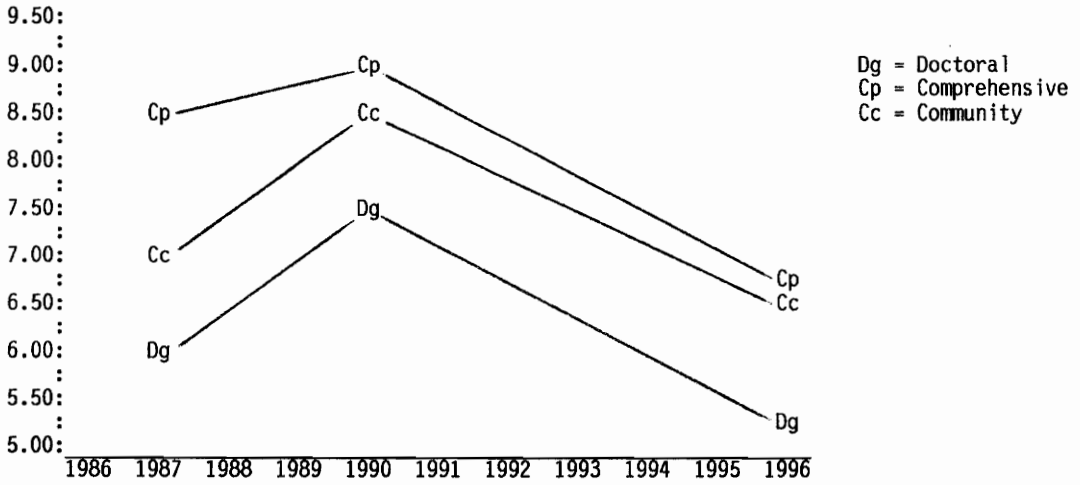

FIGURE 2c. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION
COMMON DEPENDENT VARIABLE: IMPORTANCE--CHIEF ACADEMIC OFFICER

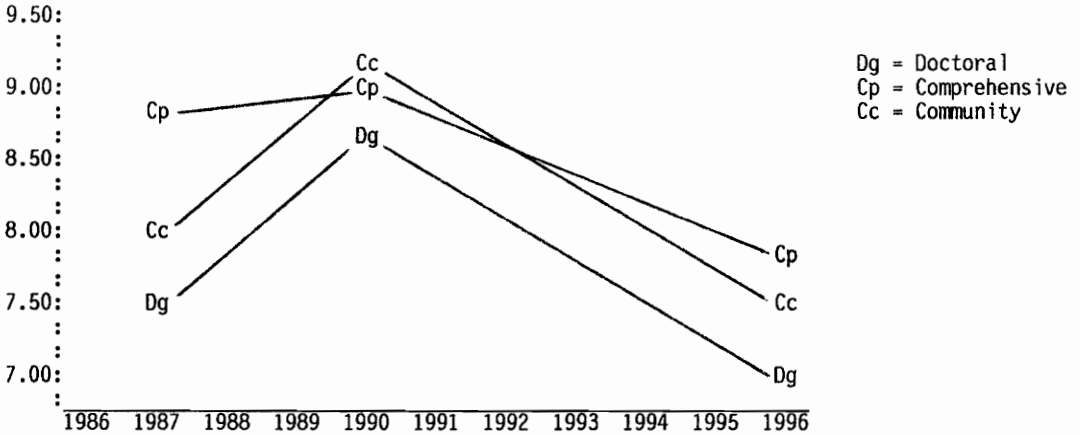

FIGURE 2d. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION
COMMON DEPENDENT VARIABLE: IMPORTANCE--ASSESSMENT COORDINATOR

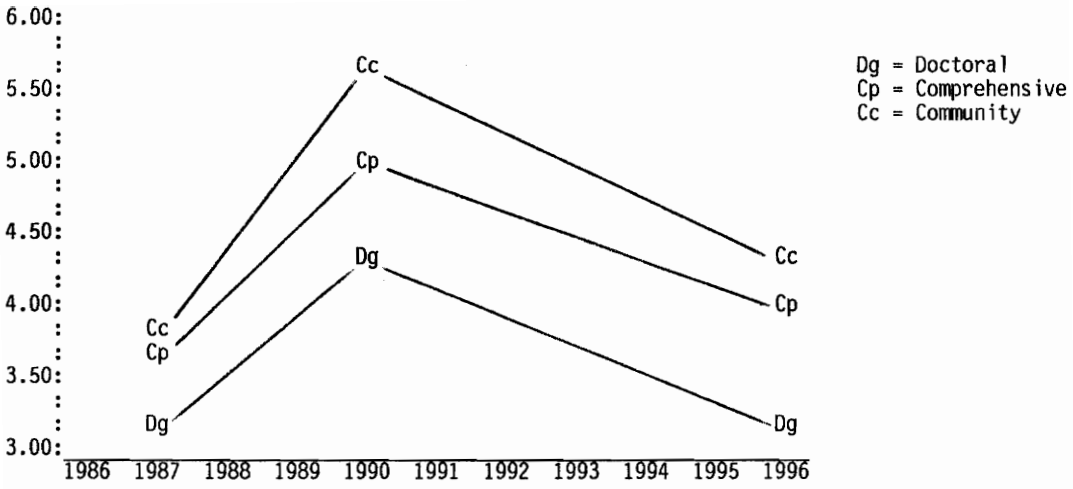

FIGURE 2e. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION
COMMON DEPENDENT VARIABLE: IMPORTANCE--FACULTY-IN-GENERAL

higher 1987 involvement and understanding might be the fact that many COMPREHENSIVE institutions had assessment coordinators working with administrators, department heads, and faculty from 1987 onward. These data further suggest that while COMPREHENSIVE respondents were initially more involved in and better understood institutional assessment planning, respondents from the other two types of institutions had reached similar levels of involvement and understanding by 1990.

IMPORTANCE Variables

There were significant TYPE * YEAR interaction effects for variables related to chief academic officer perceived importance, assessment coordinator perceived importance, and faculty-in-general perceived importance.

Chief Academic Officer Perceived Importance

Within YEAR (Figure 2c; Appendix 10e-g) for 1987 and 1990 for chief academic officer perceived importance regarding formal assessment, COMPREHENSIVE means (8.412 and 8.906) were significantly higher than COMMUNITY means (6.952 and 8.488) which, in turn, were significantly higher than DOCTORAL means (5.956 and 7.469). For 1996, there was no difference between the COMPREHENSIVE mean (6.941) and the COMMUNITY mean (6.525), but both were significantly higher than the DOCTORAL mean (5.234). Across YEAR (Figure 2c; Appendix 11g-i), DOCTORAL and COMMUNITY 1990 means (7.469; 8.488) were significantly

higher than corresponding 1987 means (5.956; 6.952); the COMPREHENSIVE 1990 mean (8.906) was not significantly different from its corresponding 1987 mean (8.412). For all three types, 1996 means (5.234; 6.941; 6.525) were significantly lower than either 1990 or 1987 means.

These data indicate that, across time, chief academic officers were seen as individuals who were convinced that SCHEV was very serious about the mandate; however, respondents from all three types of institutions expected chief academic officers to abandon higher levels of perceived importance if SCHEV relaxed its requirements. COMPREHENSIVE chief academic officer perceived importance was consistently the highest. COMMUNITY chief academic officer perceived importance was next highest, and DOCTORAL chief academic officer perceived importance was the lowest of the three types. While COMPREHENSIVE chief academic officers were seen as individuals who perceived assessment was highly important, they too were expected to perceive of it as less highly importance if external pressures were removed. In contrast, DOCTORAL chief academic officers were seen as individuals who would perceive of assessment as only moderately important if pressures were relaxed. Across time, these academic leaders of Virginia's senior, doctoral public colleges and universities were consistently seen as individuals who perceived formal

assessment was primary important because it satisfied SCHEV requirements.

Assessment Coordinator Perceived Importance

A similar TYPE * YEAR interaction effect was found for assessment coordinator perceived importance. Within YEAR (Figure 2d; Appendix 10h-j) for 1987, the COMPREHENSIVE mean (8.876) was significantly higher than the COMMUNITY mean (7.919) which, in turn, was significantly higher than the DOCTORAL mean (7.521). For 1990, there were no differences between the COMMUNITY mean (9.201) and the COMPREHENSIVE mean (9.087) or between the COMPREHENSIVE mean (9.087) and the DOCTORAL mean (8.716); however, the COMMUNITY mean (9.201) was significantly higher than the DOCTORAL mean (8.716). For 1996, while the COMPREHENSIVE mean (7.882) and COMMUNITY mean (7.450) were not significantly different, both were significantly higher than the DOCTORAL mean (6.900). Across YEAR (Figure 2d; Appendix 11j-l), DOCTORAL and COMMUNITY 1990 means (8.716 and 9.201) were significantly higher than corresponding 1987 means (7.521 and 7.919). There was no difference between COMPREHENSIVE 1990 and 1987 means (9.087 and 8.876). For 1996, all three types of means (6.900; 7.882; 7.450) were significantly lower than corresponding 1990 or 1987 means.

These data reveal that, across time, COMPREHENSIVE assessment coordinators and COMMUNITY assessment coordinators

were seen as individuals who consistently saw formal assessment as important. DOCTORAL assessment coordinators, however, were seen as individuals who perceived of assessment as highly important for 1990 but as individuals who would see it as less important if SCHEV requirements were relaxed. All of these data perhaps again reflect the fact that, for the most part, COMPREHENSIVE assessment coordinators were in place in 1987. DOCTORAL and COMMUNITY assessment coordinators were generally not employed until later--but were in place by 1990.

Faculty-in-General Perceived Importance

The TYPE * YEAR interaction effect for faculty-in-general perceived importance was different from the previous two interaction effects discussed above. Within YEAR (Figure 2e; Appendix 10k-m) for all three years, COMMUNITY means (3.891; 5.641; 4.458) and COMPREHENSIVE means (3.632; 5.090; 3.925) were significantly higher than DOCTORAL means (3.206; 4.410; 3.374). For 1990 and 1996, COMMUNITY means (5.641 and 4.458) were significantly higher than COMPREHENSIVE means (5.090 and 3.925). Across YEAR (Figure 2e; Appendix 11m-o) for all three types, 1990 means (4.410; 5.090; 5.641) were significantly higher than 1987 means (3.206; 3.632; 3.891), and 1996 means (3.374; 3.925; 4.458) were significantly lower than 1990 means. For COMMUNITY only, the 1996 mean (4.458) was significantly higher than the 1987 mean (3.891).

These data reveal that, across time, respondents saw COMMUNITY faculty-in-general perceived importance regarding formal assessment was and in the future would be slightly higher than COMPREHENSIVE faculty-in-general perceived importance. Respondents also saw DOCTORAL faculty-in-general perceived importance was and in the future would be significantly lower than either COMMUNITY or COMPREHENSIVE faculty-in-general perceived importance. Finally, in terms of magnitudes of difference, the greatest changes were for COMMUNITY (+1.75; -1.183), followed by COMPREHENSIVE (+1.458; -1.165), followed by DOCTORAL (+1.204; -1.036). These differentials perhaps might best be explained as a function of the complexity of the organizational structures of these types of institutions (i.e., chains of command).

Overall, these three sets of TYPE * YEAR significant interaction effect data reveal that respondents consistently saw significant growth in perceived importance for formal assessment between 1987 and 1990 for chief academic officers, assessment coordinators, and faculty-in-general regardless of the type of institution. Significant future declines in perceived importance were also expected to occur if SCHEV relaxed its requirements. Respondents saw assessment coordinator perceived importance and chief academic officer perceived importance as consistently and substantially higher than faculty-in-general perceived importance. Respondents saw

faculty-in-general perceived importance was only between moderate and low. Finally, these data indicate that the highest chief academic officer, assessment coordinator, and faculty-in-general perceptions of importance were found at COMMUNITY colleges or COMPREHENSIVE colleges. The lowest perceptions were always found at DOCTORAL universities.

PRIMARY RESPONSIBILITY * YEAR Interaction Analyses

The PRIMARY RESPONSIBILITY * YEAR interaction effect was statistically significant ($p < .01$) for four of the six dependent variables. It was not statistically significant for the two dependent variables related to involvement in and understanding of institutional assessment planning. The means and standard deviations for these significant interactions are found in Table 3; the means are plotted in Figures 3a-d. Post hoc testing results are provided in Appendices 12 and 13. For these four IMPORTANCE variables, patterns were similar for the first two variables (chief academic officer perceived importance and assessment coordinator perceived importance) and similar for the last two variables (department head perceived importance and faculty-in-general perceived importance).

Chief Academic Officer Perceived Importance

Within YEAR (Figure 3a; Appendix 12a-c) for 1987 and 1990 for chief academic officer perceived importance, there were no differences among the means of the three PRIMARY

TABLE 3
MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

	1987 mean st.d.	1990 mean st.d.	1996 mean st.d.
Dependent Variables:			
IMPORTANCE--CHIEF ACADEMIC OFFICER			
Administrator	6.773 (2.963)	8.517 (1.547)	7.218 (2.266)
Department Head	7.090 (2.766)	8.091 (2.244)	6.612 (2.884)
Faculty	6.864 (2.815)	8.284 (1.812)	5.840 (2.839)
IMPORTANCE--ASSESSMENT COORDINATOR			
Administrator	8.242 (1.921)	9.273 (1.130)	8.540 (1.460)
Department Head	8.535 (1.910)	9.127 (1.420)	8.000 (2.452)
Faculty	7.671 (2.561)	8.937 (1.521)	6.857 (2.898)
IMPORTANCE--DEPARTMENT HEAD			
Administrator	4.283 (2.335)	6.877 (1.753)	5.685 (2.401)
Department Head	5.622 (2.514)	7.123 (2.305)	5.698 (2.827)
Faculty	5.425 (2.742)	7.097 (2.390)	5.171 (2.717)
IMPORTANCE--FACULTY-IN-GENERAL			
Administrator	3.222 (2.033)	5.758 (1.857)	4.925 (2.328)
Department Head	3.729 (2.062)	5.205 (2.231)	4.108 (2.474)
Faculty	3.648 (2.016)	5.083 (2.133)	3.892 (2.211)

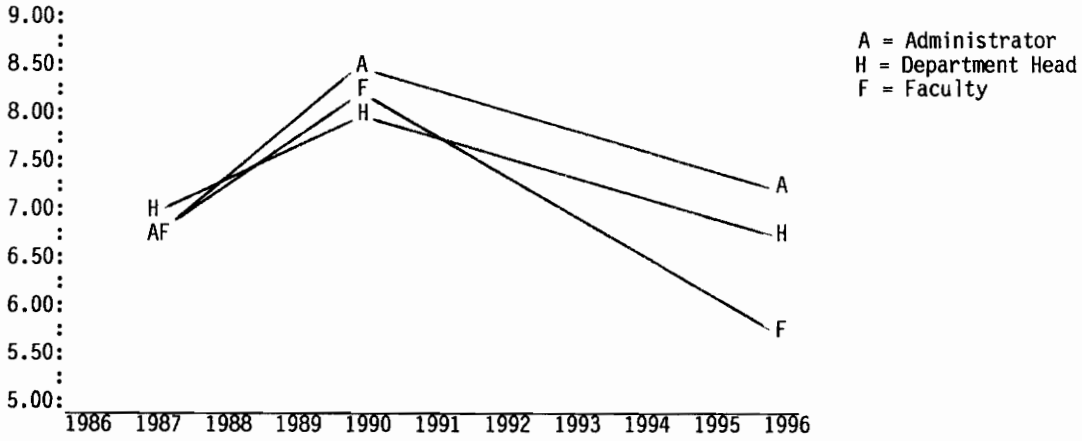

FIGURE 3a. GRAPH OF MEANS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES COMMON DEPENDENT VARIABLE: IMPORTANCE--CHIEF ACADEMIC OFFICER

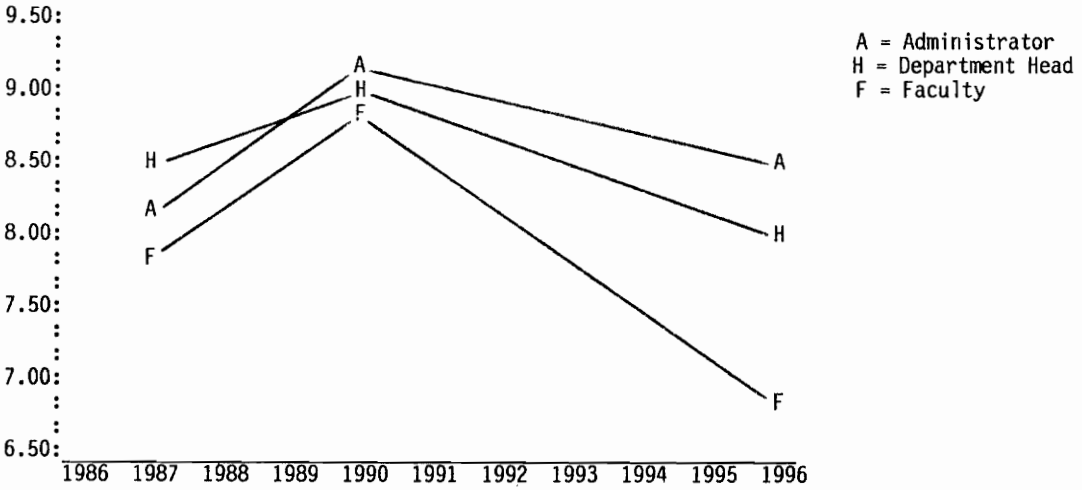

FIGURE 3b. GRAPH OF MEANS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES COMMON DEPENDENT VARIABLE: IMPORTANCE--ASSESSMENT COORDINATOR

FIGURE 3c. GRAPH OF MEANS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES COMMON DEPENDENT VARIABLE: IMPORTANCE--DEPARTMENT HEAD

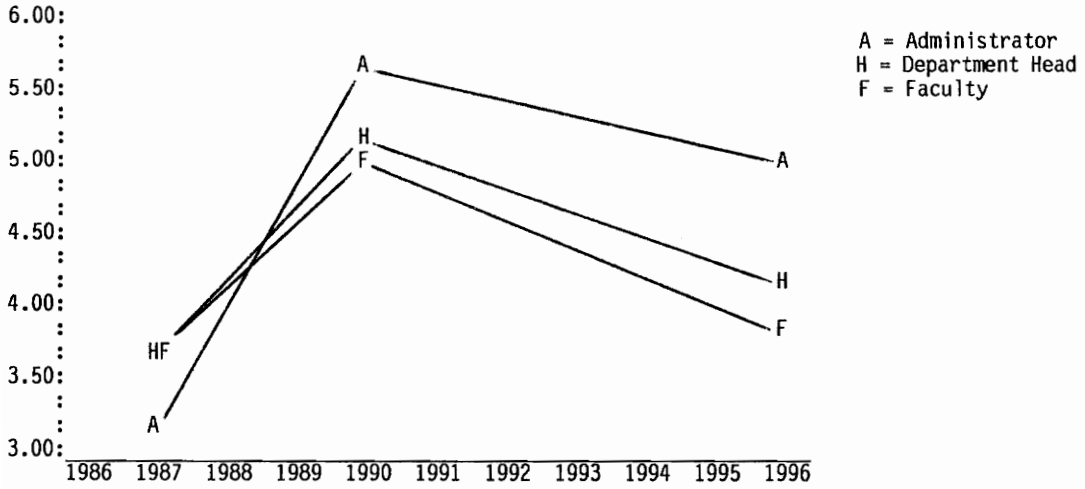

FIGURE 3d. GRAPH OF MEANS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES COMMON DEPENDENT VARIABLE: IMPORTANCE--FACULTY-IN-GENERAL

RESPONSIBILITY groups (1987: 6.773; 7.090; 6.864; 1990: 8.517; 8.091; 8.284). For 1996, the ADMINISTRATOR mean (7.218) was significantly higher than the DEPARTMENT HEAD mean (6.612) which, in turn, was significantly higher than the FACULTY mean (5.840). Across YEAR (Figure 3a; Appendix 13a-c) for all three groups, 1990 means (8.517; 8.091; 8.284) were significantly higher than 1987 means (6.773; 7.090; 6.864), and 1996 means (7.218; 6.612; 5.840) were significantly lower than 1990 means. For DEPARTMENT HEAD and FACULTY respondents, 1996 means (6.612; 5.840) were significantly lower than 1987 means (7.090; 6.864).

These data reveal that, across time, ADMINISTRATOR and DEPARTMENT HEAD respondent perceptions of chief academic officer perceived importance were higher than corresponding FACULTY respondent perceptions. These data further indicate that while ADMINISTRATOR and DEPARTMENT HEAD respondents expected chief academic officer perceived importance for assessment to decline for 1996, FACULTY respondents expected an even greater decline if SCHEV relaxed its requirements. FACULTY respondents apparently felt that the basis of 1990 chief academic officer perceived importance was pressure from SCHEV. They apparently did not perceive that chief academic officers possessed a firm belief in the intrinsic importance of assessment.

Assessment Coordinator Perceived Importance

Within YEAR (Figure 3b; Appendix 12d-f) for 1987 for assessment coordinator perceived importance, the FACULTY mean (7.671) and the ADMINISTRATOR mean (8.242) were not significantly different, but the FACULTY mean was significantly lower than the DEPARTMENT HEAD mean (8.535). For 1990, there were no differences among the means for these three groups (9.273; 9.127; 8.937). For 1996, there was no difference between the ADMINISTRATOR mean (8.540) and the DEPARTMENT HEAD mean (8.000), but both of these means were significantly higher than the FACULTY mean (6.857). Across YEAR (Figure 3b; Appendix 13d-f) for all three groups, 1990 means (9.273; 9.127; 8.937) were significantly higher than 1987 means (8.242; 8.535; 7.671), and 1996 means (8.540; 8.000; 6.857) were significantly lower than 1990 means. For DEPARTMENT HEAD and FACULTY respondents, 1996 means (8.000; 6.857) were significantly lower than 1987 means (8.535; 7.671).

These data reveal that, across time, ADMINISTRATOR and DEPARTMENT HEAD respondent perceptions of assessment coordinator perceived importance were consistently higher than corresponding FACULTY respondent perceptions. Again, these data indicate that, while ADMINISTRATOR and DEPARTMENT HEAD respondents expected assessment coordinator perceived importance to decline for 1996, FACULTY respondents expected

a greater decline. FACULTY respondents again apparently perceived that in 1990 assessment coordinators held no firm belief in the intrinsic value of formal assessment. Perhaps many respondents felt that it was just the assessment coordinator's job to be the campus cheerleader for assessment. Whatever the case, FACULTY respondents were not convinced that assessment would be perceived as highly important even by assessment coordinators without SCHEV reporting requirements.

Department Head Perceived Importance

Within YEAR (Figure 3c; Appendix 12g-i) for 1987 for department head perceived importance, there was no difference between the DEPARTMENT HEAD mean (5.622) and the FACULTY mean (5.425), but both were significantly higher than the ADMINISTRATOR mean (4.283). For 1990, there were no differences among the three PRIMARY RESPONSIBILITY group means (6.877; 7.123; 7.097). For 1996, there was no difference between the ADMINISTRATOR mean (5.685) and the DEPARTMENT HEAD mean (5.698), but both were significantly higher than the FACULTY mean (5.171). Across YEAR (Figure 3c; Appendix 13g-i) for all three groups, 1990 means (6.877; 7.123; 7.097) were significantly higher than 1987 means (4.283; 5.622; 5.425), and 1996 means (5.685; 5.698; 5.171) were significantly lower than 1990 means. For ADMINISTRATOR respondents, the 1996 mean (5.685) was still significantly higher than the 1987 mean

(4.283), but for FACULTY respondents, the 1996 mean (5.171) was significantly lower than the 1987 mean (5.425).

These data reveal that, across time, DEPARTMENT HEAD respondent perceptions of department head perceived importance regarding formal assessment were consistently but not always significantly higher than corresponding ADMINISTRATOR or FACULTY respondent perceptions. These data further indicate that all three groups of respondents perceived that department head perceived importance was lower than either chief academic officer perceived importance or assessment coordinator perceived importance. Also, ADMINISTRATOR respondents expected 1996 department head perceived importance to decline but to remain significantly higher than 1987 department head perceived importance. DEPARTMENT HEAD respondents expected 1996 department head perceived importance to decline to approximately the 1987 level. FACULTY respondents, on the other hand, expected a greater decline for 1996. In fact, they expected 1996 department head perceived importance to fall significantly below 1987 department head perceived importance if SCHEV relaxed its requirements. FACULTY respondents, again, were apparently not convinced that 1990 department head perceived importance was based on a firm belief in the intrinsic worth of assessment.

Faculty-in-General Perceived Importance

Within YEAR (Figure 3d; Appendix 12j-l) for 1987 for faculty-in-general perceived importance, there were no differences between the DEPARTMENT HEAD mean (3.729) and the FACULTY mean (3.648) and between the FACULTY mean and the ADMINISTRATOR mean (3.222); however, the DEPARTMENT HEAD mean was significantly higher than the ADMINISTRATOR mean. For 1990 and 1996, there were no differences between the DEPARTMENT HEAD means (5.205; 4.108) and the FACULTY means (5.083; 3.892); however, both were significantly lower than the ADMINISTRATOR means (5.758; 4.925). Across YEAR (Figure 3d; Appendix 13j-l) for all three groups, 1990 means (5.758; 5.205; 5.083) were significantly higher than 1987 means (3.222; 3.729; 3.648); 1996 means (4.925; 4.108; 3.892) were significantly lower than 1990 means; but 1996 means were still significantly higher than 1987 means.

These data reveal that, across time, ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY respondents felt that faculty-in-general perceived importance regarding was the lowest among all four dependent variables (chief academic officer perceived importance, assessment coordinator perceived importance, department head perceived importance, and faculty-in-general perceived importance). Again, FACULTY respondents expected the greatest decline if SCHEV requirements were relaxed. FACULTY respondents seemed convinced that 1990 faculty-in-

general perceived importance was not based on a firm belief in the importance of formal assessment.

Overall, all of the above significant PRIMARY RESPONSIBILITY * YEAR interaction effect data reflect that ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY respondents ranked chief academic officer perceived importance, assessment coordinator perceived importance, department head perceived importance, and faculty-in-general perceived importance in the same relative ordering. Assessment coordinators and chief academic officers were seen as individuals who perceived formal assessment to be highly important, while department heads and faculty-in-general were seen as individuals who perceived it to be moderately (or less) important. If SCHEV relaxed its requirements, all three PRIMARY RESPONSIBILITY groups expected a significant decline in perceived importance, but FACULTY respondents consistently expected a greater decline. Apparently, ADMINISTRATOR respondents were expecting (or perhaps hoping) that faculty-in-general perceived importance would not decline greatly if SCHEV requirements were relaxed. Perhaps they felt the intrinsic importance of assessment would be the key factor sustaining faculty-in-general perceived importance. Perhaps they hoped that faculty would eventually "own" and carry out the assessment mandate, leaving administrators free to return to other duties. FACULTY respondents, on the other hand, apparently expected

that administrators (probably assessment coordinators specifically) and department heads would either continue to conduct formal assessment activities themselves or agree with the faculty-in-general to drop any serious emphasis on formal assessment. Clearly, the differing perceptions of ADMINISTRATOR and FACULTY respondents regarding future perceived importance for assessment suggest that potentially serious problems may arise in the 1990s.

