AN ANALYSIS OF THE RESIDENCY REQUIREMENT FOR THE DOCTORAL DEGREE IN THE COLLEGE OF EDUCATION, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

by

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INTRODUCTION

Throughout the evolutionary process of graduate education, the doctoral degree has remained the highest achievement. It is both a pre-requisite for the highest paying research and scholarly jobs and a commitment to a professional career. Its importance in fields other than education is documented when one considers the fact that firms such as General Electric, Shell and IBM "employ more PhD's today than all of the liberal arts colleges in the country" (Swift, 1976, p. 191).

Of major importance to educators working with doctoral programs is the fact that adults over 25 years of age comprise the graduate student population. In a survey conducted by Harder (1977), the majority of post-masters students enrolled in the College of Education at Virginia Polytechnic Institute and State University were over 35 years of age. The majority of students enrolled in NOVA's external degree program "are in their mid-forties" (Kappan, April 1979, p. 567). Thus, the figures indicate that adults are returning to traditional as well as non-traditional degree programs with several years of maturity and experience. College and university administrators are beginning to realize what an untapped resource these adult students represent. Glenny (1973, p. 6) surmised that "higher education will no longer be a growth industry unless an entirely new constitutency can be attracted to its institutions, and unless continuing education becomes an accepted pattern in our society."

For centuries, colleges and universities have developed a set of pedagogical methods designed specifically for young adult students. Because mature adult students respond differently to pedagogical practices, and engage in education primarily on a part-time basis, often in conflict with work, family responsibilities and leisure activities, the traditional residency requirement may cause them problems. Along these general lines, Knowles (1969, p. 31) has noted that the "definitions of academic standards are deeply rooted and most higher adult education is still evaluated on the same scales (grade point average, content covered, etc.) as youth education, whether they are relevant or not."

Swift (1976, p. 189) stated that "graduate education remains a relatively unstudied segment of American higher education." Of the studies that have been conducted, very few have analyzed the nature of the residency requirement in graduate programs. Most traditional doctoral granting institutions continue to endorse the residency requirement as the backbone of graduate study, believing that it socializes the student to the academic and intellectual environment of the university. While the value of full-time study should be acknowledged, more should be done to focus on the unique needs of mature adult students in post-masters degree programs. This study has, therefore, provided a set of procedures for analyzing the perceptions held by graduates of their academic, professional and personal experiences related to full-time residential study in a post-masters degree program.

Description of the Problem Situation

The fact that the adult student population is one of the fastest growing segments of American higher education documents the strong commitment adults have made to continuing their education on all levels. Their reasons for returning are unique. As Neugarten (1968, p. 10) explained, the adult student in his/her middle years is "in a period of heightened sensitivity to his/her position within this complex social environment." Sheehy (1974) has indicated in her book, Passages, that many people in their "catch-30" stage are looking for greater fulfillment in their lives. They are beginning to see changes in their perceptions of themselves as well as in their professional competencies and abilities. Many adults may feel that a doctorate may broaden their professional careers and expand their personal lives.

Traditional doctoral programs have operated on the assumption that a student must complete the institution's residency requirement in order to meet the academic and intellectual standards of an advanced degree. This assumption appears rooted in the premise that the achievement of academic and intellectual growth is directly related to studying in-residence at the degree granting institution for a specified period of time. Because the student can direct his or her full attention to study, can utilize a graduate level library, and can live in an academic atmosphere with faculty and fellow graduate students, the residency requirement enhances the academic experience. The residency requirement should be viewed, not as an arbitrary decree made by the graduate school on students to move to a specific location

for a specified period of time, but rather as a measure attempting to ensure full graduate commitment to scholarly pursuits in an academic environment.

The requirements for completing the doctorate differ among colleges and universities across the country, but many established programs have a residency requirement. This usually means that a student must study on a full-time basis for a specified number of academic terms on the campus of the degree granting institution. For most new adult students, residency mandates physical relocation to the university community, with or without his or her family and leaving full-time professional employment. It is possible that many adult graduate students today are experiencing difficulty with this requirement due to the nature of full-time study. Robb, the Executive Director of the Southern Association of Colleges and Schools, stated:

> People are trapped financially - familywise and otherwise - by the inability to take time off for residence requirements in traditional programs of established universities. They are looking for a shortcut, but they don't know how short the cut can be between something honorable and legitimate and something that lacks integrity (Cross and Valley, 1975, p. 151).

Robb was referring to some of the external degree programs that are competing for adult students by promising to waive the requirements for full-time study, on-campus residence, extensive coursework, traditional examinations, and research-oriented dissertations. Programs such as those operated by NOVA University in Florida require one seminar a month for three years, one week a summer for two years, and a final project to complete the requirements for a doctor of education in Educational Administration. The activities are supervised by a

"rented" professor from another university who, at best, is working under a full-time faculty-student ratio of 60 to 1. Ashworth (1978, p. 174) attacked the laxity of external doctorates such as the one at NOVA. He stated:

> It seems absurd that agencies without a campus, without a library, without laboratories, and without a faculty, should be offering doctoral degrees. But they are. Moreover, it seems even more ridiculous that they should be demanding recognition of the credentials they sell as equal to those offered by traditional universities. But they are.