TYPE * PRIMARY RESPONSIBILITY * YEAR Interaction Analyses

The TYPE * PRIMARY RESPONSIBILITY * YEAR Interaction effect was statistically significant ($p < .05$) for two of the six dependent variables, understanding of institutional assessment planning and chief academic officer perceived importance. The means and standard deviations for these significant interactions are found in Table 4; these means are plotted in Figures 4a-1. Post hoc testing results are found in Appendices 14-19. For each of these two dependent variables, the PRIMARY RESPONSIBILITY * YEAR within TYPE analysis is presented first, followed by the TYPE * YEAR within PRIMARY RESPONSIBILITY analysis.

UNDERSTANDING Variable

PRIMARY RESPONSIBILITY * YEAR Within TYPE Analysis

For understanding of institutional assessment planning, the COMPREHENSIVE two-way interaction effect of PRIMARY RESPONSIBILITY * YEAR was significantly different from the

TABLE 4
MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN

	1987	1990
Doctoral		
Administrator	2.000 (1.414)	2.875 (0.354)
Department Head	1.793 (1.122)	2.494 (0.709)
Faculty	1.094 (1.036)	2.083 (0.871)
Comprehensive		
Administrator	2.545 (0.934)	2.818 (0.405)
Department Head	1.620 (1.028)	2.460 (0.579)
Faculty	1.875 (0.935)	2.207 (0.811)
Community		
Administrator	2.027 (1.190)	2.850 (0.427)
Department Head	1.868 (0.984)	2.474 (0.808)
Faculty	1.376 (1.022)	2.156 (0.786)

Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER

	1987	1990	1996
Doctoral			
Administrator	8.166 (0.983)	8.000 (1.414)	6.250 (1.982)
Department Head	6.116 (2.946)	7.366 (2.525)	5.389 (2.936)
Faculty	5.634 (2.855)	7.500 (2.028)	5.036 (2.592)
Comprehensive			
Administrator	8.143 (2.610)	9.000 (1.333)	8.000 (1.633)
Department Head	8.425 (2.286)	8.705 (1.899)	7.242 (2.574)
Faculty	8.447 (1.982)	9.161 (1.128)	6.120 (2.666)
Community			
Administrator	6.194 (3.146)	8.500 (1.617)	7.216 (2.428)
Department Head	7.182 (2.488)	8.437 (1.955)	7.308 (2.686)
Faculty	7.011 (2.758)	8.502 (1.675)	6.141 (2.906)

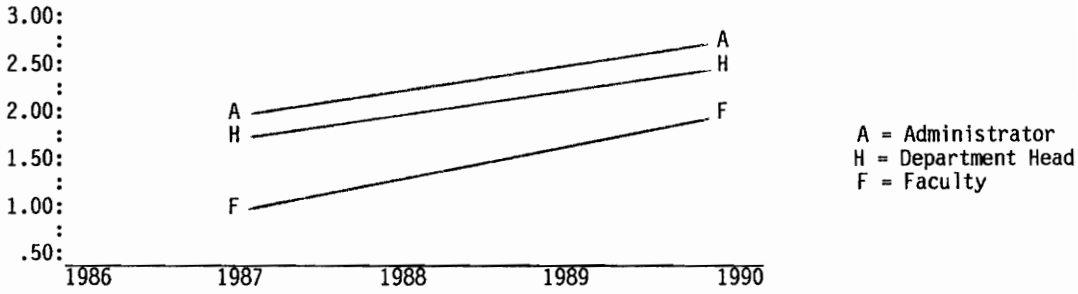

FIGURE 4a. DOCTORAL

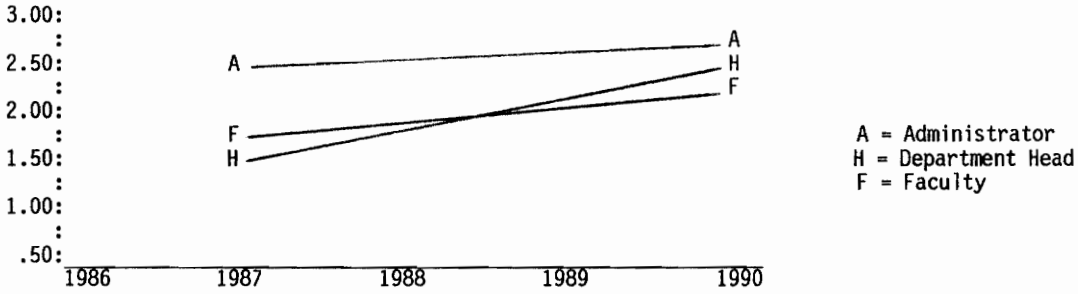

FIGURE 4b. COMPREHENSIVE

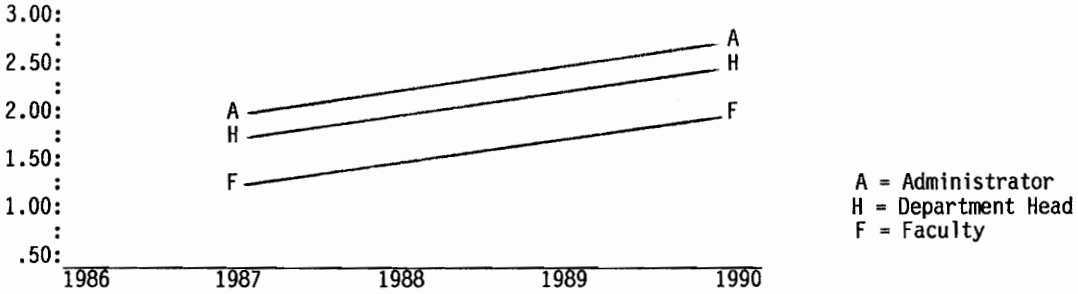

FIGURE 4c. COMMUNITY

FIGURES 4a-c. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS COMMON DEPENDENT VARIABLE: UNDERSTANDING--INSTITUTIONAL PLAN

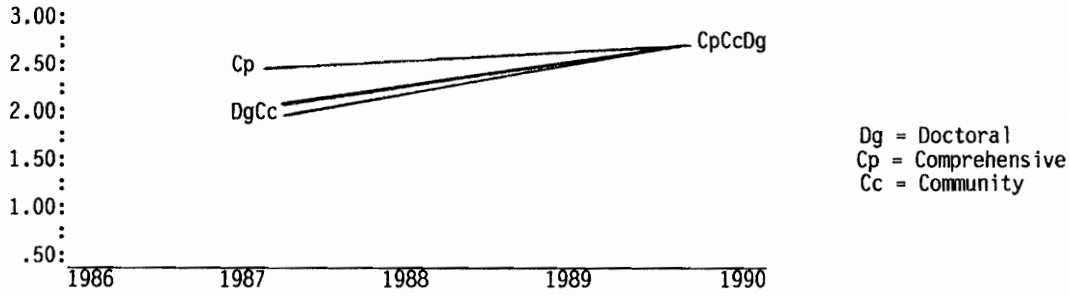

FIGURE 4d. ADMINISTRATOR

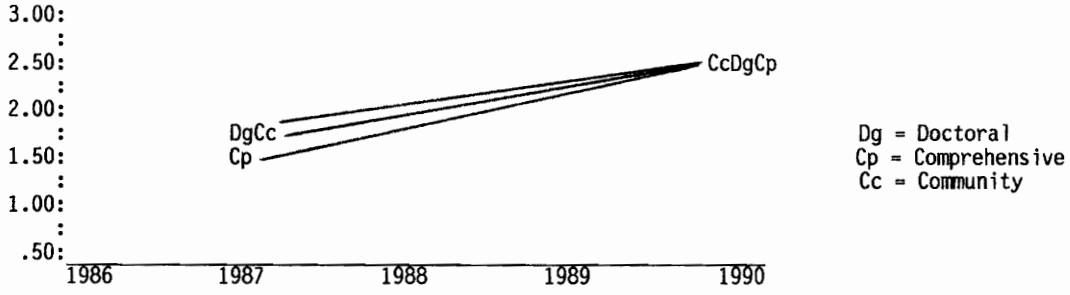

FIGURE 4e. DEPARTMENT HEAD

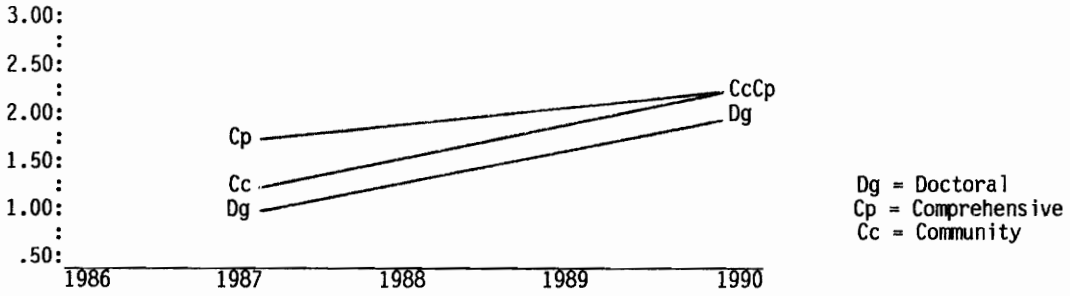

FIGURE 4f. FACULTY

FIGURES 4d-f. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS COMMON DEPENDENT VARIABLE: UNDERSTANDING--INSTITUTIONAL PLAN

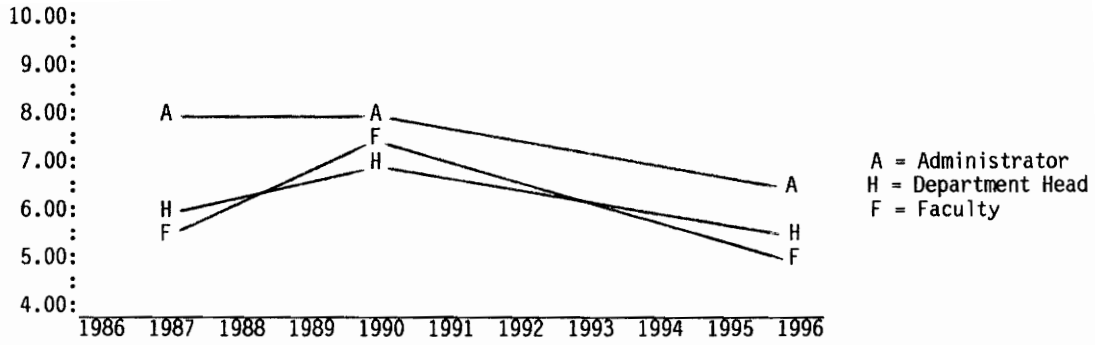

FIGURE 4g. DOCTORAL

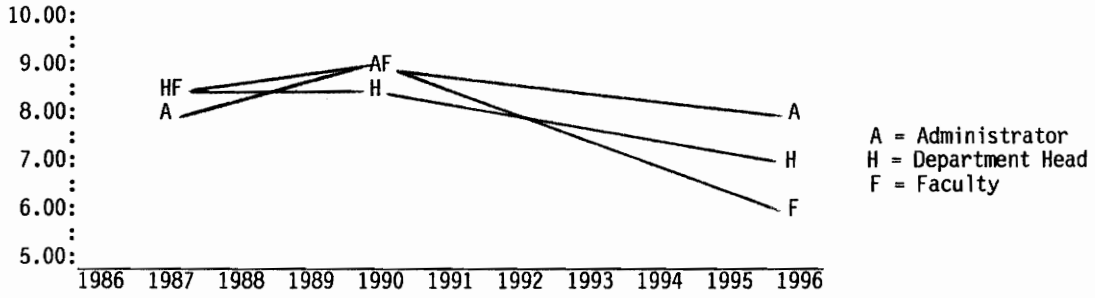

FIGURE 4h. COMPREHENSIVE

FIGURE 4i. COMMUNITY

FIGURES 4g-i. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS COMMON DEPENDENT VARIABLE: IMPORTANCE--CHIEF ACADEMIC OFFICER

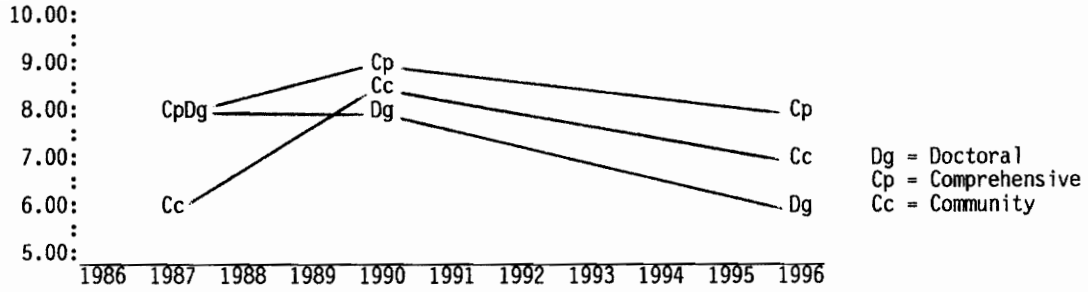

FIGURE 4j. ADMINISTRATOR

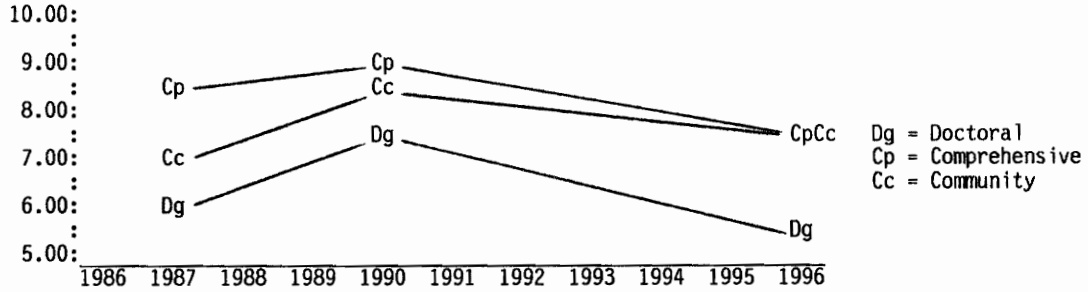

FIGURE 4k. DEPARTMENT HEAD

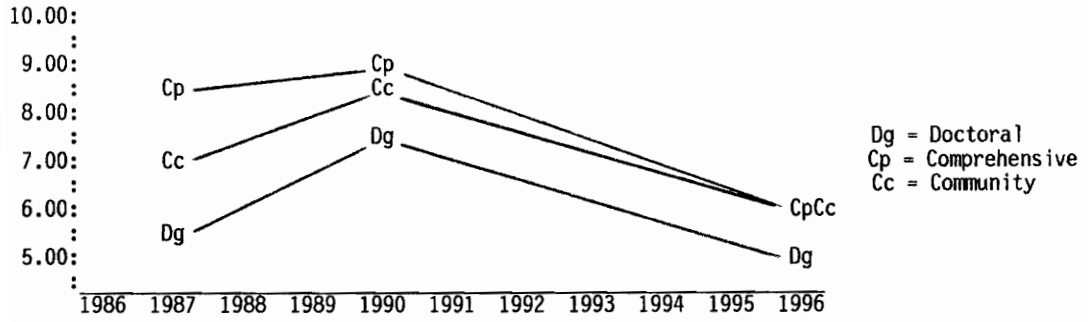

FIGURE 4l. FACULTY

FIGURES 4j-l. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS COMMON DEPENDENT VARIABLE: IMPORTANCE--CHIEF ACADEMIC OFFICER

DOCTORAL and COMMUNITY two-way interactions effects (Figures 4a-c). For both DOCTORAL and COMMUNITY, the patterns and magnitudes of difference were approximately the same and significantly different from those for COMPREHENSIVE.

Within YEAR (Figures 4a-c; Appendix 14a-f) for 1987 for DOCTORAL and COMMUNITY, administrator means (2.000; 2.027) and department head means (1.793; 1.868) were significantly higher than faculty means (1.094; 1.376). For COMPREHENSIVE, the administrator mean (2.545) was significantly higher than faculty and department head means (1.875; 1.620). For 1990 for DOCTORAL and COMMUNITY, administrator means (2.875; 2.850) and department head means (2.494; 2.474) were significantly higher than faculty means (2.083; 2.156). For COMPREHENSIVE, however, the department head mean (2.460) exceeded the faculty mean (2.207) and, in fact, was not significantly different from the administrator mean (2.818). Also for 1990 for DOCTORAL and COMPREHENSIVE, there were no differences between administrator means (2.875; 2.818) and department head means (2.494; 2.460); for COMMUNITY, however, the administrator mean (2.850) was significantly higher than the department head mean (2.474). Across YEAR (Figures 4a-c; Appendix 16a-i) for all three types of institutions, all except one of the 1990 means were significantly higher than corresponding 1987 means. For COMPREHENSIVE, the administrator 1990 mean (2.818) was not

significantly different from its corresponding 1987 mean (2.545).

These data reveal that, across time, for DOCTORAL and COMMUNITY, no change occurred in the relative positions of administrator, department head, and faculty respondent understanding of institutional assessment plans. For COMPREHENSIVE, faculty and department head respondent understanding reversed positions. While COMPREHENSIVE faculty respondent perceptions were higher than corresponding department head perceptions for 1987, this was not the case for 1990. In fact, 1990 COMPREHENSIVE department head respondent perceptions more than just reversed positions with faculty respondent perceptions. Similar to their counterparts at DOCTORAL and COMMUNITY, COMPREHENSIVE department head respondents began to reach the level of understanding possessed by their chief academic officers and assessment coordinators. The data further reveal that the pattern for 1990 at COMPREHENSIVE became similar to those patterns at DOCTORAL and COMMUNITY. In essence, at all three types of institutions, faculty respondents felt they had significantly less understanding of institutional assessment planning than did either administrator or department head respondents.

TYPE * YEAR Within PRIMARY RESPONSIBILITY Analysis

For understanding of institutional assessment planning, the DEPARTMENT HEAD two-way interaction effect of TYPE * YEAR

was significantly different from the ADMINISTRATOR and FACULTY two-way interaction effects (Figures 4d-f). For both ADMINISTRATOR and FACULTY, the patterns and magnitudes of difference were similar, and both groups' 1987 patterns and magnitudes of difference were substantially different from those of DEPARTMENT HEAD. The most noticeable difference involved the comprehensive means. For ADMINISTRATOR and FACULTY, comprehensive means were substantially higher than either community means or doctoral means. In contrast, for DEPARTMENT HEAD, the comprehensive mean was lower than either the community mean or the doctoral mean.

Within YEAR and across YEAR (Figures 4a-f; Appendices 15a-f and 16a-c), there were few significant differences in means. Within YEAR, only for 1987 and only for FACULTY were there significant mean differences. The comprehensive mean (1.875) was significantly higher than either the community mean (1.376) or the doctoral mean (1.094). Across YEAR for all types and groups, all 1990 means except one were significantly higher than their corresponding 1987 means. Only the ADMINISTRATOR 1990 comprehensive mean (2.818) was not significantly different from its corresponding 1987 mean (2.545).

These data reveal that, across time, ADMINISTRATOR respondent perceptions from all three types of institutions were highest, DEPARTMENT HEAD respondent perceptions were

second highest, and FACULTY respondent perceptions were lowest. ADMINISTRATOR and FACULTY respondent understanding had more variation across types of institutions. ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY respondents from comprehensive colleges consistently expressed higher understanding than did their community and doctoral counterparts. Apparently in 1987, leaders at comprehensive colleges worked hard to encourage ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY understanding of institutional assessment plans. In contrast, data suggest that at community colleges and doctoral universities in 1987, FACULTY were pretty much uninformed about assessment plans. Perhaps the most positive information to come out of this data is that by 1990 across all three types of institutions, ADMINISTRATOR respondents perceived they had high understanding of institutional assessment planning, DEPARTMENT HEAD respondents perceived they had between moderate and high understanding, and FACULTY respondents perceived they had moderate understanding. Significant and substantial growth in understanding of institutional assessment planning at all three types of institutions and within all three groups of personnel had occurred by 1990.

IMPORTANCE Variable

PRIMARY RESPONSIBILITY * YEAR Within TYPE Analysis

For chief academic officer perceived importance regarding formal assessment, the DOCTORAL two-way interaction effect of PRIMARY RESPONSIBILITY * YEAR was significantly different from the COMPREHENSIVE and COMMUNITY two-way interaction effects (Figures 4g-i). For both COMPREHENSIVE and COMMUNITY, the patterns and magnitudes of difference were similar for 1987 and 1990; and both types' patterns and magnitudes of difference for 1987 were substantially different from the DOCTORAL 1987 pattern and magnitude of difference. For 1990, the DOCTORAL pattern and magnitude of difference had become closer to the patterns and magnitudes of the other two types. For 1996, the DOCTORAL pattern and magnitudes were even more similar to the COMPREHENSIVE pattern and magnitudes of difference. Further, there were few significant differences involving within-YEAR comparisons within each type of institution. In contrast, there were many significant differences involving across-YEAR comparisons within each type of institution. These across-time findings were consistent with the trend of IMPORTANCE variable data presented thus far in this chapter.

Within YEAR (Figures 4g-i; Appendix 17a-i), only one-third of the means differences were significant. For 1987 for DOCTORAL, the administrator mean (8.166) was significantly

higher than the department head mean (6.116) and the faculty mean (5.634). For COMPREHENSIVE, there were no significant differences. For COMMUNITY, the department head mean (7.182) and the faculty mean (7.011) were significantly higher than the administrator mean (6.194). For 1990, there were no significant differences among the nine means comparisons. For 1996 for DOCTORAL, there were no significant differences. For COMPREHENSIVE, the administrator mean (8.000) and the department head mean (7.242) were significantly higher than the faculty mean (6.120). For COMMUNITY, the department head mean (7.308) and the administrator mean (7.216) were significantly higher than the faculty mean (6.141).

Across YEAR (Figures 4g-i; Appendix 19a-i), over two-thirds of the means differences were significant. For DOCTORAL, the 1996 administrator mean (6.250) was significantly lower than its corresponding 1990 mean (8.000) and 1987 mean (8.166). The 1990 department head mean (7.366) was significantly higher than its corresponding 1987 mean (6.116); the 1996 department head mean (5.389) was significantly lower than either its corresponding 1990 mean or 1987 mean. The 1990 faculty mean (7.500) was significantly higher than its corresponding 1987 mean (5.634); the 1996 faculty mean (5.036) was significantly lower than either its corresponding 1990 mean or 1987 mean. For COMPREHENSIVE, there were no significant differences between administrator

means for 1987, 1990, and 1996 (8.143; 9.000; 8.000). The 1996 department head mean (7.242) was significantly lower than its corresponding 1990 mean (8.705) and 1987 mean (8.425). The 1996 faculty mean (6.120) was significantly lower than its corresponding 1990 mean (9.161) and 1987 mean (8.447). For COMMUNITY, the 1990 administrator mean (8.500) was significantly higher than its corresponding 1987 mean (6.194); the 1996 administrator mean (7.216) was both significantly lower than its corresponding 1990 mean and significantly higher than its corresponding 1987 mean. The 1990 department head mean (8.437) was significantly higher than its corresponding 1987 mean (7.182); the 1996 department head mean (7.308) was significantly lower than its corresponding 1990 mean. Finally, the 1990 faculty mean (8.502) was significantly higher than its corresponding 1987 mean (7.011); the 1996 faculty mean (6.141) was significantly lower than its corresponding 1990 mean and 1987 mean.

These data reveal that, across time, DOCTORAL administrator respondent perceptions of chief academic officer perceived importance were higher than corresponding department head and faculty respondent perceptions. The pattern was different for both COMPREHENSIVE and COMMUNITY. These data suggest that for 1990 across all types of institutions, administrator, department head, and faculty respondents were in close agreement regarding chief academic officer perceived

importance of formal assessment. In contrast across all three types of institutions, faculty respondents expected far greater declines in future chief academic officer perceived importance than did either administrator or department head respondents. Differences in future chief academic officer perceived importance regarding formal assessment suggest serious problems could arise in the 1990s at all three types of institutions.

TYPE * YEAR Within PRIMARY RESPONSIBILITY Analysis

For chief academic officer perceived importance, the ADMINISTRATOR two-way interaction effect of TYPE * YEAR was significantly different from the DEPARTMENT HEAD and FACULTY two-way interaction effects (Figures 4j-l). For both DEPARTMENT HEADS and FACULTY, the patterns and magnitudes of differences were approximately the same for all three years, and both groups' patterns and magnitudes of differences for 1987 and 1996 were substantially different from the ADMINISTRATOR 1987 and 1996 patterns and magnitudes of difference. For 1990, the ADMINISTRATOR pattern and magnitudes of difference more closely matched those of the other two personnel groups.

Within YEAR (Figures 4j-l; Appendix 19a-i), significant differences were found in two-thirds of the means comparison. For 1987 for ADMINISTRATOR, the community mean (6.194) was significantly lower than the comprehensive mean (8.143) and

the doctoral mean (8.166). For both DEPARTMENT HEAD and FACULTY, the comprehensive means (8.425; 8.447) were significantly higher than the community means (7.182; 7.011) which, in turn, were significantly higher than the doctoral means (6.116; 5.634). For 1990, there were no significant ADMINISTRATOR mean differences. For DEPARTMENT HEAD and FACULTY, however, doctoral means (7.366; 7.500) were significantly lower than community means (8.437; 8.502); and for FACULTY, the community mean (8.502) was significantly lower than the comprehensive mean (9.161). For 1996 for ADMINISTRATOR, doctoral and community means (6.250; 7.216) were both significantly lower than the comprehensive mean (8.000). For both DEPARTMENT HEAD and FACULTY, doctoral means (5.389; 5.036) were significantly lower than comprehensive and community means (7.242; 6.120; and 7.308; 6.141).

Across YEAR (Figures 4j-l; Appendix 19a-i), numerous significant differences were found. The basic trend continued. The 1990 means were significantly higher than 1987 means; 1996 means were significantly lower than 1990 means; and in most instances, 1996 means were significantly lower than 1987 means. Exceptions to this trend were few but notable. For ADMINISTRATORS, doctoral respondents saw no difference between 1990 and 1987 chief academic officer perceived importance. Comprehensive respondents saw no differences between 1987, 1990, or 1996 perceived importance.

For DEPARTMENT HEADS, comprehensive respondents saw no differences between 1990 and 1987 chief academic officer perceived importance; community respondents saw no difference between 1996 and 1987 perceived importance. Finally for FACULTY, comprehensive respondents saw no difference between 1990 and 1987 chief academic officer perceived importance. Perhaps all of these instances where no differences were found can be explained by the fact, overall, these respondents saw 1987 chief academic officer perceived importance was high. Their 1990 perceptions simply couldn't go much higher. Also, many of these respondents expected 1996 chief academic officer perceived importance to remain high or at least to remain between high and moderate.

These data reveal that, across time, ADMINISTRATOR respondent perceptions of chief academic officer perceived importance had greater variation than either DEPARTMENT HEAD or FACULTY respondent perceptions. Also, doctoral respondent perceptions of chief academic officer perceived importance were consistently lower than comprehensive or community respondent perceptions. Overall, all doctoral respondent perceptions of future chief academic officer perceived importance regarding formal assessment were as low as all FACULTY respondent perceptions of future chief academic officer perceived importance. In essence, doctoral ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY respondent

perceptions of chief academic officer perceived importance were consistently the lowest among all three types of institutions. Earlier, data revealed that these same doctoral respondents also felt department head perceived importance and faculty-in-general perceived importance were the lowest among all three types of institutions.

It should also be noted that for administrator respondents who were chief academic officers, this dependent variable rating was essentially a perception of self support for assessment. Apparently in 1987, DOCTORAL chief academic officers were not effectively communicating to their department heads and faculty just how important they perceived formal assessment was. COMPREHENSIVE and COMMUNITY chief academic officers apparently had communicated more accurately their perceived importance regarding formal assessment. By 1990, DOCTORAL chief academic officers had communicated their perceived importance more effectively. For 1996, however, potential communication problems exist. All three types of administrator respondents (DOCTORAL, COMPREHENSIVE, and COMMUNITY) expected there would be a decline in chief academic officer perceived importance if SCHEV relaxed its requirements, but apparently none were aware that their faculty respondents expected a significantly greater decline in chief academic officer perceived importance. These wide

differences of future declines suggest difficult problems for assessment in Virginia may arise in the 1990s.

ADDITIONAL Dependent Variables

Summary ANOVA Tables and post hoc testing results for all ADDITIONAL significant YEAR main effects and two-way and three-way interactions with the YEAR variable are found in Appendices 20-31. Only department heads and faculty responded to these ADDITIONAL variables.

YEAR Main Effect Analyses

The YEAR main effect was statistically significant ($p < .01$) for each of the six analyses. The means and standard deviations for each significant YEAR main effect are found in Table 5; these means are plotted in Figures 5a-c. Post hoc testing results are found in Appendix 21.

INVOLVEMENT and UNDERSTANDING Variables

Within YEAR (Figures 5a and 5b) for 1987, involvements in department assessment planning and activities were approximately equal; so were understandings of department assessment planning and activities. Both types of understandings, however, were higher than both types of involvements. Department head and faculty respondents perceived their 1987 understandings were between moderate and low, but they perceived their 1987 involvements were low. For 1990, the same pattern existed. Respondents perceived their

TABLE 5
MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

	1987 mean st.d.	1990 mean st.d.	1996 mean st.d.
Dependent Variables:			
INVOLVEMENT--DEPARTMENT PLAN	1.344 (1.173)	2.145 (0.969)	
UNDERSTANDING--DEPARTMENT PLAN	1.512 (1.179)	2.354 (0.876)	
INVOLVEMENT--DEPARTMENT ACTIVITIES	1.312 (1.165)	2.092 (1.035)	
UNDERSTANDING--DEPARTMENT ACTIVITIES	1.491 (1.191)	2.326 (0.905)	
IMPORTANCE--FACULTY-IN-THE-DEPARTMENT	4.071 (2.424)	5.431 (2.538)	4.415 (2.716)
IMPORTANCE--RESPONDENT	5.346 (2.953)	6.818 (2.809)	5.629 (2.962)

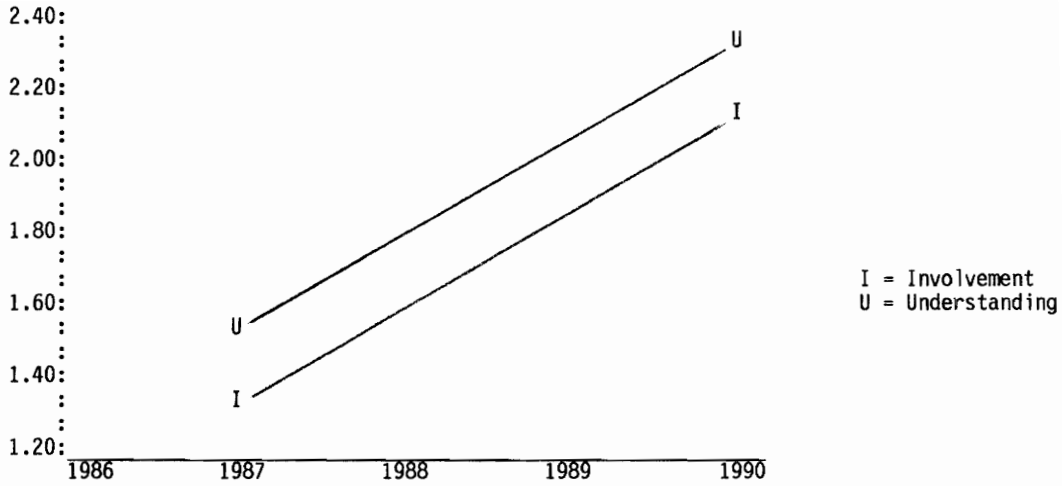

FIGURE 5a. GRAPH OF MEANS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
ADDITIONAL DEPENDENT VARIABLES: INVOLVEMENT--DEPARTMENT PLAN
UNDERSTANDING--DEPARTMENT PLAN

FIGURE 5b. GRAPH OF MEANS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
ADDITIONAL DEPENDENT VARIABLES: INVOLVEMENT--DEPARTMENT ACTIVITIES
UNDERSTANDING--DEPARTMENT ACTIVITIES

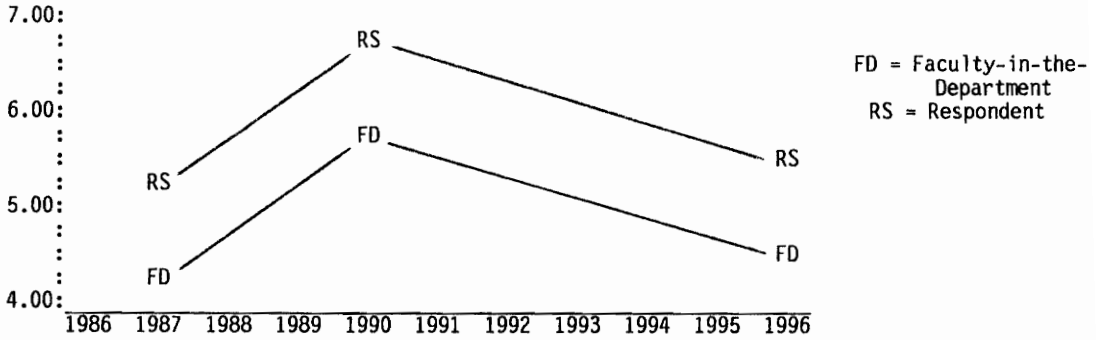

FIGURE 5c. GRAPH OF MEANS FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
ADDITIONAL DEPENDENT VARIABLES: IMPORTANCE--FACULTY-IN-THE-DEPARTMENT
IMPORTANCE--RESPONDENT

1990 understandings was between high and moderate; they perceived their 1990 involvements were only moderate.

Across YEAR (Figures 5a and 5b; Appendix 21a-d) for involvements in department assessment planning and activities, 1990 means (2.145 and 2.092) were significantly higher than 1987 means (1.344 and 1.312). For understandings of department assessment plans and activities, 1990 means (2.354 and 2.326) were significantly higher than 1987 means (1.512 and 1.491). In essence, these data reveal that, across time, campus efforts to increase department head and faculty involvements in and understanding of department assessment planning and activities have had significant, positive results.

IMPORTANCE Variables

Within YEAR (Figure 5c) for each of the three years, respondent perceived importance regarding formal assessment was substantially higher than faculty-in-the-department perceived importance. Across YEAR (Figure 5c; Appendix 21e-f) for both variables, 1990 means (6.818; 5.431) were significantly higher than 1987 means (5.346; 4.071); 1996 means (5.629; 4.415) were significantly lower than 1990 means; but 1996 means were still significantly higher than 1987 means.

These data reveal that, across time, department head and faculty respondents felt that their own perceived importance

regarding formal assessment was higher than the perceived importance they attributed to their department colleagues. These YEAR main effect data further reveal that increases in respondent involvements and understandings related to department assessment planning and department assessment activities were accompanied by increases in respondent perceived importance regarding formal assessment. Expected future declines in respondent perceived importance and faculty-in-the-department perceived importance reflect the significance of SCHEV reporting requirements. It is interesting to note that department head and faculty respondents perceived that faculty-in-the-department valued assessment more importantly than did faculty-in-general, although not much more importantly (4.071 vs. 3.654 as seen on Table 1). Across all COMMON and ADDITIONAL dependent variables, respondents consistently felt that faculty-in-the-department perceived importance and faculty-in-general perceived importance were lowest among the six types of perceived importance investigated in this study.

Finally, Year main effect data (Tables 1 and 5) reveal that, across time, levels of respondent perceived importance and department head perceived importance were the closest for all six IMPORTANCE variables (1987: 5.346 vs. 5.426; 1990: 6.818 vs. 7.093; 1996: 5.629 vs. 5.388). The closeness of these two sets of means suggests that there may be a link

between faculty and department head perceived importance regarding formal assessment. Because faculty and department head respondents had worked together on department assessment planning and/or department assessment activities for at least one year prior to this study, faculty respondent perceptions of the importance of assessment probably were greatly influenced by their immediate supervisor's views. The closeness of these two sets of means, then, suggests that department heads may have been an important influence on faculty perceived importance for assessment.

TYPE * YEAR Interaction Analyses

The TYPE * YEAR interaction effect was statistically significant ($p < .01$) for four of the six dependent variables. It was not statistically significant for faculty-in-the-department perceived importance and respondent perceived importance. The means and standard deviations for the significant interaction effects are found in Table 6; these means are plotted in Figures 6a-d. Post hoc testing results are found in Appendices 22 and 23.

INVOLVEMENT Variables

For both involvement in department assessment planning and department assessment activities, the patterns were almost identical within YEAR and across YEAR. Within YEAR (Figures 6a and 6c; Appendix 22a-b and e-f) for 1987 for both variables, COMPREHENSIVE means (1.991 and 1.879) were

TABLE 6
MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

	1987 mean	st.d.	1990 mean	st.d.	1996 mean	st.d.
Dependent Variables:						
INVOLVEMENT--DEPARTMENT PLAN						
Doctoral	1.121	(1.153)	2.096	(0.991)		
Comprehensive	1.991	(1.076)	2.445	(0.773)		
Community	1.304	(1.149)	2.093	(0.992)		
UNDERSTANDING--DEPARTMENT PLAN						
Doctoral	1.381	(1.196)	2.396	(0.873)		
Comprehensive	2.064	(1.091)	2.618	(0.690)		
Community	1.435	(1.143)	2.245	(0.912)		
INVOLVEMENT--DEPARTMENT ACTIVITIES						
Doctoral	1.098	(1.148)	2.008	(1.102)		
Comprehensive	1.879	(1.163)	2.411	(0.868)		
Community	1.280	(1.121)	2.055	(1.043)		
UNDERSTANDING--DEPARTMENT ACTIVITIES						
Doctoral	1.336	(1.224)	2.336	(0.952)		
Comprehensive	2.120	(1.065)	2.606	(0.694)		
Community	1.409	(1.146)	2.248	(0.908)		

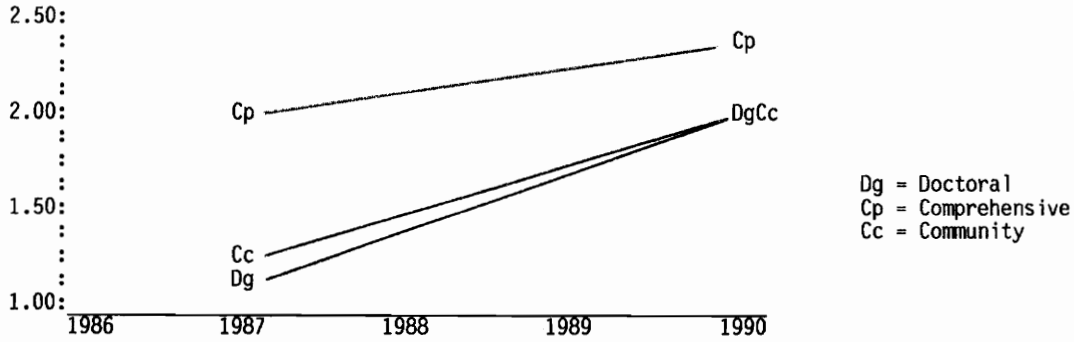

FIGURE 6a. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLE: INVOLVEMENT--DEPARTMENT PLAN

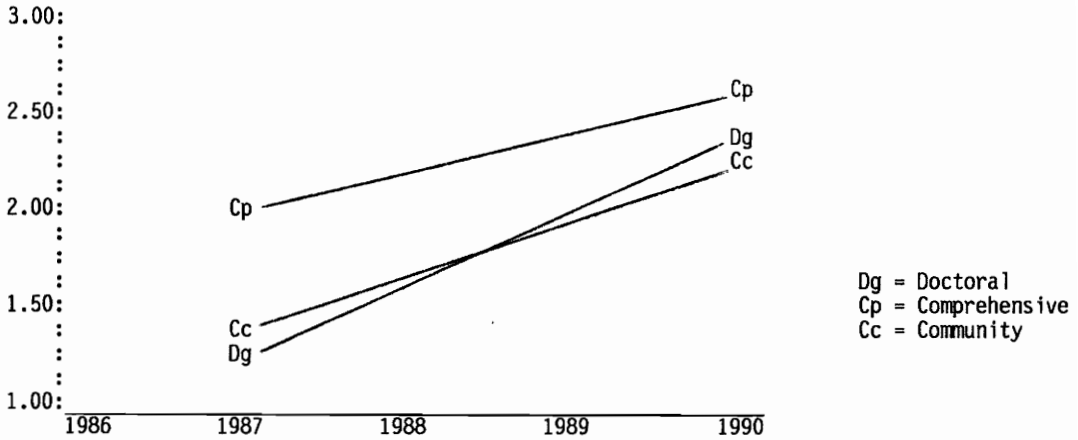

FIGURE 6b. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLE: UNDERSTANDING--DEPARTMENT PLAN

FIGURE 6c. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLE: INVOLVEMENT--DEPARTMENT ACTIVITIES

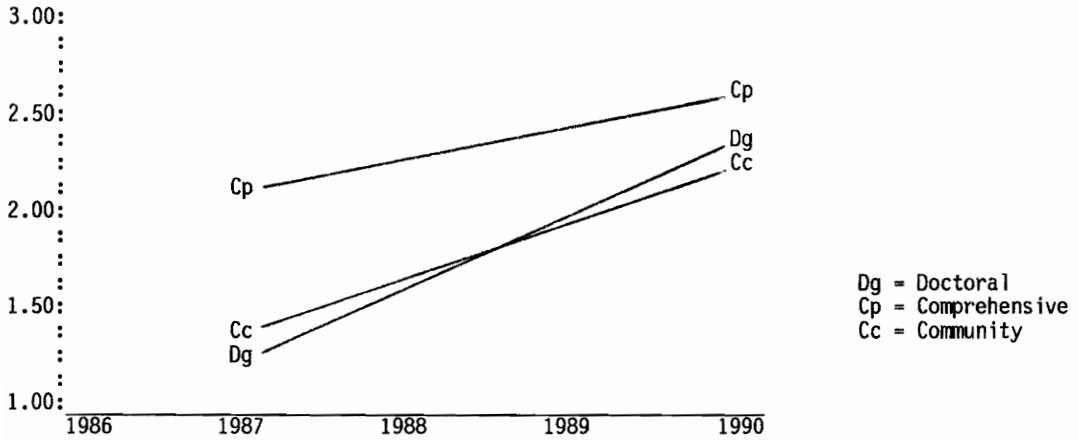

FIGURE 6d. GRAPH OF MEANS FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLE: UNDERSTANDING--DEPARTMENT ACTIVITIES

significantly higher than COMMUNITY means (1.304 and 1.280) which, in turn, were significantly higher than DOCTORAL means (1.121 and 1.098). For 1990, COMPREHENSIVE means (2.445; 2.411) were significantly higher than DOCTORAL means (2.096; 2.008) and COMMUNITY means (2.093; 2.055). Across YEAR (Figures 6a and 6c; Appendix 23a-c and g-i) for all three types of institutions for both variables, 1990 means (Department Planning: 2.096; 2.445; 2.093; Department Activities: 2.008; 2.411; 2.055) were significantly higher than corresponding 1987 means (Department Planning: 1.121; 1.991; 1.304; Department Activities: 1.098; 1.879; 1.280). These data reveal that, across time, COMPREHENSIVE respondent perceptions of their involvements in department assessment planning and department assessment activities were consistently the highest; DOCTORAL respondent perceptions were the lowest. This early lead in department assessment involvements by COMPREHENSIVE respondents is probably the result of their having had the assistance of an assessment coordinator from 1987 onward.

UNDERSTANDING Variables

For both understanding of department assessment planning and department assessment activities, the patterns were again almost identical. Within YEAR (Figures 6b and 6d; Appendix 22c-d and g-h) for 1987 for both variables, COMPREHENSIVE means (2.064; 2.120) were significantly higher than COMMUNITY

means (1.435; 1.409) and DOCTORAL means (1.381; 1.336). For 1990, COMPREHENSIVE means (2.618; 2.606) were again significantly higher than DOCTORAL means (2.396; 2.336) and COMMUNITY means (2.245; 2.248). Across YEAR (Figures 6b and 6d; Appendix 23d-f and j-l) for all three types of institutions for both variables, 1990 means (Department Planning: 2.396; 2.618; 2.245; Department Activities: 2.336; 2.606; 2.248) were significantly higher than corresponding 1987 means (Department Planning: 1.381; 2.064; 1.435; Department Activities: 1.336; 2.120; 1.409). These data reveal that, across time, COMPREHENSIVE respondent perceptions of understanding were consistently the highest; DOCTORAL respondent perceptions were the lowest. Again, assessment coordinators working with COMPREHENSIVE department head and faculty respondents from 1987 onward probably made the difference.

Overall, data from all four of the above significant two-way interactions reveal that across time and type, understandings were higher but not substantially higher than involvements. Respondents who perceived themselves to be more involved also perceived themselves as possessing higher understandings. COMPREHENSIVE department head and faculty respondent perceptions of their involvements and understandings were consistently the highest, probably because they tended to have an important early advantage--an

assessment coordinator. Finally, DOCTORAL department head and faculty respondent perceptions related to involvements in and understandings of department assessment planning and department assessment activities were the lowest among the three types of respondents. Previously discussed findings reveal that DOCTORAL respondent perceptions were the lowest regardless of the dependent variable. That is, DOCTORAL respondent perceptions were also the lowest among the three types of institutions for variables related to involvement in and understanding of institutional assessment planning, chief academic officer perceived importance, assessment coordinator perceived importance, department head perceived importance, faculty-in-the-department perceived importance, faculty-in-general perceived importance, and respondent perceived importance.

PRIMARY RESPONSIBILITY * YEAR Interaction Analyses

The PRIMARY RESPONSIBILITY * YEAR interaction effect was statistically significant ($p < .05$) for only one of the six ADDITIONAL dependent variables, understanding of department activities. The means and standard deviations for this significant interaction effect are found in Table 7; the means are plotted in Figure 7a. Post hoc testing results are found in Appendices 24 and 25.

Within YEAR (Figure 7a; Appendix 24a-b) for both 1987 and 1990 for understanding of department assessment activities,

TABLE 7
MEANS/STANDARD DEVIATIONS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

	1987 mean st.d.	1990 mean st.d.
Dependent Variable:		
UNDERSTANDING--DEPARTMENT ACTIVITIES		
Department Head	1.893 (1.176)	2.656 (0.677)
Faculty	1.323 (1.154)	2.198 (0.950)

FIGURE 7a. GRAPH OF MEANS FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSIS
ADDITIONAL DEPENDENT VARIABLE: UNDERSTANDING--DEPARTMENT ACTIVITIES

DEPARTMENT HEAD means (1.893; 2.656) were significantly higher than FACULTY means (1.323; 2.198). Across YEAR (Figure 7a; Appendix 25a-b), both DEPARTMENT HEAD and FACULTY 1990 means (2.656; 2.198) were significantly higher than corresponding 1987 means (1.893; 1.323). These data reveal that, across time, DEPARTMENT HEAD respondent perceptions of their understanding of department assessment activities were significantly higher than corresponding FACULTY perceptions. These findings seem reasonable because DEPARTMENT HEAD respondents would naturally be expected to be more aware of any formal activities that were being conducted within their departments. It is interesting to note that FACULTY respondents perceived their understanding had increased to moderate. Significant growth in understanding of department assessment activities had occurred by 1990. Since these department head and faculty respondents had been involved in department assessment planning and/or activities for at least one year prior to this study, these data suggest that such involvement probably was the major factor prompting these increases in understanding.

TYPE * PRIMARY RESPONSIBILITY * YEAR Interaction Analyses

The TYPE * PRIMARY RESPONSIBILITY * YEAR interaction effect was statistically significant ($p < .05$) for two of the six ADDITIONAL dependent variables, involvement in department assessment activities and respondent perceived importance.

The means and standard deviations for these significant interaction effects are found in Table 8; these means are plotted in Figures 8a-j. Post hoc testing results are found in Appendices 26-31. For each of these two dependent variables, the PRIMARY RESPONSIBILITY * YEAR within TYPE analysis has been presented first, followed by the TYPE * YEAR within PRIMARY RESPONSIBILITY analysis.

INVOLVEMENT Variable

PRIMARY RESPONSIBILITY * YEAR Within TYPE Analysis

For involvement in department assessment activities, the COMPREHENSIVE two-way interaction effect of PRIMARY RESPONSIBILITY * YEAR was significantly different from the DOCTORAL and COMMUNITY two-way interaction effects (Figures 8a-c). For both DOCTORAL and COMMUNITY, the patterns and magnitudes of difference were approximately the same for 1987 and were substantially different from those for COMPREHENSIVE. DOCTORAL and COMMUNITY department head perceptions regarding their 1987 involvement in department assessment activities were higher than the perceptions of their faculty counterparts. In contrast, COMPREHENSIVE faculty perceptions regarding their 1987 involvement were higher than the perceptions of their department head counterparts. For 1990, the patterns and magnitudes were approximately the same for all three types of institutions.

TABLE 8

MEANS/STANDARD DEVIATION FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES

	1987	1990
Doctoral		
Department Head	1.423 (1.146)	2.185 (0.963)
Faculty	0.925 (1.115)	1.917 (1.160)
Comprehensive		
Department Head	1.816 (1.219)	2.551 (0.765)
Faculty	1.931 (1.122)	2.293 (0.937)
Community		
Department Head	1.710 (1.099)	2.194 (1.002)
Faculty	1.168 (1.097)	2.015 (1.018)

Dependent Variable: IMPORTANCE--RESPONDENT

	1987	1990	1996
Doctoral			
Department Head	5.950 (2.774)	7.391 (2.379)	6.176 (2.704)
Faculty	4.036 (2.471)	5.633 (2.777)	4.552 (2.652)
Comprehensive			
Department Head	5.959 (3.136)	7.500 (2.991)	6.444 (3.251)
Faculty	6.179 (2.867)	6.983 (2.999)	5.426 (2.852)
Community			
Department Head	6.571 (2.877)	8.000 (2.527)	7.096 (2.892)
Faculty	5.226 (2.927)	6.872 (2.707)	5.622 (2.979)

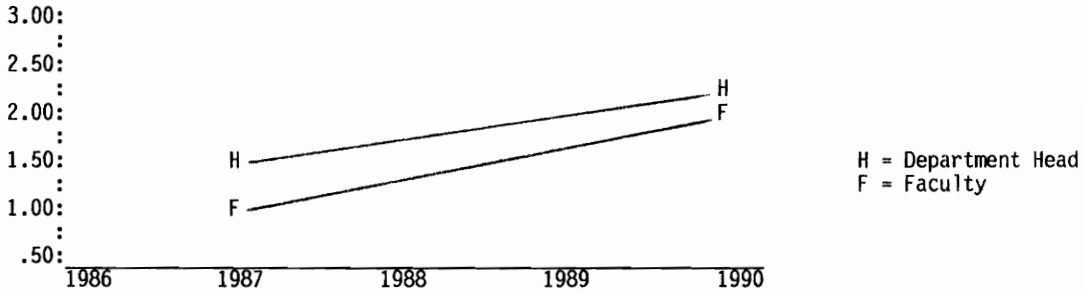

FIGURE 8a. DOCTORAL

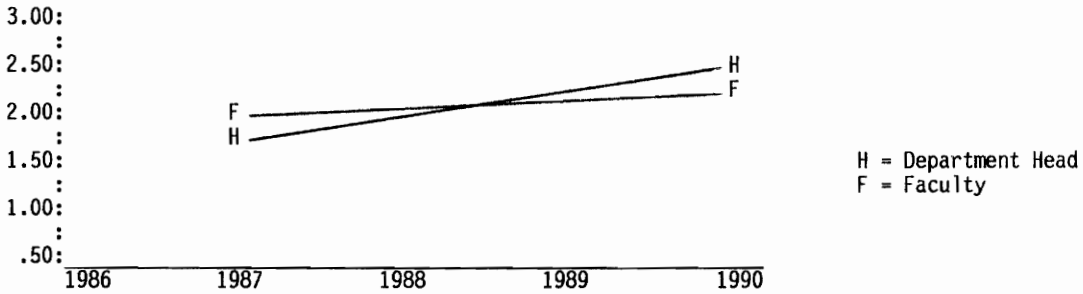

FIGURE 8b. COMPREHENSIVE

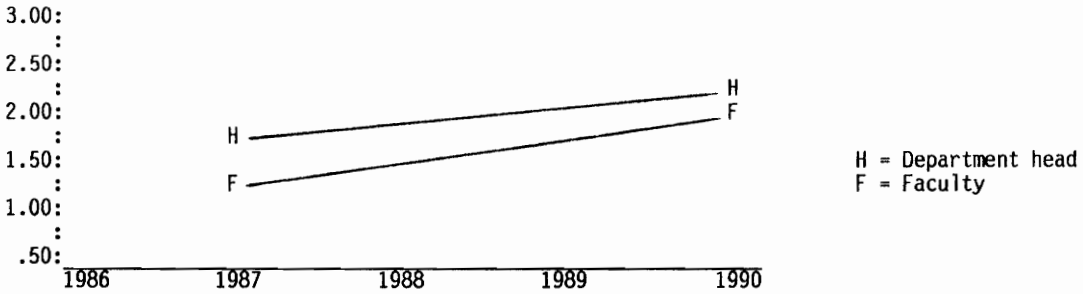

FIGURE 8c. COMMUNITY

FIGURES 8a-c. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS ADDITIONAL DEPENDENT VARIABLE: INVOLVEMENT--DEPARTMENT ACTIVITIES

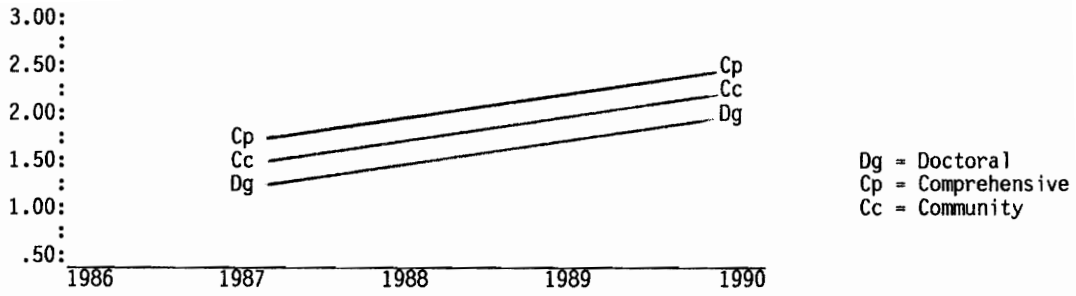

FIGURE 8d. DEPARTMENT HEAD

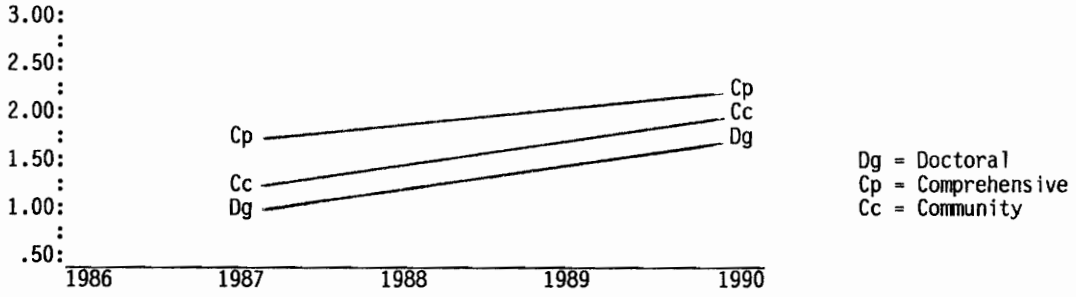

FIGURE 8e. FACULTY

FIGURES 8d-e. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS ADDITIONAL DEPENDENT VARIABLE: INVOLVEMENT--DEPARTMENT ACTIVITIES

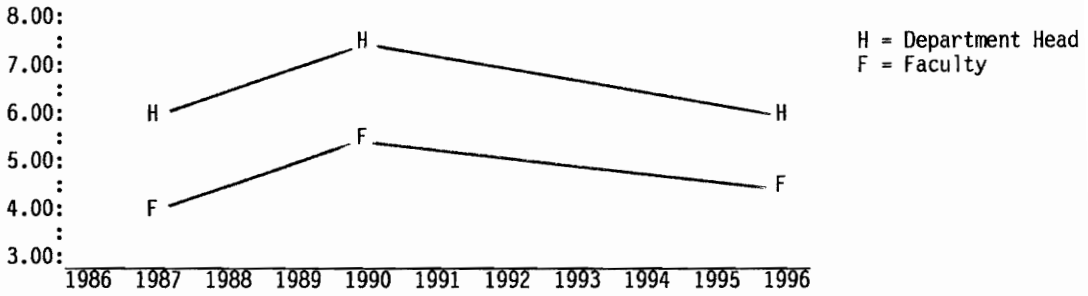

FIGURE 8f. DOCTORAL

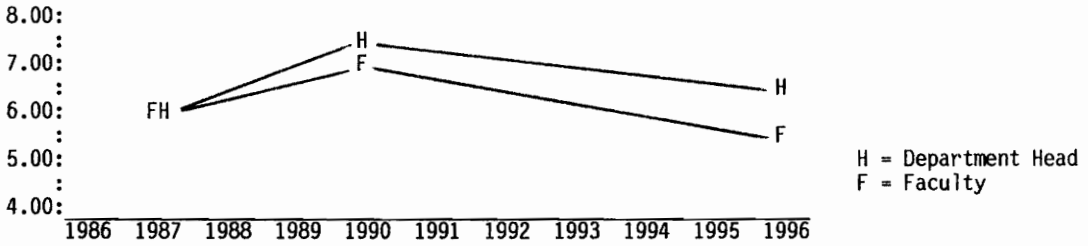

FIGURE 8g. COMPREHENSIVE

FIGURE 8h. COMMUNITY

FIGURES 8f-h. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS ADDITIONAL DEPENDENT VARIABLE: IMPORTANCE--RESPONDENT

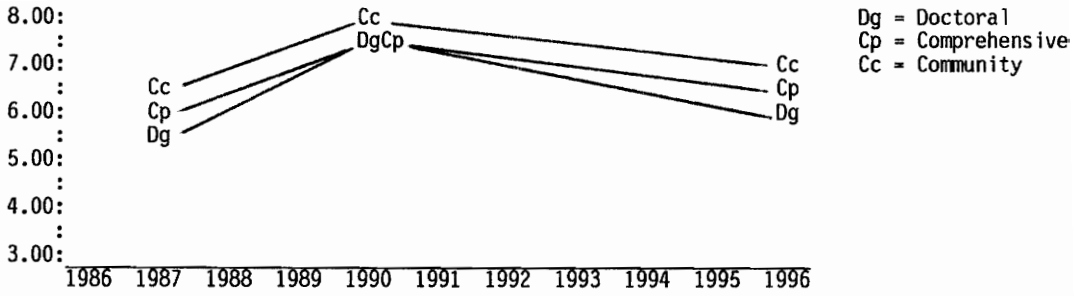

FIGURE 8i. DEPARTMENT HEAD

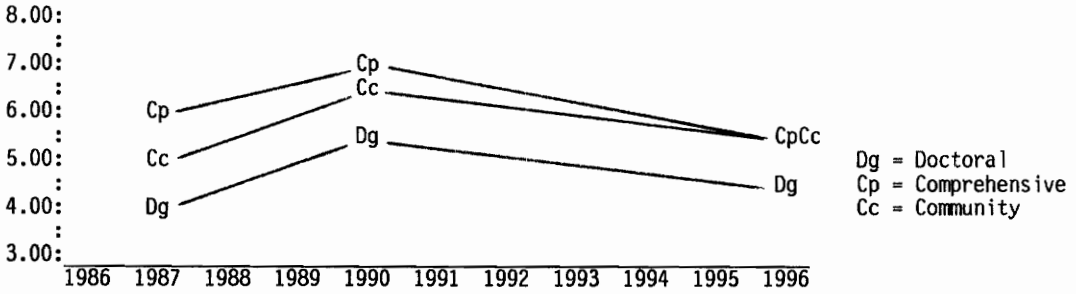

FIGURE 8j. FACULTY

FIGURES 8i-j. GRAPHS OF MEANS FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES--TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS ADDITIONAL DEPENDENT VARIABLE: IMPORTANCE--RESPONDENT

Within YEAR (Figures 8a-c; Appendix 26a-f) for 1987 for DOCTORAL and COMMUNITY, department head means (1.423; 1.710) were significantly higher than faculty means (0.925; 1.168). In contrast, the COMPREHENSIVE faculty mean (1.931) was not significantly higher than the COMPREHENSIVE department head mean (1.816). For 1990 for all three types of institutions, department head means (2.185; 2.551; 2.194) were not significantly higher than faculty means (1.917; 2.293; 2.015). Across YEAR (Figures 8a-c; Appendix 28a-f) for all three types of institutions, all 1990 means were significantly higher than corresponding 1987 means.

These data reveal that, across time, no change occurred in the relative positions of DOCTORAL and COMMUNITY department head and faculty respondent perceptions; COMPREHENSIVE department head and faculty respondent perceptions reversed positions. COMPREHENSIVE department head and faculty respondent perceptions were consistently the highest; DOCTORAL department head and faculty respondent perceptions were consistently the lowest. In essence, while the two COMPREHENSIVE groups of respondents reversed positions, they both were more involved in department assessment activities for each year than were any of their DOCTORAL and COMMUNITY counterparts. Through 1990, then, respondents from COMPREHENSIVE institutions appeared to hold onto the early lead in assessment involvement that they established in 1987.

It is important to note, however, that faculty respondents from all three institutions felt their involvement in department assessment activities had increased to at least moderate by 1990.

TYPE * YEAR Within PRIMARY RESPONSIBILITY Analysis

For involvement in department assessment activities, the DEPARTMENT HEAD two-way interaction effect of TYPE * YEAR was significantly different from the FACULTY two-way interaction effect (Figures 8d-e). Especially for 1987, the DEPARTMENT HEAD pattern and magnitude of difference were substantially different from those for FACULTY.

Within YEAR (Figures 8d-e; Appendix 27a-d) for 1987 for DEPARTMENT HEAD, the comprehensive mean (1.816) was not significantly higher than the community mean (1.7.10) but was significantly higher than the doctoral mean (1.423). The community mean was not significantly higher than the doctoral mean. For FACULTY, the comprehensive mean (1.931) was significantly higher than the community mean (1.168) which, in turn, was significantly higher than the doctoral mean (0.925). For 1990 for DEPARTMENT HEAD, THE comprehensive mean (2.551) was not significantly higher than the community mean (2.194) but was significantly higher than the doctoral mean (2.185). For FACULTY, the pattern was the same; the comprehensive mean (2.293) was not significantly higher than the community mean (2.015) but was significantly higher than

the doctoral mean (1.917). Across YEAR (Figures 8d-e; Appendix 28a-f) for both DEPARTMENT HEAD and FACULTY, all 1990 means were significantly higher than corresponding 1987 means.

These data reveal that, across time, DEPARTMENT HEAD and FACULTY respondent perceptions from comprehensive institutions were consistently the highest; respondent perceptions from doctoral institutions were consistently the lowest. DEPARTMENT HEAD respondent perceptions from all three types of institutions were close; however, FACULTY respondent perceptions from all three types were close only for 1990. In fact for 1987, FACULTY respondent perceptions from comprehensive institutions were significantly higher than corresponding FACULTY respondent perceptions from the other two types. These data suggest that while DEPARTMENT HEAD and FACULTY respondents from comprehensive institutions still held their early lead in involvement in department assessment activities, DEPARTMENT HEAD and FACULTY respondents from both community colleges and doctoral universities had closed the gap by 1990.

IMPORTANCE Variable

PRIMARY RESPONSIBILITY * YEAR Within TYPE Analysis

For respondent perceived importance regarding formal assessment, the COMPREHENSIVE two-way interaction effect of PRIMARY RESPONSIBILITY * YEAR was significantly different from the DOCTORAL and COMMUNITY two-way interaction effects

(Figures 8f-h). For both DOCTORAL and COMMUNITY, the patterns and magnitudes of difference were approximately the same for all three years; for COMPREHENSIVE, however, the patterns and magnitudes changed.

Within YEAR (Figures 8f-h; Appendix 29a-i) for 1987, 1990, and 1996 for DOCTORAL and COMMUNITY, department head means (DOCTORAL: 5.950; 7.391; 6.176; COMMUNITY: 6.571; 8.000; 7.069) were significantly higher than corresponding faculty means (DOCTORAL: 4.036; 5.633; 5.622; COMMUNITY: 5.226; 6.872; 5.622). For COMPREHENSIVE for 1987 and 1990, department head and faculty means were approximately equal (5.959 vs. 6.179; 7.500 vs. 6.983); but for 1996, the department head mean (6.444) was significantly higher than the faculty mean (5.426). For all three types of institutions, the 1996 patterns and magnitudes of difference were approximately the same.

Across YEAR (Figures 8f-h; Appendix 31a-f), the vast majority of means differences were significant. The 1990 means were always significantly higher than the 1987 means; 1996 means were always significantly lower than the 1990 means; but 1996-1987 means comparisons revealed substantial variation. The 1996 DOCTORAL, COMPREHENSIVE, and COMMUNITY department head means (6.176; 6.444; 7.096) were not significantly higher than their corresponding 1987 means (5.950; 5.959; 6.571). In contrast, the 1996 DOCTORAL and

COMMUNITY faculty means (4.522; 5.622) were significantly higher than their corresponding 1987 means (4.036; 5.226). Perhaps more surprising is the 1996-1987 means comparison for COMPREHENSIVE faculty respondents; the 1996 mean (5.426) was significantly lower than its corresponding 1987 mean (6.179).

These data reveal that, across time, DOCTORAL and COMMUNITY department head respondent perceptions regarding their own perceived importance for assessment were significantly higher than corresponding faculty respondent perceptions. In contrast, COMPREHENSIVE department head and faculty respondent perceptions were in close agreement for 1987, farther apart for 1990, and still farther apart for 1996. These data reveal that, overall, faculty respondent perceptions from all three types of institutions were consistently the lowest among the three groups of respondents, and DOCTORAL faculty respondent perceptions of their own perceived importance regarding formal assessment were the lowest of all.

TYPE * YEAR Within PRIMARY RESPONSIBILITY Analysis

For respondent perceived importance related to formal assessment, the DEPARTMENT HEAD two-way interaction effect of TYPE * YEAR was significantly different from the FACULTY two-way interaction effect (Figures 8i-j). For DEPARTMENT HEAD for all three years, the patterns and magnitudes of difference

were approximately the same and were substantially different from those found for FACULTY.

Within YEAR (Figures 8i-j; Appendix 30a-f), significant differences were found in slightly over half of all means comparisons. For 1987 for DEPARTMENT HEAD, the community mean (6.571) was not significantly higher than the comprehensive mean (5.959) but was significantly higher than the doctoral mean (5.950). For FACULTY, the comprehensive mean (6.179) was significantly higher than the community mean (5.226) which, in turn, was significantly higher than the doctoral mean (4.036). For 1990 for DEPARTMENT HEAD, the community mean (8.000) was not significantly higher than the comprehensive mean (7.500) but was significantly higher than the doctoral mean (7.391). For FACULTY, the comprehensive mean (6.983) and the community mean (6.872) were both significantly higher than the doctoral mean (5.633). For 1996 for DEPARTMENT HEAD, the community mean (7.096) was not significantly higher than the comprehensive mean (6.444) but was significantly higher than the doctoral mean (6.176). For FACULTY, the community mean (5.622) and the comprehensive mean (5.426) were both significantly higher than the doctoral mean (4.552).

Across YEAR (Figures 8i-j; Appendix 31a-f), significant differences were found in the vast majority of means comparisons. All 1990 means were significantly higher than corresponding 1987 means; all 1996 means were significantly

lower than corresponding 1990 means; and 1996-1987 means comparisons produced varied results. For DEPARTMENT HEADS across all three types of institutions, 1996 means were consistently higher but not significantly higher than corresponding 1987 means. For FACULTY, however, doctoral and community 1996 means (4.552; 5.622) were significantly higher than corresponding 1987 means (4.036; 5.226). In contrast, the comprehensive 1996 mean (5.426) was significantly lower than its corresponding 1987 mean (6.179).

These data reveal that, across time and types of institutions, DEPARTMENT HEAD respondent perceptions of their own perceived importance related to formal assessment were consistently higher than FACULTY respondent perceptions. DEPARTMENT HEAD respondent perceptions from community colleges were consistently the highest, and corresponding DEPARTMENT HEAD perceptions from doctoral institutions were consistently the lowest. In contrast, FACULTY respondent perceptions from comprehensive institutions were the highest, and again, corresponding FACULTY perceptions from doctoral institutions were consistently the lowest. In every case at each type of institution and for each group of personnel, there was an increase in perceived importance for 1990 followed by a perceived future decline for 1996. These data, as well as all the IMPORTANCE data presented thus far in this chapter, suggest that the momentum for the assessment mandate that had

been generated by 1990 was expected to be lost if SCHEV relaxed its requirements.

Even among department heads and faculty who had been moderately involved in department assessment planning and/or department assessment activities for at least one year, there was no doubt that SCHEV reporting requirements continued to be a major factor influencing perceptions about assessment. By 1990, department head respondents perceived assessment was very important perhaps because they were told by their superiors to take it seriously or perhaps because they felt department assessment findings could have serious impacts on their department's structure, staffing, and funding. By 1990, faculty respondents consistently perceived that assessment was important (but not highly important) for perhaps many of the same reasons. These department head and faculty respondents were identified by their assessment coordinators as those individuals "carrying the assessment load" for their respective campuses. Overall, respondents did not appear to possess a strong belief in the intrinsic importance of formal outcomes assessment. Without external pressure from SCHEV, these chief academic officer, assessment coordinator, and especially department head and faculty respondents have said they expect future perceived importance regarding formal assessment will significantly decline.

Non-Significant Two-Way and Three-Way Interaction Data

A review of the means, patterns, and magnitudes of difference from all other non-significant two-way and three-way interaction effects revealed no new information. All 1990 ratings were higher than 1987 ratings; for the IMPORTANCE variables, 1996 ratings were lower than 1990 ratings; and 1996 ratings were as low or lower than 1987 ratings. Patterns and magnitudes of difference echoed the findings of the significant YEAR main effects and two-way and three-way interaction effects that have been presented in this chapter.

Follow-Up Interview and Written Comment Findings

The second research question addressed the identification and examination of common factors that had influenced administrator and faculty involvement, understanding, and perceived importance regarding formal assessment at Virginia public colleges and universities. Data from the 67 interviews, as well as data from 509 written comments from the questionnaires, were examined. In 43 cases, additional pages of comments, copies of articles that supported various positions, and copies of campus assessment materials (newsletters, memos, reports, etc.) accompanied returned questionnaires or were received during interviews. Over 300 pages of qualitative data were summarized, cross-referenced, and cross-validated. Approximately 70% of all comments contained common concerns, criticisms, praises, or mixtures

of all three. A common factor was defined as one that was voiced by at least 50% of all commenters across types of institutions and groups of personnel. Eight common factors emerged from the data and have been presented in descending order of frequency (Table 9). All findings have been presented in the order of, first, negative viewpoints, second, positive viewpoints, and finally, mixed viewpoints and concerns.

SCHEV's Role

Over 90% of all commenters spoke of the role that the State Council of Higher Education played in initiating and sustaining Virginia's assessment efforts thus far. Almost 25% of these individuals referred to SCHEV's role in strong negative language. Typical words and phrases included "SCHEV threats," "edicts," "intrusions," "just another SCHEV fad," "another ridiculous educational fad created by bureaucrats and politicians who have nothing better to do," and "another example of centralized authority trying to standardize higher education." Activities and reports were criticized as "meaningless busy work," and others said SCHEV had "alienated" administrators and faculty.

Approximately 5% of this overall 90% referred to SCHEV's role in strong positive language. SCHEV's "reasonable attitudes," "flexibility," "persistence in encouraging faculty

TABLE 9
EIGHT COMMON FACTORS WHICH HAVE INFLUENCED
ADMINISTRATOR AND FACULTY INVOLVEMENT, UNDERSTANDING, AND
PERCEIVED IMPORTANCE REGARDING FORMAL ASSESSMENT

FACTOR	% of Total References	% of Negative, Positive, Mixed, or Neutral References
1. SCHEV's Role	90%	25% Negative 5% Positive 70% Mixed
2. SACS' Requirements	75%	100% Neutral
3. Chief Academic Officer's Role	65%	50% Negative 50% Positive
4. Assessment Coordinator's Effectiveness	65%	15% Negative 75% Positive 10% Mixed
5. Limited Resources	60%	100% Negative
6. Valuable Results	60%	80% Positive 20% Mixed
7. Educating Administrators and Faculty (Communication Involvement and Knowledge)	55%	50% Negative 50% Mixed
8. Intrinsic Value of Assessment	50%	80% Positive 20% Mixed

involvement," "praise" of specific assessment activities, "national leadership," and "dedication" were cited.

Approximately 70% of this 90%, fairly evenly distributed across type and group, referred to SCHEV's role with mixed evaluations. Whether beginning with negative descriptors such as "inconvenient," "unrealistic," "unreasonable" reporting requirements or with more neutral, matter-of-fact terms such as "SCHEV's mandate," "requirements," "criteria," or "guidelines," most of these commenters went on to talk about how outcomes assessment was "important," "a sound idea," and "something we should do if we aren't already doing it." Referring to reporting deadlines, phrases such as "frustrating" and "much less than full faculty involvement" were frequently followed by sentiments such as "necessary but difficult external reporting requirements." "Early confusion and frustration" were attributed to SCHEV's "lack of direction," "vagueness," and "ambiguity," but others concluded that perhaps SCHEV was not completely at fault. As one doctoral university department head surmised,

> The process had to start somewhere, and I believe that perhaps SCHEV had communicated more than many of us were told in 1987. I can't believe this just suddenly appeared out of nowhere. Maybe some of our people knew that it was coming but just ignored it or felt they would save us the trouble by dealing with it themselves. That's happened before.

Whatever the cause, according to many of these observers, the resulting initial distrust shaped negative faculty attitudes and "never gave assessment a chance to prove its worth."

Over half of those who criticize SCHEV's "early difficulties," however, concluded that by 1990 "some progress has been made." They praised SCHEV's more recent efforts "to involve more faculty in conferences and workshops" and to send out "people to talk to our administrators and faculty." In all, SCHEV's pressure was credited as being both the critical factor driving assessment in Virginia thus far and, at the same time, the reason faculty initially have been nonsupportive. As one senior humanities faculty member from a comprehensive college observed,

> Top-down required activities have been conducted and reports have been submitted. In 1987, SCHEV wanted assessment. I suppose by now a few administrators and faculty in a few places really want it too, but my guess is that it's still SCHEV's game in 1990."

SACS' Requirements

Over 75% of all commenters referred to "SACS requirements," "SACS criteria." or "SACS self-study guidelines." No one referred to SACS before referring to SCHEV, except when considering a future without SCHEV requirements. Typical administrator responses were "SACS will always require assessment even if SCHEV drops its reporting requirement" and "SACS requirements are here to stay, and we all had better get used to that fact."

All comments about SACS tended to be matter-of-fact, and commenters cited three reasons. SACS was too far removed; SACS accreditation was needed and desired; and SACS intruded only once every ten years.

Chief Academic Officer's Role

Over 65% of all commenters referred to their chief academic officer as an important factor. Comments included references to commitment, involvement, and understanding, and almost half of this 65% spoke negatively. "Lack of leadership" was often followed by such statements as "no one on campus has ever heard or has rarely ever heard him mention the subject"; "I'm not sure how she feels about it"; and "as long as he doesn't have to do anything about it but sign off on the report, he doesn't care."

The other half spoke positively, using terms such as "visible," "vocal," "creative," and "knowledgeable." Their chief academic officers defined assessment as "a top priority," "an integral part of our every day work," and "a set of benefits rather than processes." Two additional observations emerged. First, turnover among chief academic officers often meant momentum had to be regained. Second, committed chief academic officers selected equally committed assessment coordinators but "worked hard" to continue to be seen as the "driving force" for assessment on their campuses.

Assessment Coordinator's Effectiveness

Similar to the chief academic officer factor, approximately 65% of all commenters referred to assessment coordinators. In contrast to the nearly 50% negative chief academic officer reaction, only about 15% of these commenters spoke negatively, and these commenters appeared to address one coordinator at a doctoral institution, two at comprehensive institutions, and two at community colleges. These individuals were described as "uninterested," "the weak link," "going through the motions," and "naive."

Over 75% of this 65% spoke positively, using such terms as "committed," "knowledgeable," "competent," "caring, "and "hard working." Eight coordinators were cited as "respected senior faculty." Effective coordinators "shared faculty concerns," "gave good advice about procedures and tests," "set a pace we could live with," "kept us well informed," and "held committee meetings to a minimum." Coordinator updates, newsletters, reports, presentations before all faculty, and "day to day cooperation" were especially appreciated.

Three additional observations emerged. First, in 1987-88 apparently at least four doctoral universities, two comprehensive colleges, and eleven community colleges either had no assessment coordinator or at least he or she was not well known. Administrators and faculty said they felt "in the dark" and "assumed that assessment must not really be that

important." Second, the turnover rate appeared to be high. Over 40% of all institutions have had more than one coordinator since 1987-88. Third, commenters especially appreciated coordinators in 1990 because they provided essential clerical and technical support.

Limited Resources

The fifth most frequently mentioned factor was "lack of resources." Approximately 60% of all commenters referred to this factor, but no one spoke positively about the three concerns that emerged: 1) time, 2) money, and 3) allocation or reallocation uncertainty.

The most frequent negative comment was that assessment was a "waste of time," figuratively and literally. Typical phrases relating time and working conditions were "I'm already overloaded just with heavy class loads and research" and "I have no time left for anything other than preparing for classes, teaching classes, grading exams and papers, conferencing with students, attending committee meetings, and preparing for classes again." Planning, implementing, interpreting data, and determining curriculum and teaching changes were seen as important, but formalizing these activities and externally reporting was "paper shuffling," and "not an essential part of the assessment process but the part that has taken the most time and effort." A science professor

at a doctoral institution spoke to "the heart of this issue" when he said,

> Assessment is an unnecessary formal analysis of what we already informally know but can do little about without more release time, more space and equipment, more staff, in short, more money.

Others asked such questions as "How could assessment have been perceived as so important in 1987 when so little funding was provided for staff and materials and no money was provided for faculty release time?" Others "doubted" assessment's "long term viability" and "chances for survival," given recent higher education funding cuts.

One final concern about resources related to allocation or reallocation of funds. SCHEV had consistently said funding should not be tied to outcomes, but many commenters worried that SCHEV's position might change. Further, some voiced the fear that should institutional funding be decreased in the 1990s, institutions themselves might begin reallocating funds based on assessment results. A department head at a comprehensive institution perhaps best described one important underlying uncertainty:

> Would a department having poorer results lose funding or ironically would it receive an increase to help "pull itself up"? Is it possible that a department having better results might be "punished" rather than rewarded? In either case, data originally designed to be "non-threatening" would, in fact, be quite threatening to either department.

In essence, the issues of time, money, and future uses of data have continued to be important arguments working against widespread perceived importance for assessment. Few commenters expected administrator and faculty perceived importance for assessment to increase until funding increased, and no one seemed to know when that might be.

Valuable Results

Nearly 60% of all commenters cited the importance of "useable results" to generate involvement, understanding, and perceived importance. In sharp contrast to the factor of resources, roughly 80% of these commenters were hopeful about the potential for results to convince skeptical faculty. They commented on the "utility of the data" and the "value of the data" offsetting the "trouble and expense of collecting it." They went on to say that results had to produce "workable," "visible," "practical," "positive" changes in student, faculty, and administrator behavior. In essence, results had to produce "valuable" and "significant" improvements in curriculum and teaching, or assessment would "be forgotten by the mid 1990s."

Many professional and vocational/technical program personnel stated that they had been conducting assessment activities for many years. Engineering and nursing administrators and faculty, for example, were quick to point out that their certification exams and employer/graduate

surveys had "consistently yielded valuable results" which frequently led to "significant modifications." They argued that for their programs,

> SCHEV's requirements have had little meaning. We didn't start assessing because of SCHEV, and we won't stop when they get tired of filing away reports.

Many of these same professional and vocational/technical commenters wondered if results would "lead to important improvements in the Arts and Sciences." While many felt it was time for "the other side" (i.e., liberal arts) to become "accountable," few were convinced that Arts and Sciences faculty would ever accept assessment as an integral part of their programs.

Educating Administrators and Faculty (Communication, Involvement, and Knowledge)

The factors of communication, involvement, and knowledge were so frequently mentioned together that commenters appeared to be seeing them as one integrated factor. Only rarely was one mentioned without the other two being mentioned in immediately following statements. Nearly 55% of all commenters referred to the importance of "educating and involving more and more faculty" if faculty ownership and the "institutionalizing of assessment" were to occur.

As might be expected, no one spoke against the value of communication, involvement, and knowledge regarding assessment, but roughly half of this 55% criticized SCHEV,

their chief academic officer, their assessment coordinator, or their department head for "poorly communicating," "not encouraging involvement," or "not knowing much about assessment himself." While committee work was often seen as "despised by faculty," it was also seen as "an effective way to both educate and involve at the same time." Commenters referred to the importance of SCHEV presentations before committees and whole faculties at institutions and suggested SCHEV needed to continue this practice. Commenters noted that administrators and faculty needed to know more about "the history of assessment, especially assessment in Virginia," "how SCHEV arrived at the 'need' for assessment," "just what was this 'need,'" and "how would 'letting everybody do their own thing' satisfy this 'need.'" Some commenters took a more aggressive stand similar to that found in the following comment made by a social science faculty member at a community college:

> From its beginning assessment has been seen as a tool of administrators and SCHEV. As long as that impression exists, the faculty will never see their ownership as anything but an illusion being encouraged to conceal the "real" uses of the data.

These critics stressed that "first impressions" were difficult to change and that communication and involvement arising from in-service workshops and state, regional, and national conferences would lead to "more knowledgeable faculty" who would assume "control" of assessment. "Assessment has

important potentials," they argued, but "the data, interpreting it, and actually changing curriculum and instruction all have to be under the direct control of the faculty." Many concluded that "current external reporting requirements only sustain first impressions." In fact, over 30% referred to external reporting beyond the department level as "threatening," "unnecessary," and "counterproductive."

Intrinsic Value of Assessment

Finally, perhaps the most positive factor mentioned by over 50% of all commenters was the concept of assessment itself. While external reporting requirements seemed to represent a barrier to full campus involvement, understanding, and perceived importance related to formal assessment activities, virtually no one questioned the intrinsic worth of assessment. Many referred to it as a "sound idea," "an idea whose time has come," and "an idea no professional educator can ever ignore." Others simply echoed SCHEV's phrase that it was "a means to improve curriculum and instruction." Individuals from professional and vocational/technical disciplines emphasized that they had always performed outcomes assessment because it was "an excellent concept." Still others spoke of how assessment "heightens awareness of student learning rather than faculty teaching." Many expressed their desire to "keep students first and do the best we can do to help them learn." Others

commented on the importance of "continuous feedback" and of "accountability to students, parents, employers, graduate schools, and the community."

About 20% of these very positive commenters, however, felt that the intrinsic value of assessment had already been overshadowed by the negative attitudes regarding external reporting. While reporting "might be a necessary mechanism" to "protect" an "excellent concept" from being "pushed aside by tight budgets and 'greater' needs," many hoped that faculty could eventually ignore "other people looking at the data." One community college assessment coordinator perhaps best expressed this optimism shared by this small group of avid supporters:

> My hope and prediction is that [assessment] will become somewhat less of an administrative priority and more of a faculty owned enterprise, as more and more academic departments steadily become more closely involved. As it becomes more pervasive and routine--institutionalized--as a regular part of curriculum development, I predict its perceived importance may diminish while its actual importance grows.

CHAPTER FIVE

Summary, Conclusions, Implications, and Recommendations

The purpose of this study was to investigate administrator and faculty support for formal assessment at Virginia public colleges and universities. There were three major objectives related to this purpose: (1) to investigate across-time involvements in and understandings of institutional/department assessment planning and department assessment activities; (2) to investigate perceptions of across-time administrator and faculty perceived importance regarding formal assessment; and (3) to identify common factors which have influenced involvement, understanding, and perceived importance.

Two research questions addressed these objectives. The first research question concerned the examination of past and present involvements/understandings and past, present, and future perceived importance related to formal assessment. Administrator and faculty across-time support was defined to be the composite of the above involvements, understandings, and perceptions of importance. The second research question concerned the examination of common factors which have influenced across-time support.

Summary of Results

YEAR Main Effect Analyses

There were significant YEAR main effect results for dependent variables related to (1) institutional assessment planning; (2) department assessment planning and activities; and (3) all of the IMPORTANCE variables (chief academic officer perceived importance, assessment coordinator perceived importance, department head perceived importance, respondent perceived importance, faculty-in-the-department perceived importance, and faculty-in-general perceived importance). Results reveal that, across time, all respondents (chief academic officers, assessment coordinators, department heads, and faculty) perceived their involvement in and understanding of institutional assessment planning had significantly increased. Similarly, department head and faculty respondents perceived their involvement in and understanding of department assessment planning and department assessment activities had significantly increased. Also across time, respondent perceptions of their understandings were consistently higher than their perceptions of their involvements.

Results further reveal that, across time, respondents saw that for 1990 perceived importance regarding formal assessment for all six IMPORTANCE variables had significantly increased. Data further reveal that respondents expected all future levels of perceived importance would be significantly lower

if SCHEV relaxed its reporting requirements. In fact, when considering this hypothetical condition, respondents expected future levels of perceived importance to be significantly below 1987 levels for both assessment coordinators and chief academic officers. It should be noted at this point that (1) SCHEV officials have never said or implied that assessment requirements would ever be relaxed and (2) this hypothetical condition was offered to respondents of this study in an attempt to measure how intrinsically important they perceived assessment might be by the end of a decade of formal assessment activities.

YEAR main effect results further reveal that, across time, assessment coordinator perceived importance regarding formal assessment was consistently seen as the highest among the six perceived importance dependent variables. Chief academic officer perceived importance was consistently seen as the second highest, followed by department head perceived importance, respondent perceived importance, faculty-in-the-department perceived importance, and faculty-in-general perceived importance. In essence, all YEAR main effect results confirm that significant increases in involvement, understanding, and perceived importance have occurred and that significant declines in future perceived importance were expected to occur if SCHEV's assessment requirements were relaxed.

TYPE * YEAR Interaction Analyses

There were significant TYPE * YEAR interaction effect results for dependent variables related to (1) institutional assessment planning; (2) department assessment planning and activities; and (3) the three IMPORTANCE variables of assessment coordinator perceived importance, chief academic officer perceived importance, and faculty-in-general perceived importance. Results reveal that, across time, perceptions about institutional planning from COMPREHENSIVE college and COMMUNITY college respondents were consistently and almost always significantly higher than corresponding perceptions from DOCTORAL university respondents. COMPREHENSIVE, COMMUNITY, and DOCTORAL respondent perceptions regarding their involvements in institutional assessment planning were approximately equal. COMPREHENSIVE and COMMUNITY respondent perceptions regarding their understandings of institutional assessment planning were significantly higher than corresponding DOCTORAL respondent perceptions. Across time and types of institutions, respondent perceptions of their understanding of institutional assessment planning were consistently higher than their corresponding perceptions of involvement in this planning.

Results further reveal that, across time, perceptions about department assessment planning/activities from COMPREHENSIVE college respondents were always higher and

almost always significantly higher than corresponding perceptions from COMMUNITY college and DOCTORAL university respondents. Perceptions from DOCTORAL university respondents were frequently the lowest, and across time and types of institutions, respondent perceptions of their understandings of department assessment planning and activities were consistently higher than their perceptions of their involvements in such planning and activities.

Finally, results reveal that, across time, perceptions about assessment coordinator perceived importance, chief academic officer perceived importance, and faculty-in-general perceived importance remained relatively constant in relation to types of institutions. COMPREHENSIVE and COMMUNITY respondent perceptions were significantly higher than corresponding DOCTORAL respondent perceptions. In essence, all significant TYPE * YEAR interaction effect results related to involvement, understanding, and perceived importance confirm that DOCTORAL university respondent perceptions were the lowest among the three TYPES of public colleges and universities.

PRIMARY RESPONSIBILITY * YEAR Interaction Analyses

There were significant PRIMARY RESPONSIBILITY * YEAR interaction effect results for dependent variables related to (1) understanding of department assessment activities and (2) the four IMPORTANCE variables of chief academic officer

perceived importance, assessment coordinator perceived importance, department head perceived importance, and faculty-in-general perceived importance. Results reveal that, across time, DEPARTMENT HEAD and FACULTY respondents perceived their understanding of department assessment activities had significantly increased. Results further reveal that DEPARTMENT HEAD respondent perceptions about understanding department activities were significantly higher than corresponding FACULTY respondent perceptions about these assessment activities.

Results related to chief academic officer perceived importance, assessment coordinator perceived importance, department head perceived importance, and faculty-in-general perceived importance were consistent in relation to groups of respondents. Results reveal that, across time, perceptions of importance from either ADMINISTRATOR respondents (chief academic officers and assessment coordinators) or DEPARTMENT HEAD respondents were almost always significantly higher than corresponding perceptions from FACULTY respondents. FACULTY respondent perceptions were consistently the lowest for 1990 and 1996. In essence, all significant PRIMARY RESPONSIBILITY * YEAR interaction effect results related to both understanding of department assessment activities and perceived importance confirm that FACULTY respondent

perceptions were consistently the lowest among the three PRIMARY RESPONSIBILITY groups.

TYPE * PRIMARY RESPONSIBILITY * YEAR Interaction Analyses

There were significant TYPE * PRIMARY RESPONSIBILITY * YEAR interaction effect results for dependent variables related to (1) understanding of institutional assessment planning; (2) chief academic officer perceived importance; (3) involvement in department assessment activities; and (4) respondent perceived importance.

Across time, all DOCTORAL, COMMUNITY, and COMPREHENSIVE respondents (ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY) perceived their understanding of institutional assessment planning had significantly increased to moderate. PRIMARY RESPONSIBILITY * YEAR within TYPE analysis confirmed that DOCTORAL and COMMUNITY patterns and magnitudes of difference were initially different from COMPREHENSIVE patterns and magnitudes of difference. TYPE * YEAR within PRIMARY RESPONSIBILITY analysis confirmed that ADMINISTRATOR and FACULTY patterns and magnitudes of difference were initially different from DEPARTMENT HEAD patterns and magnitudes of difference. DOCTORAL and COMMUNITY ADMINISTRATOR and DEPARTMENT HEAD respondent perceptions of their understandings of institutional assessment planning were consistently higher than corresponding DOCTORAL and COMMUNITY FACULTY respondent perceptions. In contrast, COMPREHENSIVE ADMINISTRATOR

respondent perceptions were significantly higher than COMPREHENSIVE FACULTY and DEPARTMENT HEAD respondent perceptions for 1987. By 1990, however, COMPREHENSIVE DEPARTMENT HEAD and FACULTY respondent perceptions were much closer to COMPREHENSIVE ADMINISTRATOR respondent perceptions. While COMPREHENSIVE DEPARTMENT HEAD and FACULTY respondents reversed positions, both groups perceived their understanding had significantly increased. In essence, all of the above results confirm that by 1990 for all three types of institutions, ADMINISTRATOR respondent perceptions of their understanding of institutional assessment planning were the highest, DEPARTMENT HEAD respondent perceptions were next highest, and FACULTY respondent perceptions were consistently the lowest. Also, it should be noted that, across time, DOCTORAL FACULTY respondent perceptions of their understandings institutional assessment planning were the lowest among all three types of FACULTY.

Across time, all DOCTORAL, COMMUNITY, and COMPREHENSIVE respondents (ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY) saw a significant increase in chief academic officer perceived importance for 1990, and they expected future chief academic officer perceived importance would significantly decline if SCHEV requirements were relaxed. PRIMARY RESPONSIBILITY * YEAR within TYPE analysis confirmed that COMMUNITY, and COMPREHENSIVE patterns of magnitudes of difference were

initially different from the DOCTORAL patterns and magnitudes of difference. TYPE * YEAR within PRIMARY RESPONSIBILITY analysis confirmed that DEPARTMENT HEAD and FACULTY patterns and magnitudes of difference were initially different from the ADMINISTRATOR patterns and magnitudes of difference. For 1987, COMMUNITY and COMPREHENSIVE DEPARTMENT HEAD and FACULTY respondent perceptions of chief academic officer perceived importance were consistently higher than corresponding COMMUNITY and COMPREHENSIVE ADMINISTRATOR respondent perceptions. In contrast, DOCTORAL ADMINISTRATOR respondent perceptions were significantly higher than corresponding DOCTORAL DEPARTMENT HEAD and FACULTY respondent perceptions. For 1990, there were no differences among COMMUNITY, COMPREHENSIVE, and DOCTORAL patterns or magnitudes of difference. In essence, all three groups of respondents from all three types of institutions felt chief academic officer perceived importance for assessment was high. For 1996, there again were no significant differences among patterns for the three types of institutions; however, 1996 magnitudes of difference were greater than 1990 magnitudes of difference. Regardless of type of institution, FACULTY respondent perceptions were consistently the lowest among all three PRIMARY RESPONSIBILITY groups, and DOCTORAL FACULTY respondent perceptions of chief academic officer perceived importance were significantly lower than corresponding COMMUNITY or

COMPREHENSIVE FACULTY respondent perceptions. In fact, while COMPREHENSIVE ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY respondent perceptions across time were consistently the highest, DOCTORAL ADMINISTRATOR, DEPARTMENT HEAD, and FACULTY respondent perceptions were consistently the lowest.

Across time, all DOCTORAL, COMMUNITY, and COMPREHENSIVE respondents (DEPARTMENT HEAD and FACULTY only) perceived their involvement in department assessment activities had significantly increased. PRIMARY RESPONSIBILITY * YEAR within TYPE analysis confirmed that DOCTORAL and COMMUNITY patterns and magnitudes of difference were initially different from the COMPREHENSIVE patterns and magnitudes of difference. TYPE * YEAR within PRIMARY RESPONSIBILITY analysis confirmed that DEPARTMENT HEAD and FACULTY patterns were similar across time, but magnitudes of difference were initially different for these two groups of respondents. For 1987, DOCTORAL and COMMUNITY DEPARTMENT HEAD respondent perceptions of their involvement in department assessment activities were higher than corresponding DOCTORAL and COMMUNITY FACULTY respondent perceptions. In contrast, COMPREHENSIVE FACULTY perceptions were higher than COMPREHENSIVE DEPARTMENT HEAD perceptions. For 1990, COMPREHENSIVE FACULTY and DEPARTMENT HEAD perceptions reversed positions, and all three types of institutions' patterns and magnitudes of difference were similar. Data also reveal one other result. While

COMPREHENSIVE DEPARTMENT HEAD and FACULTY perceptions for 1987 confirm that these respondents established an early lead in involvements related to department assessment activities, DOCTORAL and COMMUNITY respondents had closed the gap substantially by 1990.

Finally, across time, all DOCTORAL, COMMUNITY, and COMPREHENSIVE respondents (DEPARTMENT HEAD and FACULTY only) felt their own perceived importance regarding formal assessment had significantly increased, and they expected their future perceived importance regarding formal assessment to decline significantly if SCHEV requirements were relaxed. PRIMARY RESPONSIBILITY * YEAR within TYPE analysis confirmed that DOCTORAL and COMMUNITY patterns and magnitudes of difference were initially different from the COMPREHENSIVE patterns and magnitudes of difference. TYPE * YEAR within PRIMARY RESPONSIBILITY analysis confirmed that DEPARTMENT HEAD patterns and magnitudes of difference for both 1987 and 1990 were different from FACULTY patterns and magnitudes of difference, but 1996 patterns and magnitudes of difference were similar for both groups of respondents. For 1987, DOCTORAL and COMMUNITY DEPARTMENT HEAD respondent perceptions of their own perceived importance regarding formal assessment were significantly higher than corresponding DOCTORAL and COMMUNITY FACULTY respondent perceptions. In contrast, COMPREHENSIVE DEPARTMENT HEAD and FACULTY perceptions were

approximately the same, with FACULTY perceptions only slightly higher. For 1990, COMPREHENSIVE DEPARTMENT HEAD and FACULTY perceptions reversed positions, and all three types of institutions' patterns and magnitudes of difference were similar for both 1990 and 1996. Data also reveal two other results. Across time and regardless of the type of institution, DEPARTMENT HEAD perceptions of their own perceived importance for assessment were consistently higher than corresponding FACULTY perceptions. Finally, DOCTORAL DEPARTMENT HEAD and FACULTY perceptions of their own perceived importance for assessment were consistently the lowest among all three types of institutions.

Common Factors Which Have Influenced Support

Eight common factors which have influenced administrator and faculty involvement, understanding, and perceived importance regarding formal assessment at Virginia public colleges and universities emerged from the qualitative data. The role that the State Council of Higher Education (SCHEV) played in initiating and sustaining the assessment mandate was the most frequently cited factor. The vast majority of commenters gave either negative or mixed evaluations of SCHEV's role and requirements. Requirements from the Southern Association of Colleges and Schools (SACS) were also frequently cited. All comments about SACS tended to be matter-of-fact rather than negative, positive, or mixed. How

well the chief academic officer and the assessment coordinator worked in developing campus-wide involvement and understanding of the assessment mandate were the third and fourth factors, respectively. While both individuals received about an equal number of comments, half of the comments related to chief academic officers were negative; only about 15% of the comments related to assessment coordinators were negative. "Lack of resources" was the fifth most frequently mentioned factor; however, no one spoke positively. More specifically, commenters spoke of their frustrations related to lack of money and time. They also commented on the uncertainties related to allocation or reallocation of money and staff based on assessment findings. The importance of "useable" and "valuable" results coming from campus assessment efforts was the next most frequently mentioned factor. The vast majority of commenters were hopeful about the potential for results to convince skeptical faculty. Educating administrators and faculty (i.e., providing effective communication, involvement, and knowledge) about assessment and it benefits was the seventh factor to emerge from the data. Approximately half of all comments related to this factor were critical of either SCHEV, chief academic officers, assessment coordinators, or department heads. Finally, the intrinsic value or importance of assessment was cited as a factor by just over half of all commenters. Virtually no one questioned the intrinsic worth

of assessment, and over 20% of all commenters who spoke of this factor did so in very positive terms.

Conclusions

When the findings of this study were examined within the context of the basic "change" theory principles discussed earlier in Chapter Two, a variety of conclusions emerged.

1. Involvement and Understanding

"Change" theorists have emphasized that positive change occurs more rapidly among professional when their understanding is reinforced by involvements in planning and conducting activities related to the desired change. The findings of this study suggest that positive changes in perceptions of the importance of formal assessment have occurred largely as a result of increased involvements and understandings. At all three types of public colleges and universities in Virginia, efforts to bring more administrators and faculty into the mainstream of the assessment process have been successful. As one assessment coordinator observed, "All across the state, a corps of involved, knowledgeable, and reasonably committed [administrators and faculty] are carrying out the assessment mandate." Many of these individuals participated in this study, and their involvement, understanding, and perceived importance regarding formal assessment planning and activities have helped generate a momentum for assessment by 1990.

The findings of this study suggest that wider involvement in and understanding of formal assessment activities should develop as more departments begin the process of assessing learning outcomes. Increased involvements and understandings were closely related to increased perceived importance for assessment. Administrator and faculty respondents perceived that their involvement, understanding, and perceived importance of assessment had increased significantly by 1990. Future increased understandings related to formal assessment could, therefore, be accompanied by higher levels of perceived importance for formal assessment as increasingly larger numbers of administrators and faculty become involved in the assessment process throughout the 1990s.

2. Leadership

"Change" theorists have emphasized that an institution's leaders have to assume the responsibility for leading their personnel through the change process until the change has become firmly established. These theorists have further stressed that leaders such as chief academic officers have to consistently exhibit their commitment to the change both to their administrators and as much as possible to the typical teaching faculty member. The findings of this study suggest that there was substantial variation in the effectiveness of the leadership at the three types of institutions involved in this study.

Chief academic officers from all three types of institutions were seen as individuals who were convinced that SCHEV was very serious about the assessment mandate. COMPREHENSIVE college chief academic officers were seen as having greater involvement, understanding, and perceived importance regarding formal assessment than their COMMUNITY college and DOCTORAL university peers. In fact, DOCTORAL chief academic officers were seen by their department heads and faculty as individuals who viewed assessment as basically a state requirement, not a valued and integral part of higher education. The chief academic officers at DOCTORAL universities have apparently not provided the leadership necessary to encourage substantial department head and faculty involvement, understanding, and perceived importance regarding formal assessment. While momentum for assessment has been established at these DOCTORAL universities, it is the weakest among the three types of institutions. Perhaps the depth of the negative feelings regarding assessment at DOCTORAL universities might best be captured in a statement from one DOCTORAL university Arts and Sciences faculty member: "The state can kiss my assessment."

Findings further reveal that across all types of institutions chief academic officer and faculty respondents consistently expressed radically different expectations for formal assessment in the 1990s. Faculty respondents expected

the greatest declines in future perceived importance if SCHEV requirements were relaxed, and DOCTORAL university faculty respondents expected the greatest future declines among the three types of faculty. Regardless of the type of institution, chief academic officers expected the least declines. Faculty respondents apparently felt that pressure from SCHEV was the primary basis of 1990 chief academic officer perceived importance, assessment coordinator perceived importance, department head perceived importance, faculty-in-the-department perceived importance, and faculty-in-general perceived importance. In essence, faculty respondents apparently perceived that none of these groups of critical personnel firmly believed in the intrinsic importance of formal assessment. In contrast, chief academic officers apparently felt (or hoped) that department heads and faculty had already begun to accept formal assessment as an intrinsically important part of higher education. Apparently, these leaders expected that faculty would eventually "own" and carry out the assessment mandate. Faculty respondents, on the other hand, apparently expected that chief academic officers, assessment coordinators, and department heads would either continue to conduct formal assessment themselves or agree with the faculty-in-general to drop any serious emphasis on formal assessment. These differing perceptions suggest that chief academic officers did not perceive or did not wish to perceive

of the tenuousness of faculty perceived importance for assessment in 1990.

3. Strategies

"Change" theorists have emphasized a variety of strategies designed to foster support for educational change. These strategies have included the use of shared leadership activities, evaluation processes, and technical and clerical support staff. The findings of this study suggest that shared leadership activities have been implemented at all institutions that participated in this study. All institutions had assessment steering committees whose members included department heads and faculty. At least eight institutions had senior, highly respected faculty members serving as assessment coordinators. No findings of this study, however, suggest that program and/or individual performance evaluation processes have been used to foster support for formal assessment.

In contrast, findings suggest that the use of technical and clerical support staff has been extensive. By 1990, every institution had an assessment office with at least one assessment specialist available to assist department heads and faculty. The presence of assessment specialists at eight of the ten comprehensive institutions in 1987-88 was found to be an importance factor which led to these institutions establishing an early lead in administrator and faculty

involvements, understandings, and perceptions of importance related to formal assessment. DOCTORAL university and COMMUNITY college assessment coordinators were generally not employed until later--but were in place by 1990. While COMPREHENSIVE college administrators and faculty maintained their higher levels of involvement, understanding, and perceived importance through 1990, their counterparts from COMMUNITY colleges and DOCTORAL universities had closed the gap substantially. As one COMMUNITY college chief academic officer observed, "We simply have to recognize the importance of keeping our assessment coordinators if we expect to get more faculty involved."

4. Needs Analysis

"Change" theorists have emphasized that conducting a needs analysis prior to attempting to implement a change is important both to develop the specifics of the change and to guide the change through the organization by providing explanation and justification to the professional personnel most directly involved. Assessment literature and the findings of this study suggest that a needs analysis was not conducted at either the state level or the institutional level prior to implementing the assessment mandate. In essence, the decision to mandate formal assessment in Virginia was predominately political. The findings of this study further suggest that administrators and faculty have frequently

questioned the basis of the mandate and questioned the basis of their own institution's initial assessment planning. Much of the administrator and faculty resistance to formal assessment can be directly related to SCHEV's "heavy-handed" approach to implementing this mandate.

5. External Support

"Change" theorists have emphasized that change occurs within an organization when it is supported by both internal and external forces. The findings of this study suggest that campus support for assessment has been generated largely as a result of pressure from two external forces, the State Council of Higher Education for Virginia (SCHEV) and the Southern Association of Colleges and Schools (SACS). These entities have traditionally controlled such sensitive resources as incentive monies, program approval, general funding guidelines, organizational prestige, and accreditation status. The findings of this study suggest that these external incentives have been necessary to generate and sustain momentum for formal assessment during its early stages of development (1987-1990). Findings further suggest that these external incentives will be necessary to sustain momentum for assessment in the 1990s as well.

More specifically, SCHEV's influence has been direct and immediate. After three years of campus assessment planning and activities, momentum for assessment among administrators

and faculty appears to exist. This momentum, however, should not be mistaken for faculty "ownership" of the assessment mandate, for this momentum has been the direct result of SCHEV's requirements that each public college or university conduct formal assessment activities and report findings. If SCHEV were to relax these requirements, this momentum would be lost. Participants of this study expected that they themselves, as well as chief academic officers, assessment coordinators, department heads, faculty-in-the-department, and faculty-in-general, would see formal assessment as no more important than they saw it in 1987 if SCHEV dropped its requirements.

SACS requirements were the second most often referred to factor which had influenced administrator and faculty perceived importance. Both criticism and praise were noticeably absent in these references. The large number of references to SACS requirements suggests that by 1990 chief academic officers and assessment coordinators had been linking Virginia assessment requirements to SACS "institutional effectiveness" criteria. The fact that SACS reaccreditation has been seen as desirable by both administrators and faculty might explain why negative comments were absent. Linking formal assessment in Virginia with SACS reaccreditation requirements apparently has been an effective strategy for

reducing administrator and faculty hostility towards SCHEV's top-down assessment mandate.

6. The Worth of the Change

"Change" theorists have emphasized that those desiring to foster support for a change must demonstrate the benefits of the change to those most directly charged with the responsibility of implementing it. In the case of formal assessment, improvements in student learning resulting from improvements in curriculum and instruction should have been demonstrated to administrators and faculty by 1990. The findings of this study suggest that preliminary results from formal assessment have been disseminated to administrators and faculty. These findings, however, do not suggest that by 1990 these preliminary results have convinced administrators and faculty (1) that formal assessment activities have the potential to provide lasting benefits or (2) that these activities have been or will be worth the time, money, and effort that have been directed toward them.

In essence, across all types of institutions, varying amounts of momentum for assessment have been generated. Significant growth in administrator and faculty involvement, understanding, and perceived importance has occurred, but this growth is fragile. Without doubt, more administrators and faculty have become involved in assessment, more have begun to better understand assessment, and more have begun to

perceive of formal assessment as important. As one department head observed, however, this growth "does not even represent campus ownership of the assessment process in 1990, much less administrator and faculty ownership." Another faculty member concluded, "We've come a long way, but assessment is still SCHEV's game." Three years into the mandate, then, administrator and faculty involvements, understandings, and perceptions of importance identified by this study suggest that wide-spread administrator and faculty "ownership" of formal assessment has not occurred. Future wide-spread administrator and faculty "ownership" of formal assessment remains uncertain.

Implications

On the basis of all the evidence gathered in this study, at least six implications can be drawn.

1. If campus momentum for assessment is to be sustained, it is also imperative that SCHEV reporting requirements firmly remain in place for the foreseeable future.

2. If the ultimate goal of SCHEV officials is administrator and faculty ownership of the assessment process, it is imperative that SCHEV officials continue to emphasize the importance of involving more department heads and faculty in the assessment process.

3. If the ultimate goal of chief academic officers is department head and faculty ownership of the assessment process, these academic leaders and especially the academic leaders at DOCTORAL universities must increase their efforts to involve more faculty in department level assessment planning and activities. They must believe in the intrinsic importance of formal assessment themselves, and they must communicate to their department heads and faculty that assessment would remain vitally important to them and to their institutions even if external reporting requirements were removed. They must take the responsibility for communicating useful, valuable assessment findings and for demonstrating how these findings have produced significant improvements in curriculum and instruction. They also must reduce the frustrations and fears faculty have regarding limited resources. Finally, they must encourage department heads and faculty to see assessment as a tool for professional growth.

4. If reducing faculty resistance to formal assessment is an important goal, SCHEV officials, chief academic officers, assessment coordinators, and department heads must continue to demonstrate to faculty how the assessment mandate in Virginia has provided the incentive for public colleges and universities to conduct what SACS has described as "institutional effectiveness" studies. SCHEV officials and campus leaders must emphasize more clearly how meeting the

requirements of the assessment mandate have already prepared Virginia public colleges and universities for meeting many SACS reaccreditation requirements. Faculty probably desire SACS reaccreditation perhaps as much as administrators desire it, but faculty are probably not as fully aware of how SACS "institutional effectiveness" criteria influenced Virginia's assessment mandate.

5. If developing faculty leadership regarding formal assessment is an important goal, SCHEV officials and chief academic officers need to develop more shared-leadership activities involving senior faculty and especially senior DOCTORAL university faculty. While it is commendable that chief academic officers, assessment coordinators, department heads, and faculty from COMPREHENSIVE colleges and COMMUNITY colleges were seen as the most supportive of assessment, it is imperative that their DOCTORAL peers be seen as at least equal partners in this task. In fact, if administrators and faculty at these senior institutions were to assume more of a leadership role on this issue for all of Virginia public higher education, more credibility would be given to formal assessment and, in turn, higher faculty involvement, understanding, and perceived importance would be generated. SCHEV officials need to devote even more time and effort to convince personnel at these senior DOCTORAL institutions to develop such a statewide leadership role.

6. If officials in other states wish to implement an assessment mandate similar to the Virginia model, they need to be aware that the goal of administrator and faculty ownership is a difficult goal to accomplish, especially when it is the goal of a top-down mandate. They need to be aware that the faculty momentum for assessment that has been generated in the last three years in Virginia is tenuous. If the Virginia model is to be replicated in other states, officials need to be aware that linking assessment to regional accreditation requirements (if such regional "institutional effectiveness" requirements exist) would be an effective strategy for introducing assessment to their colleges and universities. Further, a more gradual introduction involving senior department heads and faculty from all types of colleges and universities from the beginning would serve to soften the impact of this complex process.

Recommendations for Further Research

1. Further efforts should be made to determine which types of faculty (i.e. engineering, humanities, social sciences, mathematics, natural sciences, etc.) have the highest involvements, understandings, and perceptions of importance regarding formal assessment and which have the lowest. Once this has been determined, strategies could be devised to increase the involvements, understandings, and

perceptions of importance of those types of faculty who are not in the mainstream of formal assessment activities.

2. Further efforts should be made to determine whether administrators and faculty from smaller or larger institutions (based on undergraduate enrollments) have higher involvements, understandings, and perceptions of importance regarding formal assessment. Once this has been determined, strategies could be devised to increase the involvements, understandings, and perceptions of importance at those institutions where administrators and faculty are not in the mainstream of formal assessment activities.

3. Further efforts should be made to determine whether administrators and faculty from rural or urban/suburban institutions have higher involvements, understandings, and perceptions of importance regarding formal assessment. Once this has been determined, strategies could be devised to increase the involvements, understandings, and perceptions of importance at those institutions where administrators and faculty are not in the mainstream of formal assessment activities.

4. Further efforts should be made to determine the effects of significant statewide budget cuts on administrator and faculty perceived importance for assessment. These cuts were just beginning to occur when this study was conducted,

and since then numerous budget cuts at all public colleges and universities in Virginia have been substantial.

5. Further efforts should be made to determine how meeting the requirements of the Virginia assessment mandate assisted public colleges and universities in preparing for SACS reaccreditation. SACS "institutional effectiveness" requirements have been in effect since 1984, and all Virginia public colleges and universities have gone, are going, or will be going through reaccreditation activities under these new requirements before 1994.

6. Further efforts should be made to investigate the pervasiveness of administrator and faculty support for formal assessment at Virginia public colleges and universities. The goal of administrator and faculty ownership was theorized to take a decade to accomplish. The data from this study were gathered three years after formal assessment began in Virginia, and they represent the only baseline data related to administrator and faculty involvement, understanding, and perceived importance related to formal assessment. This study should be replicated in 1993 and then again in 1996 at the end of a full decade of formal assessment activities. The 1993 data could reveal what additional progress has been made toward meeting the goal of administrator and faculty ownership, and the 1996 data could confirm whether this goal has been met.

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APPENDIX 1

QUESTIONNAIRE SENT TO CHIEF ACADEMIC OFFICERS
AND ASSESSMENT COORDINATORS

April 2, 1990

DEAR VIRGINIA PUBLIC COLLEGE AND UNIVERSITY CHIEF ACADEMIC OFFICER OR ASSESSMENT COORDINATOR:

We are seeking your help in investigating the pervasiveness of the assessment movement in Virginia public higher education. As part of a doctoral dissertation, the following survey has been designed to study past, present, and predicted administrator and faculty perceptions of the importance of outcomes assessment activities. Please take a few moments to give us your opinions.

As you may know, proponents of assessment have stressed that administrators and faculty must take a variety of important measurements if they are to know what actual knowledge, skills, and values their graduates possess. Such measurements, they have argued, are critical to institutional accountability and curriculum improvement. To preserve institutional uniqueness and autonomy, Virginia's assessment model has stressed that each public college or university must develop its own plan (i.e., procedures, testing instruments, reporting format/style, data analysis, interpretations, and curriculum improvement). Colleges and universities submitted initial plans to the State Council of Higher Education for Virginia (SCHEV) in the summer of 1987, provided brief progress reports and/or revised plans in the summer of 1988, and reported the first official assessment data in the summer of 1989. Throughout, at least two important assumptions have guided statewide assessment efforts: (1) the goal of curriculum improvement can be met only if critical college and university personnel consider assessment activities to be important and (2) development of this sense of assessment's importance will be gradual, perhaps taking as long as a decade (through 1996). The following survey, then, is the first statewide investigation of these assumptions.

Please note that this survey has been numbered for purposes of follow-up; however, all responses will be kept confidential and data will be presented only in the aggregate. Your responses are needed by April 16, 1990. To assist you, this questionnaire has been return-addressed and stamped and is ready for mailing. Upon completing it, refold it, staple it so that the return address is on the outside, and put it into the U.S. mail. If you wish, you may receive a brief summary of the findings of this survey. Thank you for your cooperation and contribution to this study. If you have any questions, please call Michael Scott at (703) 862-4246 or SCATS 857-7460.

Respectfully,

Dennis E. Hinkle
Assistant Provost

Michael R. Scott
Research Associate

APPENDIX 1 Continued

A STATEWIDE SURVEY OF PERCEPTIONS OF THE IMPORTANCE
OF FORMAL OUTCOMES ASSESSMENT

1. How long have you been employed by your institution? _____ years

2. What is your responsibility? ____Chief Academic Officer
____Assessment Coordinator

3. What has been your involvement in the development of your institution's overall assessment plan?

A. in 1987: ____none ____low ____moderate ____high
B. in 1990: ____none ____low ____moderate ____high

Comments:_____

4. What has been your understanding of your institutional assessment plan?

A. in 1987: ____none ____low ____moderate ____high
B. in 1990: ____none ____low ____moderate ____high

Comments:_____

5. In 1986-1987, when SCHEV first required institutional assessment plans, how important did the following people at your institution perceive formal outcomes assessment to be?

A. CHIEF ACADEMIC OFFICER: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

B. DEPARTMENT HEADS: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

C. ASSESSMENT COORDINATOR: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

D. FACULTY-IN-GENERAL: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

Comments:_____

6. In 1989-1990, during the third year of official outcomes assessment, how important do the following people at your institution perceive formal outcomes assessment to be?

A. CHIEF ACADEMIC OFFICER: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

B. DEPARTMENT HEADS: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

C. ASSESSMENT COORDINATOR: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

D. FACULTY-IN-GENERAL: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

Comments:_____

7. Suppose by 1996 SCHEV no longer required official outcomes assessment. How important would the following people at your institution probably perceive formal outcomes assessment to be?

A. CHIEF ACADEMIC OFFICER: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

B. DEPARTMENT HEADS: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

C. ASSESSMENT COORDINATOR: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

D. FACULTY-IN-GENERAL: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

Comments:_____

8. What have been critical factors influencing administrator and faculty perceptions of the importance of formal outcomes assessment at your institution?

9. What other general comments about formal outcomes assessment do you have?

10. Do you wish to receive a brief summary of the findings of this survey? ____ yes ___ no

APPENDIX 2

QUESTIONNAIRE SENT TO DEPARTMENT HEADS
AND FACULTY

April 2, 1990

DEAR VIRGINIA PUBLIC COLLEGE AND UNIVERSITY DEPARTMENT HEAD OR FACULTY MEMBER:

We are seeking your help in investigating the pervasiveness of the assessment movement in Virginia public higher education. As part of a doctoral dissertation, the following survey has been designed to study past, present, and predicted administrator and faculty perceptions of the importance of outcomes assessment activities. Please take a few moments to give us your opinions.

As you may know, proponents of assessment have stressed that administrators and faculty must take a variety of important measurements if they are to know what actual knowledge, skills, and values their graduates possess. Such measurements, they have argued, are critical to institutional accountability and curriculum improvement. To preserve institutional uniqueness and autonomy, Virginia's assessment model has stressed that each public college or university must develop its own plan (i.e., procedures, testing instruments, reporting format/style, data analysis, interpretations, and curriculum improvement). Colleges and universities submitted initial plans to the State Council of Higher Education for Virginia (SCHEV) in the summer of 1987, provided brief progress reports and/or revised plans in the summer of 1988, and reported the first official assessment data in the summer of 1989. Throughout, at least two important assumptions have guided statewide assessment efforts: (1) the goal of curriculum improvement can be met only if critical college and university personnel consider assessment activities to be important and (2) development of this sense of assessment's importance will be gradual, perhaps taking as long as a decade (through 1996). The following survey, then, is the first statewide investigation of these assumptions.

Please note that this survey has been numbered for purposes of follow-up; however, all responses will be kept confidential and data will be presented only in the aggregate. Your responses are needed by April 16, 1990. To assist you, this questionnaire has been return-addressed and stamped and is ready for mailing. Upon completing it, refold it, staple it so that the return address is on the outside, and put it into the U.S. mail. If you wish, you may receive a brief summary of the findings of this survey. Thank you for your cooperation and contribution to this study. If you have any questions, please call Michael Scott at (703) 862-4246 or SCATS 857-7460.

Respectfully,

Dennis E. Hinkle
Assistant Provost

Michael R. Scott
Research Associate

APPENDIX 2 Continued

A STATEWIDE SURVEY OF PERCEPTIONS OF THE IMPORTANCE
OF FORMAL OUTCOMES ASSESSMENT

1. How long have you been employed by your institution? _____ years

2. What is your primary responsibility?

___Department Head
___Faculty

3. What assessment activities has your department conducted? (more than one possible)

___planning
___curriculum improvement
___implementing/measuring
____no activity
____don't know

Comments:_____

4. What has been your involvement in the development of your institution's overall assessment plan?

A. in 1987: ___none ___low ___moderate ___high
B. in 1990: ___none ___low ___moderate ___high

Comments:_____

5. What has been your understanding of your institution's overall assessment plan?

A. in 1987: ___none ___low ___moderate ___high
B. in 1990: ___none ___low ___moderate ___high

Comments:_____

6. If your department has planned or is planning assessment activities, what has been your involvement in this planning?

A. in 1987: ___none ___low ___moderate ___high
B. in 1990: ___none ___low ___moderate ___high

Comments:_____

7. What has been your understanding of your department's plan?

A. in 1987: ___none ___low ___moderate ___high
B. in 1990: ___none ___low ___moderate ___high

Comments:_____

8. If your department has been implementing its plan, what has been your involvement in the carrying out of these assessment activities?

A. in 1987: ___none ___low ___moderate ___high
B. in 1990: ___none ___low ___moderate ___high

Comments:_____

9. What has been your understanding of your department's actual assessment activities?

A. in 1987: ___none ___low ___moderate ___high
B. in 1990: ___none ___low ___moderate ___high

Comments:_____

10. In 1986-1987, when SCHEV first required institutional assessment plans, how important did the following people at your institution perceive formal outcomes assessment to be?

A. CHIEF ACADEMIC OFFICER: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

B. DEPARTMENT HEADS: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

C. ASSESSMENT COORDINATOR: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

D. FACULTY-IN-GENERAL: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

E. FACULTY-IN-YOUR-DEPT.: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

F. YOURSELF: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

Comments:_____

11. In 1989-1990, during the third year of official outcomes assessment, how important do the following people at your institution perceive formal outcomes assessment to be?

A. CHIEF ACADEMIC OFFICER: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

B. DEPARTMENT HEADS: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

C. ASSESSMENT COORDINATOR: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

D. FACULTY-IN-GENERAL: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

E. FACULTY-IN-YOUR-DEPT.: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

F. YOURSELF: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

Comments:_____

12. Suppose by 1996 SCHEV no longer required official outcomes assessment. How important would the following people at your institution probably perceive formal outcomes assessment to be?

A. CHIEF ACADEMIC OFFICER: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

B. DEPARTMENT HEADS: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

C. ASSESSMENT COORDINATOR: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

D. FACULTY-IN-GENERAL: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

E. FACULTY-IN-YOUR-DEPT.: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

F. YOURSELF: (Low) 1 2 3 4 5 6 7 8 9 10 (High) Don't Know

Comments:_____

13. What have been critical factors influencing administrator and faculty perceptions of the importance of outcomes assessment at your institution?

_____

_____

_____

14. What other general comments about outcomes assessment do you have?

_____

_____

_____

15. Do you wish to receive a brief summary of the findings of this survey? ____ yes ____ no

APPENDIX 3

INTERVIEW QUESTIONS
PERCEPTIONS OF THE IMPORTANCE OF FORMAL ASSESSMENT

1. ID Number of College or University? Interviewee? Primary Responsibility of Interviewee?

2. Do you believe that formal outcomes assessment is an important part of your job? Why?

3. Have you been encouraged by others at your institution to regard formal outcomes assessment as an important part of your job? If yes, who? How?

4. Have you been encouraged by others outside of your institution to regard formal outcomes assessment as an important part of your job? If yes, who? How?

5. What specific assessment activities in which you have participated have most influenced you to perceive of formal outcomes assessment as an important part of your job? Please consider national, regional, state, institutional, and departmental levels.

6. What specific assessment procedures and measurement instruments have been used by your institution and/or department?

7. How were these procedures/instruments developed/selected, and who developed/selected them?

8. How well have these procedures/instruments been supported as being workable, reliable, and valid? By administrators? By faculty? By Students?

9. By now data have been collected; therefore, how much of an impact have these data had on curriculum improvement? Please cite examples.

10. What problems or concerns exist regarding these procedures/instruments?

11. Which specific procedures and instruments (or types) do you believe will be used on your campus in the future?

12. Do you believe specific assessment procedures and/or measurement instruments (or types) influence administrator and faculty perceptions of the importance of assessment activities at your institution? If yes, how?

13. What are some present activities that you see at your institution/department that are designed to sustain or enhance existing administrator and faculty perceptions of the importance of assessment?

14. What are some future activities at your institution/department that you would like to see developed to sustain or enhance administrator and faculty perceptions of the importance of assessment?

15. What additional comments regarding outcomes assessment at your institution, your department, the state level, or the national level would you care to offer?

APPENDIX 4

VIRGINIA PUBLIC COLLEGES AND UNIVERSITIES
ASSESSMENT CONTACT PERSONS -- FEBRUARY 2, 1990

Type	Institution	Contact Person
Doctoral	George Mason	Karen Gentemann
	Old Dominion	Lucy Wilson
	William and Mary	Kathleen Slevin
	University of Virginia	Ned Moomaw
	Virginia Commonwealth	Barbara Fuhrman
	Virginia Tech	Dennis Hinkle
Comprehensive	Christopher Newport	Dennis Ridley
	Clinch Valley	Lana Low
	James Madison	Dary Erwin
	Longwood	Ed Smith
	Mary Washington	Ed Piper
	Norfolk State	Carol Mayfield
	Radford	Steve Culver
	Virginia Military Inst.	Steve Richarde
	Virginia State	Ramona Fears
Two-Year	Richard Bland	Jim McNeer
Community	Blue Ridge	Bud Levin
	Central Virginia	Thomas Barber
	Dabney S. Lancaster	Linda Cauley
	Danville	Ed Polhamus
	Eastern Shore	Mary Mulligan
	Germanna	Gayle Wolfe
	J. Sargeant Reynolds	Lonnie Schaffer
	John Tyler	Melton Jones
	Lord Fairfax	David Perkins
	Mountain Empire	Sharon Fisher
	New River	Elaine Montjoy
	Northern Virginia	Larry Sasscer
	Patrick Henry	Colin Ferguson
	Paul D. Camp	Fran Flythe
	Piedmont Virginia	Ron Head
	Rappahannock	Jerome Friga
	Southside	John Sykes
	Southwest	John Hall
	Thomas Nelson	Mike Quanty
	Tidewater	Linda Rice
	Virginia Highlands	Mike Rush
	Virginia Western	David Hanson
	Wytheville	Tom Ashworth

APPENDIX 5

LETTER SENT TO VIRGINIA PUBLIC COLLEGES AND UNIVERSITIES
SEEKING APPROVAL FOR PARTICIPATION IN THIS STUDY

February 2, 1990

Dear Dr. _____:

I wish to begin the initial data collection stage of my dissertation project on administrator and faculty perceptions of the importance of outcomes assessment, and I am requesting that selected ____ administrators and faculty be allowed to respond to the attached questionnaire.

During the last two weeks, I have communicated with assessment contact persons for each college in the VCCS as well as contact persons for each public four-year college or university in Virginia. All two-year colleges and all but two four-year schools appear to be willing to participate in my study. I have outlined for all contact persons the following methodology:

1. I will request that each contact person takes his/her college's catalog listing of administrators and faculty, places a check mark beside the names of all individuals who have been involved in assessment for at least one year, and mail either that catalog or a copy of the pertinent pages to me.

2. I will prepare an envelope with the appropriate questionnaire inside and the individual's name and department on the outside, mail all envelopes to the respective contact persons, and ask them to drop all envelopes into their campus mails.

3. Individuals receiving an envelope will read the cover letter, fill out the questionnaire, refold it, staple it, and drop it into the U.S. Mail. All questionnaires will have been returned addressed and stamped.

As the cover letter states, all questionnaires have been "numbered for purposes of follow-up; however, all responses will be kept confidential and data will be presented only in the aggregate." As part of the "follow-up," I will interview selected respondents for purposes of clarification. I will send to each contact person a summary of findings for his or her school as well as general findings. These findings may be shared with all interested individuals. I wish to emphasize that I will be the only one to handle these data, that all responses will be confidential, and that no individual schools will be compared.

I hope that you will be able to approve my request for selected _____ administrators and faculty to be a part of this study. Thank you for your assistance and support.

Respectfully yours,

Michael R. Scott

Enclosures (2)

APPENDIX 6

VIRGINIA PUBLIC COLLEGES AND UNIVERSITIES
NUMBER OF ADMINISTRATORS AND FACULTY IDENTIFIED BY CONTACT PERSONS
NUMBER RECEIVING MAILED QUESTIONNAIRE
NUMBER AND PERCENT OF RETURNING MAILED QUESTIONNAIRES

Type	Institution	#Id	#Sur	#Rt	%Rt
Doctoral	George Mason	302	101	67	66.3
	Old Dominion	46	46	37	80.4
	William and Mary	68	68	50	73.5
	University of Virginia	22	22	16	72.7
	Virginia Commonwealth	35	35	27	77.1
	Virginia Tech	103	103	76	73.8
Comprehensive	Christopher Newport	40	40	27	67.5
	Clinch Valley	19	19	13	68.4
	James Madison	36	36	29	80.5
	Longwood	17	17	11	64.7
	Mary Washington	6	6	5	83.3
	Norfolk State	0	0	0	0.0
	Radford	27	27	21	77.8
	Virginia Military Inst.	20	20	15	68.2
	Virginia State	0	0	0	0.0
Two-Year	Richard Bland	12	12	10	83.3
Community	Blue Ridge	24	24	19	79.2
	Central Virginia	38	38	29	76.3
	Dabney S. Lancaster	14	14	11	78.6
	Danville	28	28	23	82.1
	Eastern Shore	12	12	10	83.3
	Germanna	16	16	14	87.5
	J. Sargeant Reynolds	15	15	11	73.3
	John Tyler	22	22	17	77.3
	Lord Fairfax	12	12	9	75.0
	Mountain Empire	11	11	9	81.8
	New River	33	33	24	72.7
	Northern Virginia	58	58	43	74.1
	Patrick Henry	14	14	9	64.3
	Paul D. Camp	8	8	7	87.5
	Piedmont Virginia	8	8	6	75.0
	Rappahannock	25	25	17	68.0
	Southside	32	32	22	68.8
	Southwest	34	34	24	70.6
	Thomas Nelson	28	28	20	71.4
	Tidewater	56	56	39	69.6
	Virginia Highlands	14	14	10	71.4
	Virginia Western	18	18	12	66.7
	Wytheville	29	29	21	72.4
	Totals	1302	1101	810	73.6

APPENDIX 7

FREQUENCIES AND PERCENTAGES

a. Length of Employment at Institution

Response	Frequency	Percentage
1-2 years	45	5.6
3-5 years	98	12.1
6-10 years	164	20.2
11-15 years	178	22.0
16-25 years	286	35.3
26 + years	23	2.8
no response	16	2.0

b. Primary Job Responsibility

Response	Frequency	Percentage
Chief Academic Officer	27	3.3
Assessment Coordinator	31	3.8
Department Head	216	26.7
Faculty	536	66.2

c. Department Has Conducted Assessment Planning (dept. heads and faculty)

Response	Frequency	Percentage
Yes	542	71.9
No	200	26.5
No Response	12	1.6

d. Department Has Conducted Assessment Activities (dept. heads and faculty)

Response	Frequency	Percentage
Yes	538	71.4
No	204	27.0
No Response	12	1.6

e. Department Has Conducted Assessment Curriculum Improvements (dept. heads and faculty)

Response	Frequency	Percentage
Yes	396	52.5
No	346	45.9
No Response	12	1.6

f. Department Has Not Conducted Assessment Activities (dept. heads and faculty)

Response	Frequency	Percentage
Yes	20	2.7
No	722	95.7
No Response	12	1.6

g. Don't Know What Assessment Activities Dept. Has Conducted (dept. heads and faculty)

Response	Frequency	Percentage
Yes	27	3.6
No	715	94.8
No Response	12	1.6

h. Involvement in Institutional Assessment Planning in 1987 and 1990

Response	Frequency	Percentage
(1987)		
None	288	35.6
Low	177	21.9
Moderate	149	18.4
High	167	20.6
No Response	29	3.6
(1990)		
None	105	13.0
Low	162	20.0
Moderate	236	29.1
High	291	35.9
No Response	16	2.0

i. Understanding of Institutional Assessment Plan in 1987 and 1990

Response	Frequency	Percentage
(1987)		
None	175	21.6
Low	208	25.7
Moderate	210	25.9
High	183	22.6
No Response	34	4.2
(1990)		
None	25	3.1
Low	96	11.9
Moderate	304	37.5
High	371	45.8
No Response	34	4.2

j. Involvement in Dept. Assessment Planning 1987 & 1990 (dept. heads and faculty)

Response	Frequency	Percentage
(1987)		
None	236	31.3
Low	168	22.3
Moderate	136	18.0
High	173	23.0
No Response	41	5.4
(1990)		
None	60	7.9
Low	114	15.1
Moderate	211	28.0
High	342	45.4
No Response	27	3.6

k. Understanding of Dept. Assessment Plan 1987 & 1990 (dept. heads and faculty)

Response	Frequency	Percentage
(1987)		
None	198	26.3
Low	150	19.9
Moderate	155	20.6
High	201	26.6
No Response	50	6.6
(1990)		
None	39	5.2
Low	78	10.3
Moderate	196	26.0
High	412	54.6
No Response	29	3.9

l. Involvement in Carrying Out Dept. Assessment Act. 1987 & 1990 (dept. heads and faculty)

Response	Frequency	Percentage
(1987)		
None	229	30.4
Low	157	20.8
Moderate	133	17.6
High	153	20.3
No Response	82	10.9
(1990)		
None	81	10.7
Low	96	12.7
Moderate	193	25.6
High	324	43.0
No Response	60	8.0

m. Understanding of Dept. Assessment Activities 1987 & 1990 (dept. heads and faculty)

Response	Frequency	Percentage
(1987)		
None	200	26.5
Low	160	21.2
Moderate	131	17.4
High	206	27.3
No Response	57	7.6
(1990)		
None	46	6.1
Low	74	9.8
Moderate	195	25.9
High	405	53.7
No Response	34	4.5

n. How Many Respondents Requested a Summary of Findings of this Study

Rating	Frequency	Percentage
No Response	59	7.3
No	318	39.3
Yes	433	53.5

o. Returns Per Mailing

Rating	Frequency	Percentage
First Mailing	639	78.9
Second Mailing	171	21.1

p. How Important Chief Academic Officer Perceived Assessment Activities to be: 1987-1990-1996

Rating	Frequency	Percentage
(1987)		
1 (Low)	24	3.0
2	33	4.1
3	21	2.6
4	29	3.6
5	43	5.3
6	39	4.8
7	50	6.2
8	64	7.9
9	75	9.3
10 (High)	117	14.4
No Response	33	4.1
Don't Know	282	34.8
(1990)		
1 (Low)	3	0.4
2	3	0.4
3	8	1.0
4	18	2.2
5	39	4.8
6	41	5.1
7	65	8.0
8	90	11.1
9	127	15.7
10 (High)	218	26.9
No Response	16	2.0
Don't Know	182	22.5
(1996)		
1 (Low)	58	7.2
2	17	2.1
3	20	2.5
4	34	4.2
5	73	9.0
6	54	6.7
7	55	6.8
8	71	8.8
9	61	7.5
10 (High)	72	8.9
No Response	20	2.5
Don't Know	275	34.0

q. How Important Dept. Head Perceived Assessment Activities to be: 1987-1990-1996

Rating	Frequency	Percentage
(1987)		
1 (Low)	46	5.7
2	49	6.0
3	69	8.5
4	59	7.3
5	95	11.7
6	53	6.5
7	72	8.9
8	66	6.8
9	26	3.2
10 (High)	58	7.2
No Response	35	4.3
Don't Know	193	23.8
(1990)		
1 (Low)	13	1.6
2	18	2.2
3	26	3.2
4	39	4.8
5	67	8.3
6	85	10.5
7	99	12.2
8	116	14.3
9	90	11.1
10 (High)	123	15.2
No Response	16	2.0
Don't Know	118	14.6
(1996)		
1 (Low)	74	9.1
2	37	4.6
3	48	5.9
4	56	6.9
5	106	13.1
6	62	7.7
7	65	8.0
8	60	7.4
9	38	4.7
10 (High)	51	6.3
No Response	20	2.5
Don't Know	193	23.8

r. How Important Assessment Coordinator Perceived Assessment Activities to be: 1987-1990-1996

Rating	Frequency	Percentage
(1987)		
1 (Low)	10	1.2
2	10	1.2
3	20	2.5
4	10	1.2
5	29	3.6
6	18	2.2
7	43	5.3
8	75	9.3
9	89	11.0
10 (High)	166	20.5
No Response	56	6.9
Don't Know	284	35.1
(1990)		
1 (Low)	4	0.5
2	0	0.0
3	1	0.1
4	9	1.1
5	13	1.6
6	12	1.5
7	29	3.6
8	89	11.0
9	153	18.9
10 (High)	330	40.7
No Response	23	2.8
Don't Know	147	18.1
(1996)		
1 (Low)	36	4.4
2	13	1.6
3	12	1.5
4	20	2.5
5	50	6.2
6	38	4.7
7	39	4.8
8	75	9.3
9	97	12.0
10 (High)	145	17.9
No Response	27	3.3
Don't Know	258	31.9

s. How Important the Faculty-in-General Perceived Assessment Activities to be: 1987-1990-1996

Rating	Frequency	Percentage
(1987)		
1 (Low)	101	12.5
2	119	14.7
3	109	13.5
4	89	11.0
5	103	12.7
6	45	5.6
7	40	4.9
8	13	1.6
9	3	0.4
10 (High)	7	0.9
No Response	31	3.8
Don't Know	150	18.5
(1990)		
1 (Low)	30	3.7
2	57	7.0
3	71	8.8
4	103	12.7
5	142	17.5
6	109	13.5
7	89	11.0
8	60	7.4
9	21	2.6
10 (High)	21	2.6
No Response	13	1.6
Don't Know	94	11.6
(1996)		
1 (Low)	112	13.8
2	83	10.2
3	95	11.7
4	90	11.1
5	112	13.8
6	53	6.5
7	44	5.4
8	33	4.1
9	13	1.6
10 (High)	12	1.5
No Response	18	2.2
Don't Know	145	17.9

t. How Important Faculty-in-the-Dept. Perceived Assessment Activities to be: 1987-1990-1996

Rating	Frequency	Percentage
(1987)		
1 (Low)	91	12.1
2	115	15.3
3	96	12.7
4	85	11.3
5	85	11.3
6	48	6.4
7	43	5.7
8	32	4.2
9	16	2.1
10 (High)	20	2.6
No Response	28	3.7
Don't Know	95	12.6
(1990)		
1 (Low)	40	5.3
2	67	8.9
3	69	9.1
4	82	10.9
5	102	13.5
6	96	12.7
7	62	8.3
8	84	11.2
9	44	5.8
10 (High)	47	6.2
No Response	14	1.9
Don't Know	47	6.2
(1996)		
1 (Low)	124	16.4
2	67	8.9
3	77	10.2
4	75	9.9
5	89	11.8
6	57	7.7
7	37	4.9
8	40	5.3
9	37	4.9
10 (High)	30	4.0
No Response	19	2.5
Don't Know	102	13.5

u. How Important the Respondent (Self) Perceived Assessment Activities to be: 1987-1990-1996

Rating	Frequency	Percentage
(1987)		
1 (Low)	87	11.5
2	65	8.6
3	58	7.7
4	59	7.8
5	77	10.2
6	66	8.8
7	68	9.0
8	65	8.6
9	37	4.9
10 (High)	79	10.5
No Response	30	4.0
Don't Know	63	8.4
(1990)		
1 (Low)	44	5.8
2	33	4.4
3	34	4.5
4	38	5.0
5	74	9.8
6	75	9.9
7	73	9.7
8	88	11.7
9	93	12.4
10 (High)	169	22.4
No Response	13	1.7
Don't Know	20	2.7
(1996)		
1 (Low)	98	13.0
2	34	4.5
3	56	7.4
4	61	8.2
5	70	9.3
6	76	10.1
7	71	9.4
8	78	10.3
9	51	6.8
10 (High)	90	11.9
No Response	19	2.5
Don't Know	50	6.6

APPENDIX 8

SUMMARY ANOVA
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING

Source	SS	df	MS	F	p
TYPE	17.058	2	8.529	5.82	0.0031
PRIRESP	115.670	2	57.835	39.45	0.0001
TYPE*PRIRESP	3.451	4	0.863	0.59	0.6710
ERROR#1	1153.674	787	1.466		
YEAR	163.952	1	163.952	203.71	0.0001
TYPE*YEAR	7.061	2	3.531	4.39	0.0128
PRIRESP*YEAR	1.205	2	0.603	0.75	0.4734
TYPE*PRIRESP*YEAR	4.777	4	1.194	1.48	0.2052
ERROR#2	616.505	766	0.805		

b. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN

Source	SS	df	MS	F	p
TYPE	13.524	2	6.762	6.27	0.0020
PRIRESP	87.749	2	43.875	40.68	0.0001
TYPE*PRIRESP	5.701	4	1.425	1.32	0.2602
ERROR#1	847.744	786	1.079		
YEAR	288.769	1	288.769	394.70	0.0001
TYPE*YEAR	5.277	2	2.639	4.55	0.0108
PRIRESP*YEAR	0.898	2	0.449	0.77	0.4612
TYPE*PRIRESP*YEAR	6.739	4	1.685	2.91	0.0210
ERROR#2	442.816	764	0.580		

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER

Source	SS	df	MS	F	p
TYPE	616.233	2	308.117	26.87	0.0001
PRIRESP	43.771	2	21.885	1.91	0.1491
TYPE*PRIRESP	13.853	4	3.463	0.30	0.8766
ERROR#1	7533.188	657	11.467		
YEAR	1203.857	2	601.928	300.89	0.0001
TYPE*YEAR	69.949	4	17.487	8.74	0.0001
PRIRESP*YEAR	94.193	4	23.548	11.77	0.0001
TYPE*PRIRESP*YEAR	46.352	8	5.794	2.90	0.0034
ERROR#2	1866.481	933	2.001		

d. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR

Source	SS	df	MS	F	p
TYPE	148.056	2	74.028	9.57	0.0001
PRIRESP	212.951	2	106.475	13.77	0.0001
TYPE*PRIRESP	17.961	4	4.490	0.58	0.6768
ERROR#1	5135.921	664	7.735		
YEAR	846.733	2	423.366	176.06	0.0001
TYPE*YEAR	44.289	4	11.072	4.60	0.0011
PRIRESP*YEAR	81.745	4	20.436	8.50	0.0001
TYPE*PRIRESP*YEAR	23.718	8	2.965	1.23	0.2762
ERROR#2	2260.347	940	2.405		

e. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD

Source	SS	df	MS	F	p
TYPE	609.756	2	304.878	23.88	0.0001
PRIRESP	35.022	2	17.511	1.37	0.2544
TYPE*PRIRESP	91.551	4	22.888	1.79	0.1288
ERROR#1	9129.824	715	12.769		
YEAR	1244.950	2	622.475	317.25	0.0001
TYPE*YEAR	14.550	4	3.637	1.85	0.1163
PRIRESP*YEAR	72.392	4	18.098	9.22	0.0001
TYPE*PRIRESP*YEAR	18.920	8	2.365	1.21	0.2921
ERROR#2	2172.021	1107	1.962		

f. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL

Source	SS	df	MS	F	p
TYPE	395.922	2	197.961	21.11	0.0001
PRIRESP	38.274	2	19.137	2.04	0.1306
TYPE*PRIRESP	26.342	4	6.585	0.70	0.5905
ERROR#1	6807.230	726	9.376		
YEAR	850.714	2	425.357	273.13	0.0001
TYPE*YEAR	22.638	4	5.659	3.63	0.0060
PRIRESP*YEAR	46.195	4	11.549	7.42	0.0001
TYPE*PRIRESP*YEAR	2.469	8	0.309	0.20	0.9911
ERROR#2	1901.483	1221	1.557		

APPENDIX 9

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING

	Year :	1987	1990	
Year	mean :	1.246	1.892	
1987	1.246 :			* p < .01
1990	1.892 :	19.978*		** p < .05

b. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN

	Year :	1987	1990	
Year	mean :	1.518	2.272	
1987	1.518 :			* p < .01
1990	2.272 :	27.453*		** p < .05

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER

	Year :	1987	1990	1996	
Year	mean :	6.951	8.245	6.219	
1987	6.951 :				* p < .01
1990	8.245 :	21.167*			** p < .05
1996	6.219 :	11.499*	33.435*		

d. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR

	Year :	1987	1990	1996	
Year	mean :	7.983	9.016	7.326	
1987	7.983 :				* p < .01
1990	9.016 :	15.309*			** p < .05
1996	7.326 :	9.319*	25.859*		

e. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD

	Year :	1987	1990	1996	
Year	mean :	5.426	7.093	5.388	
1987	5.426 :				* p < .01
1990	7.093 :	29.397*			** p < .05
1996	5.388 :	0.651	30.277*		

f. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL

	Year :	1987	1990	1996	
Year	mean :	3.654	5.168	4.035	
1987	3.654 :				* p < .01
1990	5.168 :	30.873*			** p < .05
1996	4.035 :	7.620*	23.299*		

APPENDIX 10

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
WITHIN YEAR FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING (1987)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	1.074	:	1.074	1.588	1.264	
Comprehensive	1.588	:	7.302*			* p < .01
Community	1.264	:	3.749**	4.896*		** p < .05

b. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING (1990)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	1.818	:	1.818	1.941	1.936	
Comprehensive	1.941	:	1.756			* p < .01
Community	1.936	:	2.356	0.076		** p < .05

c. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	1.362	:	1.362	1.829	1.528	
Comprehensive	1.829	:	7.761*			* p < .01
Community	1.528	:	3.848**	5.322*		** p < .05

d. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	2.245	:	2.245	2.370	2.283	
Comprehensive	2.370	:	2.104			* p < .01
Community	2.283	:	0.895	1.552		** p < .05

e. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	5.956	:	5.956	8.412	6.952	
Comprehensive	8.412	:	17.783*			* p < .01
Community	6.952	:	9.499*	11.741*		** p < .05

f. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	7.469	:	7.469	8.906	8.488	
Comprehensive	8.906	:	10.906*			* p < .01
Community	8.488	:	11.065*	3.452**		** p < .05

g. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	5.234	:	5.234	6.941	6.525	
Comprehensive	6.941	:	11.611*			* p < .01
Community	6.525	:	12.768*	3.097		** p < .05

h. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (1987)

Type	Type mean	:	Doctoral 7.521	Comprehensive 8.876	Community 7.919	
Doctoral	7.521	:				
Comprehensive	8.876	:	9.188*			* p < .01
Community	7.919	:	3.440**	7.008*		** p < .05

i. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (1990)

Type	Type mean	:	Doctoral 8.716	Comprehensive 9.087	Community 9.201	
Doctoral	8.716	:				
Comprehensive	9.087	:	2.824			* p < .01
Community	9.201	:	4.996*	0.922		** p < .05

j. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (1996)

Type	Type mean	:	Doctoral 6.900	Comprehensive 7.882	Community 7.450	
Doctoral	6.900	:				
Comprehensive	7.882	:	6.489*			* p < .01
Community	7.450	:	5.151*	3.043		** p < .05

k. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (1987)

Type	Type mean	:	Doctoral 3.206	Comprehensive 3.632	Community 3.891	
Doctoral	3.206	:				
Comprehensive	3.632	:	3.979**			* p < .01
Community	3.891	:	8.520*	2.631		** p < .05

l. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (1990)

Type	Type mean	:	Doctoral 4.410	Comprehensive 5.090	Community 5.641	
Doctoral	4.410	:				
Comprehensive	5.090	:	6.604*			* p < .01
Community	5.641	:	16.341*	5.776*		** p < .05

m. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (1996)

Type	Type mean	:	Doctoral 3.374	Comprehensive 3.925	Community 4.458	
Doctoral	3.374	:				
Comprehensive	3.925	:	4.999*			* p < .01
Community	4.458	:	13.968*	5.173*		** p < .05

APPENDIX 11

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING (DOCTORAL UNIVERSITY)

	Year	:	1987	1990	
Year	mean	:	1.074	1.818	
1987	1.074	:			* p < .01
1990	1.818	:	13.369*		** p < .05

b. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING (COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.588	1.941	
1987	1.588	:			* p < .01
1990	1.941	:	4.292*		** p < .05

c. Dependent Variable: INVOLVEMENT--INSTITUTIONAL PLANNING (COMMUNITY COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.264	1.936	
1987	1.264	:			* p < .01
1990	1.936	:	15.101*		** p < .05

d. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (DOCTORAL UNIVERSITY)

	Year	:	1987	1990	
Year	mean	:	1.362	2.245	
1987	1.362	:			* p < .01
1990	2.245	:	18.673*		** p < .05

e. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.829	2.370	
1987	1.829	:			* p < .01
1990	2.370	:	7.716*		** p < .05

f. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (COMMUNITY COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.528	2.283	
1987	1.528	:			* p < .01
1990	2.283	:	19.987*		** p < .05

g. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (DOCTORAL UNIVERSITY)

	Year	:	1987	1990	1996	
Year	mean	:	5.956	7.469	5.234	
1987	5.956	:				* p < .01
1990	7.469	:	13.325*			** p < .05
1996	5.234	:	6.058*	19.999*		

h. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	1996	
Year	mean	:	8.412	8.906	6.941	
1987	8.412	:				* p < .01
1990	8.906	:	3.220			** p < .05
1996	6.941	:	9.039*	12.075*		

i. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (COMMUNITY COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			6.952	8.488	6.525	
1987	6.952	:				
1990	8.488	:	18.931*			* p < .01
1996	6.525	:	5.098*	24.899*		** p < .05

j. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (DOCTORAL UNIVERSITY)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			7.521	8.716	6.900	
1987	7.521	:				
1990	8.716	:	10.123*			* p < .01
1996	6.900	:	5.019*	16.069*		** p < .05

k. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (COMPREHENSIVE COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			8.876	9.087	7.882	
1987	8.876	:				
1990	9.087	:	1.333			* p < .01
1996	7.882	:	5.804*	7.282*		** p < .05

l. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (COMMUNITY COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			7.919	9.201	7.450	
1987	7.919	:				
1990	9.201	:	13.618*			* p < .01
1996	7.450	:	4.821*	19.518*		** p < .05

m. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (DOCTORAL UNIVERSITY)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			3.206	4.410	3.374	
1987	3.206	:				
1990	4.410	:	13.715*			* p < .01
1996	3.374	:	1.890	12.071*		** p < .05

n. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (COMPREHENSIVE COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			3.632	5.090	3.925	
1987	3.632	:				
1990	5.090	:	12.168*			* p < .01
1996	3.925	:	2.337	9.393*		** p < .05

o. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (COMMUNITY COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
			3.891	5.641	4.458	
1987	3.891	:				
1990	5.641	:	26.287*			* p < .01
1996	4.458	:	8.371*	17.977*		** p < .05

APPENDIX 12

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
WITHIN YEAR FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987)

Responsibility	Responsibility mean	Administrator	Department Head	Faculty
		6.773	7.090	6.864
Administrator	6.773			
Department Head	7.090	1.855		
Faculty	6.864	0.563	2.276	

* p < .01
** p < .05

b. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990)

Responsibility	Responsibility mean	Administrator	Department Head	Faculty
		8.517	8.091	8.284
Administrator	8.517			
Department Head	8.091	2.832		
Faculty	8.284	1.648	2.143	

* p < .01
** p < .05

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996)

Responsibility	Responsibility mean	Administrator	Department Head	Faculty
		7.218	6.612	5.840
Administrator	7.218			
Department Head	6.612	3.850**		
Faculty	5.840	9.409*	7.782*	

* p < .01
** p < .05

d. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (1987)

Responsibility	Responsibility mean	Administrator	Department Head	Faculty
		8.242	8.535	7.671
Administrator	8.242			
Department Head	8.535	1.384		
Faculty	7.671	2.835	7.738*	

* p < .01
** p < .05

e. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (1990)

Responsibility	Responsibility mean	Administrator	Department Head	Faculty
		9.273	9.127	8.937
Administrator	9.273			
Department Head	9.127	0.868		
Faculty	8.937	2.129	1.955	

* p < .01
** p < .05

f. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (1996)

Responsibility	Responsibility mean	Administrator	Department Head	Faculty
		8.540	8.000	6.857
Administrator	8.540			
Department Head	8.000	3.003		
Faculty	6.857	10.111*	10.457*	

* p < .01
** p < .05

g. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD (1987)

Responsibility	Responsibility mean	:	Administrator 4.283	Department Head 5.622	Faculty 5.425
Administrator	4.283	:			
Department Head	5.622	:	8.144*		
Faculty	5.425	:	7.366*	2.148	

h. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD (1990)

Responsibility	Responsibility mean	:	Administrator 6.877	Department Head 7.123	Faculty 7.097
Administrator	6.877	:			
Department Head	7.123	:	1.649		
Faculty	7.097	:	1.574	0.303	

i. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD (1996)

Responsibility	Responsibility mean	:	Administrator 5.685	Department Head 5.698	Faculty 5.171
Administrator	5.685	:			
Department Head	5.698	:	0.084		
Faculty	5.171	:	3.562**	5.763*	

j. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (1987)

Responsibility	Responsibility mean	:	Administrator 3.222	Department Head 3.729	Faculty 3.648
Administrator	3.222	:			
Department Head	3.729	:	3.449**		
Faculty	3.648	:	3.071	1.025	

k. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (1990)

Responsibility	Responsibility mean	:	Administrator 5.758	Department Head 5.205	Faculty 5.083
Administrator	5.758	:			
Department Head	5.205	:	4.191*		
Faculty	5.083	:	5.482*	1.612	

l. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (1996)

Responsibility	Responsibility mean	:	Administrator 4.925	Department Head 4.108	Faculty 3.892
Administrator	4.925	:			
Department Head	4.108	:	5.910*		
Faculty	3.892	:	8.028*	2.723	

* p < .01
** p < .05

APPENDIX 13

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (ADMINISTRATOR)

	Year	:	1987	1990	1996	
Year	mean	:	6.773	8.517	7.218	
1987	6.773	:				
1990	8.517	:	8.721*			* p < .01
1996	7.218	:	2.199	6.900*		** p < .05

b. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (DEPARTMENT HEAD)

	Year	:	1987	1990	1996	
Year	mean	:	7.090	8.091	6.612	
1987	7.090	:				
1990	8.091	:	9.202*			* p < .01
1996	6.612	:	4.186*	13.523*		** p < .05

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (FACULTY)

	Year	:	1987	1990	1996	
Year	mean	:	6.864	8.284	5.840	
1987	6.864	:				
1990	8.284	:	18.127*			* p < .01
1996	5.840	:	12.546*	31.572*		** p < .05

d. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (ADMINISTRATOR)

	Year	:	1987	1990	1996	
Year	mean	:	8.242	9.273	8.540	
1987	8.242	:				
1990	9.273	:	4.270*			* p < .01
1996	8.540	:	1.212	3.421**		** p < .05

e. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (DEPARTMENT HEAD)

	Year	:	1987	1990	1996	
Year	mean	:	8.535	9.127	8.000	
1987	8.535	:				
1990	9.127	:	4.875*			* p < .01
1996	8.000	:	4.147*	9.299*		** p < .05

f. Dependent Variable: IMPORTANCE--ASSESSMENT COORDINATOR (FACULTY)

	Year	:	1987	1990	1996	
Year	mean	:	7.671	8.937	6.857	
1987	7.671	:				
1990	8.937	:	14.959*			* p < .01
1996	6.857	:	9.233*	25.413*		** p < .05

g. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD (ADMINISTRATOR)

Year	mean	:	1987	1990	1996
		Year :	1987	1990	1996
1987	4.283	:			
1990	6.877	:	13.214*		
1996	5.685	:	7.055*	6.337*	

* p < .01
** p < .05

h. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD (DEPARTMENT HEAD)

Year	mean	:	1987	1990	1996
		Year :	1987	1990	1996
1987	5.622	:			
1990	7.123	:	14.488*		
1996	5.698	:	0.712	13.754*	

* p < .01
** p < .05

i. Dependent Variable: IMPORTANCE--DEPARTMENT HEAD (FACULTY)

Year	mean	:	1987	1990	1996
		Year :	1987	1990	1996
1987	5.425	:			
1990	7.097	:	23.564*		
1996	5.171	:	3.467**	27.284*	

* p < .01
** p < .02

j. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (ADMINISTRATOR)

Year	mean	:	1987	1990	1996
		Year :	1987	1990	1996
1987	3.222	:			
1990	5.758	:	14.468*		
1996	4.925	:	9.522*	5.338*	

* p < .01
** p < .05

k. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (DEPARTMENT HEAD)

Year	mean	:	1987	1990	1996
		Year :	1987	1990	1996
1987	3.729	:			
1990	5.205	:	16.208*		
1996	4.108	:	4.058**	11.958*	

* p < .01
** p < .05

l. Dependent Variable: IMPORTANCE--FACULTY-IN-GENERAL (FACULTY)

Year	mean	:	1987	1990	1996
		Year :	1987	1990	1996
1987	3.648	:			
1990	5.083	:	23.658*		
1996	3.892	:	3.954**	14.027*	

* p < .01
** p < .05

APPENDIX 14

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Administrator 2.000	Department Head 1.793	Faculty 1.094
Administrator	2.000	:			
Department Head	1.793	:	1.040		
Faculty	1.094	:	4.643*	9.734*	

* p < .01
** p < .05

b. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Administrator 2.875	Department Head 2.494	Faculty 2.083
Administrator	2.875	:			
Department Head	2.494	:	1.917		
Faculty	2.083	:	4.064**	5.821*	

* p < .01
** p < .05

c. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Administrator 2.545	Department Head 1.620	Faculty 1.875
Administrator	2.545	:			
Department Head	1.620	:	5.158*		
Faculty	1.875	:	3.772**	2.434	

* p < .01
** p < .05

d. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Administrator 2.818	Department Head 2.460	Faculty 2.207
Administrator	2.818	:			
Department Head	2.460	:	1.996		
Faculty	2.207	:	3.450**	2.433	

* p < .01
** p < .05

e. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Administrator 2.027	Department Head 1.868	Faculty 1.376
Administrator	2.027	:			
Department Head	1.868	:	1.473		
Faculty	1.376	:	6.925*	7.090*	

* p < .01
** p < .05

f. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Administrator 2.850	Department Head 2.474	Faculty 2.156
Administrator	2.850	:			
Department Head	2.474	:	3.574**		
Faculty	2.156	:	7.647*	4.589*	

* p < .01
** p < .05

APPENDIX 15

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987 ADMINISTRATOR)

Type	Type mean	:	Doctoral 2.000	Comprehensive 2.545	Community 2.027	
Doctoral	2.000	:				
Comprehensive	2.545	:	2.178			* p < .01
Community	2.027	:	0.129	2.801		** p < .05

b. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990 ADMINISTRATOR)

Type	Type mean	:	Doctoral 2.875	Comprehensive 2.818	Community 2.850	
Doctoral	2.875	:				
Comprehensive	2.818	:	0.228			* p < .01
Community	2.850	:	0.120	0.175		** p < .05

c. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 1.793	Comprehensive 1.620	Community 1.868	
Doctoral	1.793	:				
Comprehensive	1.620	:	1.810			* p < .01
Community	1.868	:	0.887	2.529		** p < .05

d. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 2.494	Comprehensive 2.460	Community 2.474	
Doctoral	2.494	:				
Comprehensive	2.460	:	0.357			* p < .01
Community	2.474	:	0.238	0.143		** p < .05

e. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1987 FACULTY)

Type	Type mean	:	Doctoral 1.094	Comprehensive 1.875	Community 1.376	
Doctoral	1.094	:				
Comprehensive	1.875	:	9.333*			* p < .01
Community	1.376	:	5.307*	6.348*		** p < .05

f. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (1990 FACULTY)

Type	Type mean	:	Doctoral 2.083	Comprehensive 2.207	Community 2.156	
Doctoral	2.083	:				
Comprehensive	2.207	:	1.512			* p < .01
Community	2.156	:	1.402	0.659		** p < .05

APPENDIX 16

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

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a. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (ADMINISTRATOR DOCTORAL UNIVERSITY)

Year		1987	1990
Year	mean	2.000	2.875
1987	2.000		
1990	2.875	3.250**	

* p < .01
** p < .05

b. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (DEPARTMENT HEAD DOCTORAL UNIVERSITY)

Year		1987	1990
Year	mean	1.793	2.494
1987	1.793		
1990	2.494	8.634*	

* p < .01
** p < .05

c. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (FACULTY DOCTORAL UNIVERSITY)

Year		1987	1990
Year	mean	1.094	2.083
1987	1.094		
1990	2.083	16.599*	

* p < .01
** p < .05

d. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (ADMINISTRATOR COMPREHENSIVE COLLEGE)

Year		1987	1990
Year	mean	2.545	2.818
1987	2.545		
1990	2.818	1.189	

* p < .01
** p < .05

e. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (DEPT. HEAD COMPREHENSIVE COLLEGE)

Year		1987	1990
Year	mean	1.620	2.460
1987	1.620		
1990	2.460	7.799*	

* p < .01
** p < .05

f. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (FACULTY COMPREHENSIVE COLLEGE)

Year		1987	1990
Year	mean	1.875	2.207
1987	1.875		
1990	2.207	3.291**	

* p < .01
** p < .05

g. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (ADMINISTRATOR COMMUNITY COLLEGE)

Year		1987	1990
Year	mean	2.027	2.850
1987	2.027		
1990	2.850	6.700*	

* p < .01
** p < .05

h. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (DEPT. HEAD COMMUNITY COLLEGE)

Year		1987	1990
Year	mean	1.868	2.474
1987	1.868		
1990	2.474	6.937*	

* p < .01
** p < .05

i. Dependent Variable: UNDERSTANDING--INSTITUTIONAL PLAN (FACULTY COMMUNITY COLLEGE)

Year		1987	1990
Year	mean	1.376	2.156
1987	1.376		
1990	2.156	17.501*	

* p < .01
** p < .05

APPENDIX 17

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Administrator 8.166	Department Head 6.116	Faculty 5.634
Administrator	8.166	:			
Department Head	6.116	:	4.787*		
Faculty	5.634	:	5.954*	2.748	

* p < .01
** p < .05

b. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Administrator 8.000	Department Head 7.366	Faculty 7.500
Administrator	8.000	:			
Department Head	7.366	:	1.699		
Faculty	7.500	:	1.360	0.863	

* p < .01
** p < .05

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Administrator 6.250	Department Head 5.389	Faculty 5.036
Administrator	6.250	:			
Department Head	5.389	:	2.272		
Faculty	5.036	:	3.278	2.019	

* p < .01
** p < .05

d. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Administrator 8.143	Department Head 8.425	Faculty 8.447
Administrator	8.143	:			
Department Head	8.425	:	0.688		
Faculty	8.447	:	0.739	0.097	

* p < .01
** p < .05

e. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Administrator 9.000	Department Head 8.705	Faculty 9.161
Administrator	9.000	:			
Department Head	8.705	:	0.842		
Faculty	9.161	:	0.443	1.944	

* p < .01
** p < .05

f. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Administrator 8.000	Department Head 7.242	Faculty 6.120
Administrator	8.000	:			
Department Head	7.242	:	2.099		
Faculty	6.120	:	5.023*	4.231*	

* p < .01
** p < .05

g. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Administrator 6.194	Department Head 7.182	Faculty 7.011
Administrator	6.194	:			
Department Head	7.182	:	4.398*		
Faculty	7.011	:	4.209*	1.113	

* p < .01
** p < .05

h. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Administrator 8.500	Department Head 8.437	Faculty 8.502	
Administrator	8.500	:				
Department Head	8.437	:	0.319			* p < .01
Faculty	8.502	:	0.012	0.480		** p < .05

i. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Administrator 7.216	Department Head 7.308	Faculty 6.141	
Administrator	7.216	:				
Department Head	7.308	:	0.447			* p < .01
Faculty	6.141	:	6.003*	8.167*		** p < .05

APPENDIX 18

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987 ADMINISTRATOR)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	8.166	:				
Comprehensive	8.143	:	0.041			* p < .01
Community	6.194	:	4.420*	4.656*		** p < .05

b. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990 ADMINISTRATOR)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	8.000	:				
Comprehensive	9.000	:	2.108			* p < .01
Community	8.500	:	1.291	1.414		** p < .05

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996 ADMINISTRATOR)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	6.250	:				
Comprehensive	8.000	:	3.688**			* p < .01
Community	7.216	:	2.477	2.199		** p < .05

d. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	6.116	:				
Comprehensive	8.425	:	11.309*			* p < .01
Community	7.182	:	5.709*	5.980*		** p < .05

e. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	7.366	:				
Comprehensive	8.705	:	6.977*			* p < .01
Community	8.437	:	6.380*	1.396		** p < .05

f. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral	Comprehensive	Community	
Doctoral	5.389	:				
Comprehensive	7.242	:	8.384*			* p < .01
Community	7.308	:	10.419*	0.309		** p < .05

g. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1987 FACULTY)

Type	Type mean	:	Doctoral 5.634	Comprehensive 8.447	Community 7.011
Doctoral	5.634	:			
Comprehensive	8.447	:	13.992*		
Community	7.011	:	9.861*	8.061*	

* p < .01
** p < .05

h. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1990 FACULTY)

Type	Type mean	:	Doctoral 7.500	Comprehensive 9.161	Community 8.502
Doctoral	7.500	:			
Comprehensive	9.161	:	8.078*		
Community	8.502	:	8.390*	3.448**	

* p < .01
** p < .05

i. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (1996 FACULTY)

Type	Type mean	:	Doctoral 5.036	Comprehensive 6.120	Community 6.141
Doctoral	5.036	:			
Comprehensive	6.120	:	4.750*		
Community	6.141	:	8.455*	0.099	

* p < .01
** p < .05

APPENDIX 19

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
COMMON DEPENDENT VARIABLES (ALL RESPONDENTS)

a. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (ADMINISTRATOR DOCTORAL UNIVERSITY)

	Year	:	1987	1990	1996	
Year	mean	:	8.166	8.000	6.250	
1987	8.166	:				
1990	8.000	:	0.307			* p < .01
1996	6.250	:	3.547**	3.499**		** p < .05

b. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (DEPT. HEAD DOCTORAL UNIVERSITY)

	Year	:	1987	1990	1996	
Year	mean	:	6.116	7.366	5.389	
1987	6.116	:				
1990	7.366	:	7.126*			* p < .01
1996	5.389	:	3.875**	10.946*		** p < .05

c. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (FACULTY DOCTORAL UNIVERSITY)

	Year	:	1987	1990	1996	
Year	mean	:	5.634	7.500	5.036	
1987	5.634	:				
1990	7.500	:	12.021*			* p < .01
1996	5.036	:	3.698**	7.359*		** p < .05

d. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (ADMINIST. COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	1996	
Year	mean	:	8.143	9.000	8.000	
1987	8.143	:				
1990	9.000	:	1.739			* p < .01
1996	8.000	:	0.290	2.236		** p < .05

e. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (DEPT. HEAD COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	1996	
Year	mean	:	8.425	8.705	7.242	
1987	8.425	:				
1990	8.705	:	1.281			* p < .01
1996	7.242	:	5.029*	6.351*		** p < .05

f. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (FACULTY COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	1996	
Year	mean	:	8.447	9.161	6.120	
1987	8.447	:				
1990	9.161	:	2.949			* p < .01
1996	6.120	:	9.034*	11.310*		** p < .05

g. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (ADMINISTRATOR COMMUNITY COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
1987	6.194	:	6.194	8.500	7.216	
1990	8.500	:	9.635*			* p < .01
1996	7.216	:	4.196*	5.628*		** p < .05

h. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (DEPT. HEAD COMMUNITY COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
1987	7.182	:	7.182	8.437	7.308	
1990	8.437	:	6.985*			* p < .01
1996	7.308	:	0.688	6.575*		** p < .05

i. Dependent Variable: IMPORTANCE--CHIEF ACADEMIC OFFICER (FACULTY COMMUNITY COLLEGE)

Year	mean	:	1987	1990	1996	
		Year :	1987	1990	1996	
1987	7.011	:	7.011	8.502	6.141	
1990	8.502	:	15.166*			* p < .01
1996	6.141	:	8.516*	24.502*		** p < .05

APPENDIX 20

SUMMARY ANOVA
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING

Source	SS	df	MS	F	p
TYPE	56.677	2	28.338	21.00	0.0001
PRIRESP	51.122	1	51.122	37.89	0.0001
TYPE*PRIRESP	0.049	2	0.024	0.02	0.9820
ERROR#1	971.526	720	1.349		
YEAR	230.028	1	230.028	292.28	0.0001
TYPE*YEAR	10.841	2	5.421	6.89	0.0011
PRIRESP*YEAR	2.351	1	2.351	2.99	0.0844
TYPE*PRIRESP*YEAR	4.455	2	2.228	2.83	0.0597
ERROR#2	549.326	698	0.787		

b. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN

Source	SS	df	MS	F	p
TYPE	41.414	2	20.707	15.57	0.0001
PRIRESP	61.527	1	61.527	46.26	0.0001
TYPE*PRIRESP	0.000	2	0.000	0.00	1.0000
ERROR#1	953.279	717	1.330		
YEAR	250.625	1	250.625	381.47	0.0001
TYPE*YEAR	8.951	2	4.476	6.81	0.0012
PRIRESP*YEAR	2.018	1	2.018	3.07	0.0802
TYPE*PRIRESP*YEAR	3.508	2	1.754	2.67	0.0700
ERROR#2	453.399	690	0.657		

c. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES

Source	SS	df	MS	F	p
TYPE	50.989	2	25.495	16.27	0.0001
PRIRESP	33.767	1	33.767	21.54	0.0001
TYPE*PRIRESP	0.000	2	0.000	0.00	1.0000
ERROR#1	1076.789	687	1.567		
YEAR	205.642	1	205.642	290.45	0.0001
TYPE*YEAR	7.066	2	3.533	4.99	0.0071
PRIRESP*YEAR	2.279	1	2.279	3.22	0.0733
TYPE*PRIRESP*YEAR	4.870	2	2.435	3.44	0.0327
ERROR#2	466.643	659	0.708		

d. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES

Source	SS	df	MS	F	p
TYPE	49.058	2	24.529	17.80	0.0001
PRIRESP	75.495	1	75.495	54.79	0.0001
TYPE*PRIRESP	0.000	2	0.000	0.00	1.0000
ERROR#1	978.078	710	1.378		
YEAR	247.357	1	247.357	378.70	0.0001
TYPE*YEAR	10.713	2	5.357	8.20	0.0011
PRIRESP*YEAR	2.545	1	2.545	3.90	0.0488
TYPE*PRIRESP*YEAR	1.955	2	0.978	1.50	0.2246
ERROR#2	447.430	685	0.653		

e. Dependent Variable: IMPORTANCE--FACULTY-IN-THE-DEPARTMENT

Source	SS	df	MS	F	p
TYPE	600.690	2	300.345	21.63	0.0001
PRIRESP	56.825	1	56.825	4.09	0.0435
TYPE*PRIRESP	69.137	2	34.569	2.49	0.0837
ERROR#1	9788.980	705	13.885		
YEAR	674.769	2	337.385	192.90	0.0001
TYPE*YEAR	11.100	4	2.775	1.59	0.1754
PRIRESP*YEAR	5.383	2	2.692	1.54	0.2149
TYPE*PRIRESP*YEAR	9.392	4	2.348	1.34	0.2519
ERROR#2	2138.522	1223	1.749		

f. Dependent Variable: IMPORTANCE--SELF

Source	SS	df	MS	F	p
TYPE	350.652	2	175.326	9.99	0.0001
PRIRESP	620.662	1	620.662	35.38	0.0001
TYPE*PRIRESP	180.779	2	90.390	5.15	0.0060
ERROR#1	12702.534	724	17.545		
YEAR	862.503	2	431.252	172.43	0.0001
TYPE*YEAR	19.484	4	4.871	1.95	0.1002
PRIRESP*YEAR	12.698	2	6.349	2.54	0.0794
TYPE*PRIRESP*YEAR	23.909	4	5.977	2.39	0.0491
ERROR#2	3278.741	1311	2.501		

APPENDIX 21

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT YEAR MAIN EFFECT ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING

Year	mean	1987	1990
1987	1.344		
1990	2.145	23.973*	

* p < .01
** p < .05

b. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN

Year	mean	1987	1990
1987	1.512		
1990	2.354	27.471*	

* p < .01
** p < .05

c. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES

Year	mean	1987	1990
1987	1.312		
1990	2.092	24.028*	

* p < .01
** p < .05

d. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES

Year	mean	1987	1990
1987	1.491		
1990	2.326	27.208*	

* p < .01
** p < .05

e. Dependent Variable: IMPORTANCE--FACULTY-IN-THE-DEPARTMENT

Year	mean	1987	1990	1996
1987	4.071			
1990	5.431	26.128*		
1996	4.415	6.464*	19.544*	

* p < .01
** p < .05

f. Dependent Variable: IMPORTANCE--SELF

Year	mean	1987	1990	1996
1987	5.346			
1990	6.818	24.159*		
1996	5.629	4.586*	19.699*	

* p < .01
** p < .05

APPENDIX 22

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
WITHIN YEAR FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING (1987)

Type	Type mean	:	Doctoral 1.121	Comprehensive 1.991	Community 1.304	
Doctoral	1.121	:				
Comprehensive	1.991	:	12.008*			* p < .01
Community	1.304	:	3.505**	10.024*		** p < .05

b. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING (1990)

Type	Type mean	:	Doctoral 2.096	Comprehensive 2.445	Community 2.093	
Doctoral	2.096	:				
Comprehensive	2.445	:	4.860*			* p < .01
Community	2.093	:	0.058	3.649**		** p < .05

c. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN (1987)

Type	Type mean	:	Doctoral 1.381	Comprehensive 2.064	Community 1.435	
Doctoral	1.381	:				
Comprehensive	2.064	:	10.310*			* p < .01
Community	1.435	:	1.125	10.019*		** p < .05

d. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN (1990)

Type	Type mean	:	Doctoral 2.396	Comprehensive 2.618	Community 2.245	
Doctoral	2.396	:				
Comprehensive	2.618	:	3.385**			* p < .01
Community	2.245	:	3.206	5.979*		** p < .05

e. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1987)

Type	Type mean	:	Doctoral 1.098	Comprehensive 1.879	Community 1.280	
Doctoral	1.098	:				
Comprehensive	1.879	:	11.170*			* p < .01
Community	1.280	:	3.553**	9.079*		** p < .05

f. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1990)

Type	Type mean	:	Doctoral 2.008	Comprehensive 2.411	Community 2.055	
Doctoral	2.008	:				
Comprehensive	2.411	:	5.819*			* p < .01
Community	2.055	:	0.939	5.411*		** p < .05

g. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (1987)

Type	Type mean	:	Doctoral 1.336	Comprehensive 2.120	Community 1.409	
Doctoral	1.336	:				
Comprehensive	2.120	:	11.802*			* p < .01
Community	1.409	:	1.517	11.312*		** p < .05

h. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (1990)

Type	Type mean	:	Doctoral 2.336	Comprehensive 2.606	Community 2.248	
Doctoral	2.336	:				
Comprehensive	2.606	:	4.117**			* p < .01
Community	2.248	:	1.869	5.729*		** p < .05

APPENDIX 23

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT TYPE * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING (DOCTORAL UNIVERSITY)

Year	Year mean	1987 : 1.121	1990 2.096
1987	1.121	:	
1990	2.096	: 17.182*	

* p < .01
** p < .05

b. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING (COMPREHENSIVE COLLEGE)

Year	Year mean	1987 : 1.991	1990 2.445
1987	1.991	:	
1990	2.445	: 5.355*	

* p < .01
** p < .05

c. Dependent Variable: INVOLVEMENT--DEPARTMENT PLANNING (COMMUNITY COLLEGE)

Year	Year mean	1987 : 1.304	1990 2.093
1987	1.304	:	
1990	2.093	: 16.968*	

* p < .01
** p < .05

d. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN (DOCTORAL UNIVERSITY)

Year	Year mean	1987 : 1.381	1990 2.396
1987	1.381	:	
1990	2.396	: 19.576*	

* p < .01
** p < .05

e. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN (COMPREHENSIVE COLLEGE)

Year	Year mean	1987 : 2.064	1990 2.618
1987	2.064	:	
1990	2.618	: 7.152*	

* p < .01
** p < .05

f. Dependent Variable: UNDERSTANDING--DEPARTMENT PLAN (COMMUNITY COLLEGE)

Year	Year mean	1987 : 1.435	1990 2.245
1987	1.435	:	
1990	2.245	: 18.920*	

* p < .01
** p < .05

g. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (DOCTORAL UNIVERSITY)

Year	Year mean	: 1987	1990	
		: 1.098	2.008	
1987	1.098	:		* p < .01
1990	2.008	: 16.430*		** p < .05

h. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (COMPREHENSIVE COLLEGE)

Year	Year mean	: 1987	1990	
		: 1.879	2.411	
1987	1.879	:		* p < .01
1990	2.411	: 6.540*		** p < .05

i. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (COMMUNITY COLLEGE)

Year	Year mean	: 1987	1990	
		: 1.280	2.055	
1987	1.280	:		* p < .01
1990	2.055	: 17.057*		** p < .05

j. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (DOCTORAL UNIVERSITY)

Year	Year mean	: 1987	1990	
		: 1.336	2.336	
1987	1.336	:		* p < .01
1990	2.336	: 19.262*		** p < .05

k. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (COMPREHENSIVE COLLEGE)

Year	Year mean	: 1987	1990	
		: 2.120	2.606	
1987	2.120	:		* p < .01
1990	2.606	: 6.265*		** p < .05

l. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (COMMUNITY COLLEGE)

Year	Year mean	: 1987	1990	
		: 1.409	2.248	
1987	1.409	:		* p < .01
1990	2.248	: 19.575*		** p < .05

APPENDIX 24

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
WITHIN YEAR FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (1987)

Responsibility	Responsibility mean	:	Department Head 1.893	Faculty 1.323
Department Head	1.893	:		
Faculty	1.323	:	11.999*	

* p < .01
** p < .05

b. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (1990)

Responsibility	Responsibility mean	:	Department Head 2.656	Faculty 2.198
Department Head	2.656	:		
Faculty	2.198	:	9.748*	

* p < .01
** p < .05

APPENDIX 25

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (DEPARTMENT HEAD)

	Year	:	1987	1990	
Year	mean	:	1.893	2.656	
1987	1.893	:			* p < .01
1990	2.656	:	13.601*		** p < .05

b. Dependent Variable: UNDERSTANDING--DEPARTMENT ACTIVITIES (FACULTY)

	Year	:	1987	1990	
Year	mean	:	1.323	2.198	
1987	1.323	:			* p < .01
1990	2.198	:	24.110*		** p < .05

APPENDIX 26

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1987 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Department Head 1.423	Faculty 0.925	
Department Head	1.423	:			* p < .01
Faculty	0.925	:	5.968*		** p < .05

b. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1990 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	:	Department Head 2.185	Faculty 1.917	
Department Head	2.185	:			* p < .01
Faculty	1.917	:	2.734		** p < .05

c. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1987 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Department Head 1.816	Faculty 1.931	
Department Head	1.816	:			* p < .01
Faculty	1.931	:	0.996		** p < .05

d. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1990 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	:	Department Head 2.551	Faculty 2.293	
Department Head	2.551	:			* p < .01
Faculty	2.293	:	2.235		** p < .05

e. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1987 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Department Head 1.710	Faculty 1.168	
Department Head	1.710	:			* p < .01
Faculty	1.168	:	6.748*		** p < .05

f. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1990 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	:	Department Head 2.195	Faculty 2.015	
Department Head	2.194	:			* p < .01
Faculty	2.015	:	2.271		** p < .05

APPENDIX 27

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1987 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 1.423	Comprehensive 1.816	Community 1.710	
Doctoral	1.423	:				
Comprehensive	1.816	:	3.624**			* p < .01
Community	1.710	:	2.919	0.954		** p < .05

b. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1990 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 2.185	Comprehensive 2.551	Community 2.194	
Doctoral	2.185	:				
Comprehensive	2.551	:	3.399**			* p < .01
Community	2.194	:	0.093	3.240		** p < .05

c. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1987 FACULTY)

Type	Type mean	:	Doctoral 0.925	Comprehensive 1.931	Community 1.168	
Doctoral	0.925	:				
Comprehensive	1.931	:	10.894*			* p < .01
Community	1.168	:	3.971**	8.855*		** p < .05

d. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (1990 FACULTY)

Type	Type mean	:	Doctoral 1.917	Comprehensive 2.293	Community 2.015	
Doctoral	1.917	:				
Comprehensive	2.293	:	4.113**			* p < .01
Community	2.015	:	1.644	3.232		** p < .05

APPENDIX 28

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (DEPT. HEAD DOCTORAL UNIVERSITY)

	Year	:	1987	1990	
Year	mean	:	1.423	2.185	
1987	1.423	:			* p < .01
1990	2.185	:	8.073*		** p < .05

b. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (FACULTY DOCTORAL UNIVERSITY)

	Year	:	1987	1990	
Year	mean	:	0.925	1.917	
1987	0.925	:			* p < .01
1990	1.917	:	14.502*		** p < .05

c. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (DEPT. HEAD COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.816	2.551	
1987	1.816	:			* p < .01
1990	2.551	:	6.115*		** p < .05

d. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (FACULTY COMPREHENSIVE COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.931	2.293	
1987	1.931	:			* p < .01
1990	2.293	:	3.276**		** p < .05

e. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (DEPT. HEAD COMMUNITY COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.710	2.194	
1987	1.710	:			* p < .01
1990	2.194	:	4.829*		** p < .05

f. Dependent Variable: INVOLVEMENT--DEPARTMENT ACTIVITIES (FACULTY COMMUNITY COLLEGE)

	Year	:	1987	1990	
Year	mean	:	1.168	2.015	
1987	1.168	:			* p < .01
1990	2.015	:	16.555*		** p < .05

APPENDIX 29

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
PRIMARY RESPONSIBILITY * YEAR WITHIN TYPE ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: IMPORTANCE--SELF (1987 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	5.950	5.950	4.036
Faculty	4.036	12.212*	

* p < .01
** p < .05

b. Dependent Variable: IMPORTANCE--SELF (1990 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	7.391	7.391	5.633
Faculty	5.633	11.776*	

* p < .01
** p < .05

c. Dependent Variable: IMPORTANCE--SELF (1996 DOCTORAL UNIVERSITY)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	6.176	6.176	4.552
Faculty	4.552	10.748*	

* p < .01
** p < .05

d. Dependent Variable: IMPORTANCE--SELF (1987 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	5.959	5.959	6.179
Faculty	6.179	1.006	

* p < .01
** p < .05

e. Dependent Variable: IMPORTANCE--SELF (1990 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	7.500	7.500	6.983
Faculty	6.983	2.396	

* p < .01
** p < .05

f. Dependent Variable: IMPORTANCE--SELF (1996 COMPREHENSIVE COLLEGE)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	6.444	6.444	5.426
Faculty	5.426	4.510*	

* p < .01
** p < .05

g. Dependent Variable: IMPORTANCE--SELF (1987 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	6.571	6.571	5.226
Faculty	5.226	8.936*	

* p < .01
** p < .05

h. Dependent Variable: IMPORTANCE--SELF (1990 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	8.000	8.000	6.872
Faculty	6.872	7.742*	

* p < .01
** p < .05

i. Dependent Variable: IMPORTANCE--SELF (1996 COMMUNITY COLLEGE)

Responsibility	Responsibility mean	Department Head	Faculty
Department Head	7.096	7.096	5.622
Faculty	5.622	9.992*	

* p < .01
** p < .05

APPENDIX 30

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
TYPE * YEAR WITHIN PRIMARY RESPONSIBILITY ANALYSIS
WITHIN YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: IMPORTANCE--SELF (1987 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 5.950	Comprehensive 5.959	Community 6.571	
Doctoral	5.950	:				
Comprehensive	5.959	:	0.044			* p < .01
Community	6.571	:	3.393**	2.938		** p < .05

b. Dependent Variable: IMPORTANCE--SELF (1990 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 7.391	Comprehensive 7.500	Community 8.000	
Doctoral	7.391	:				
Comprehensive	7.500	:	0.549			* p < .01
Community	8.000	:	3.444**	2.442		** p < .05

c. Dependent Variable: IMPORTANCE--SELF (1996 DEPARTMENT HEAD)

Type	Type mean	:	Doctoral 6.176	Comprehensive 6.444	Community 7.096	
Doctoral	6.176	:				
Comprehensive	6.444	:	1.299			* p < .01
Community	7.096	:	5.156*	3.076		** p < .05

d. Dependent Variable: IMPORTANCE--SELF (1987 FACULTY)

Type	Type mean	:	Doctoral 4.036	Comprehensive 6.179	Community 5.226	
Doctoral	4.036	:				
Comprehensive	6.179	:	12.120*			* p < .01
Community	5.226	:	10.158*	5.787*		** p < .05

e. Dependent Variable: IMPORTANCE--SELF (1990 FACULTY)

Type	Type mean	:	Doctoral 5.633	Comprehensive 6.983	Community 6.872	
Doctoral	5.633	:				
Comprehensive	6.983	:	7.863*			* p < .01
Community	6.872	:	11.198*	0.689		** p < .05

f. Dependent Variable: IMPORTANCE--SELF (1996 FACULTY)

Type	Type mean	:	Doctoral 4.552	Comprehensive 5.426	Community 5.622	
Doctoral	4.552	:				
Comprehensive	5.426	:	4.942*			* p < .01
Community	5.622	:	9.475*	1.176		** p < .05

APPENDIX 31

Q VALUES (TUKEY/KRAMMER POST HOC PROCEDURE)
ACROSS YEAR FOR SIGNIFICANT TYPE * PRIMARY RESPONSIBILITY * YEAR INTERACTION ANALYSES
ADDITIONAL DEPENDENT VARIABLES (DEPARTMENT HEAD AND FACULTY RESPONDENTS)

a. Dependent Variable: IMPORTANCE--SELF (DEPT. HEAD DOCTORAL UNIVERSITY)

Year	Year mean	1987	1990	1996	
1987	5.950	5.950	7.391	6.176	
1990	7.391	8.319*			* p < .01
1996	6.176	1.297	7.124*		** p < .05

b. Dependent Variable: IMPORTANCE--SELF (FACULTY DOCTORAL UNIVERSITY)

Year	Year mean	1987	1990	1996	
1987	4.036	4.036	5.633	4.552	
1990	5.633	12.304*			* p < .01
1996	4.552	3.951**	8.537*		** p < .05

c. Dependent Variable: IMPORTANCE--SELF (DEPT. HEAD COMPREHENSIVE COLLEGE)

Year	Year mean	1987	1990	1996	
1987	5.959	5.959	7.500	6.444	
1990	7.500	6.855*			* p < .01
1996	6.444	2.101	4.596*		** p < .05

d. Dependent Variable: IMPORTANCE--SELF (FACULTY COMPREHENSIVE COLLEGE)

Year	Year mean	1987	1990	1996	
1987	6.179	6.179	6.983	5.426	
1990	6.983	3.838**			* p < .01
1996	5.426	3.531**	7.363*		** p < .05

e. Dependent Variable: IMPORTANCE--SELF (DEPT. HEAD COMMUNITY COLLEGE)

Year	Year mean	1987	1990	1996	
1987	6.571	6.571	8.000	7.096	
1990	8.000	7.664*			* p < .01
1996	7.096	2.806	4.901*		** p < .05

f. Dependent Variable: IMPORTANCE--SELF (FACULTY COMMUNITY COLLEGE)

Year	Year mean	1987	1990	1996	
1987	5.226	5.226	6.872	5.622	
1990	6.872	17.238*			* p < .01
1996	5.622	4.079**	13.207*		** p < .05

Michael R. Scott

EDUCATIONAL BACKGROUND:

1986--1991 Ph.D. (Educational Research and Evaluation)
Virginia Polytechnic Institute and State University
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Dissertation: Administrator and Faculty Support for Formal Assessment
Emphases: Statistical Research
Higher Education Administration

1971--1972 Master of Arts (English)
Virginia Polytechnic Institute and State University
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Emphases: American Literature/Rhetoric

1966--1970 Bachelor of Arts (English/Political Science)
Virginia Polytechnic Institute
Blacksburg, VA
Emphases: American Literature
Social Science Research

1964--1966 High School Diploma
Albemarle County High School
Charlottesville, VA
Emphases: Composition/Government

PROFESSIONAL EXPERIENCE:

1984--1991 Division Chair, Arts/Sciences/Nursing
Director of Sponsored Programs
Dabney S. Lancaster Community College
Clifton Forge, VA
Duties: Develop/Revise Curriculum
Schedule/Assign Courses
Prepare/Oversee Budgets
Hire/Supervise Faculty/Staff
Establish Program Objectives
Measure Program Objectives
Evaluate Faculty Performance
Evaluate Staff Performance
Write/Supervise Funded Grants (over $2,000,000)
Serve as Liaison between College/Funding Sources/ State-Federal Auditors

1982 - 1984	Associate Professor of English Director of Sponsored Programs Dabney S. Lancaster Community College Clifton Forge, VA Duties: Taught Developmental/First Year/Second Year English Wrote/Supervised Funded Grants (over $3,500,000)
1979 - 1982 1972 - 1979	Assistant Professor of English Instructor of English Dabney S. Lancaster Community College Clifton Forge, VA Duties: Taught Developmental/First Year/Second Year English
1971 - 1972	Graduate Teaching Assistant Virginia Polytechnic Institute and State Blacksburg, VA Duties: Taught Freshman Composition

PROFESSIONAL MEMBERSHIPS:

1972--1991	SCETC (Southeastern Conference on English in the Two-Year College)
1984--1991	VCCA (Virginia Community College Association)

COMMUNITY ACTIVITIES:

1983--1986	Chairman, Alleghany Highlands Public School System Board
1979--1983	Vice-Chairman, Alleghany Highlands Public School System Board
1979--1983	Vice-Chairman, Jackson River Vocational School Joint Board of Control
1980--1985	Dabney S. Lancaster Community College Representative for the Greater Alleghany United Fund

PERSONAL:

Date of Birth:	February 2, 1948
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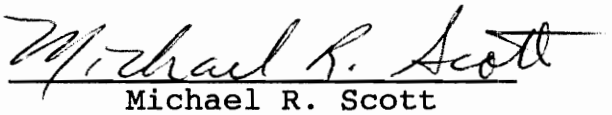
Awards:	Phi Kappa Phi Honor Society Outstanding Faculty Member



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