Some states, such as New York, Ohio, and Michigan, have manifested their disapproval of external doctorates by not recognizing the external NOVA degree (Vonk and Brown, 1978, p. 177).

Vonk and Brown (1978, p. 178) questioned both the quality and integrity of the NOVA external doctorate. They warn that if what they call academically weak programs are allowed to continue unchallenged, the Ed.D. degree, itself, will be the victim. "One consequence is already evident," the authors wrote, "public confidence in the integrity of the Ed.D. has been badly shaken."

In defense, Mitchell (1974), Director of the NOVA program, explained that it was not the intention of the programs to train research specialists. Rather, they sought to train what he calls "first-rate practitioners of the art" (Mitchell, p. 372). The graduates themselves have recently written Kappan expressing their support of the NOVA external degree (April 1979, p. 565-70). Even Vonk and Brown have praised these students' progress; the authors have nonetheless, wondered whether that progress was because of the external degree program, or in spite of it (April 1979, p. 579).

The battle between advocates and critics of external degree programs continues, and while it may be more convenient for the educational consumer to bypass the traditional requirements for a doctorate in education, the question remains, at what price?

Traditional programs historically have attempted to maintain quality through the establishment of state coordinating agencies and regional accreditation associations. In support of the traditional residency requirement, the National Council for Accreditation of Teacher Education (NCATE) has developed the following guidelines and standard:

> One of the desirable characteristics of advanced study is that students learn from each other and through close association with the faculty in a climate that stimulates research and scholarly effort. Essential to this climate is a schedule that makes available to each scholar sufficient uncommited time so that his or her creative faculties can flourish. Normally such conditions will only be realized for students who live near or on the campus, and who devote a large fraction of their time to study and research for an uninterrupted period of time. It is recognized, however, that some individuals are capable of engaging successfully in two or more activities in parallel.
>
> A full-time continuous residency or an alternate planned experience is required for candidates pursuing the specialist and doctoral degrees. An institution providing alternate experiences to full-time residence study defines the requirement and demonstrates how its overall graduate programs provide those planned learning experiences commonly associated with residency requirements for the specialist and doctoral degrees. (p. 15)

Virginia Polytechnic Institute and State University (VPI&SU) operates under NCATE standards and normally requires that every doctoral student complete three quarters of full-time residential study in Blacksburg, Virginia. In keeping with these standards, a recent interim report of the Ad Hoc Committee on Residence in the College of Education at VPI&SU stated "if we believe that the basic

purposes of residency relate to scholarly pursuits, interaction with scholars and socialization within the institution, then we must provide opportunities for this to occur" (1978 College of Education Report, p. 3).

This study will provide a set of procedures for evaluating the residency requirement by analyzing the VPI&SU graduates' own perceptions of their academic, professional and personal experiences relating to full-time residential study.

Statement of the Problem

The primary problem explored in this study was: What are the perceptions held by doctoral recipients of their academic, professional and personal experiences related to the residency requirement?

To provide guidance for the collection of data for this study, the following research questions were posed:

1. What purposes and activities of residency do faculty members and doctoral graduates perceive to be important?

2. What are the activities that comprise the residency requirement?

3. What is the relationship between faculty and students during the process of residential study?

4. In what ways do graduates perceive the residence experience as a meaningful part of their doctoral work?

5. What problems do students face as a result of the residency requirement?

Objectives of the Study

The overall purpose of this study was to provide a set of procedures for evaluating full-time residential study in a doctoral program as perceived by its graduates. Specifically, the objectives were:

1. To define the purposes and activities of the residency requirement in the College of Education at VPI&SU as articulated by the faculty and administrative staff;

2. To determine the perceptions of graduates of the academic, professional and personal experiences they encountered while fulfilling their residency requirement at VPI&SU;

3. To compare and contrast the perceptions of the faculty and the graduates with respect to the residency requirement.

Definition of Terms

In order to carry out the purposes of this study, several key terms were defined.

Residency requirement--In conformance with NCATE standards, the College of Education requires three quarters of resident full-time study, usually in Blacksburg, for the EdD and PhD degrees. Residency is completed by any combination of three terms provided that, following the first quarter of resident full-time study, the remaining two quarters are completed within two to five immediately subsequent terms and that at least two terms are consecutive. Students must be present on campus a minimum of three days a week and may not be employed more than 20 hours a week.

Traditional doctoral degree program--Those programs that operate under established advanced degree guidelines usually requiring full-time residential study, entrance, qualifying, and comprehensive examinations and a dissertation.

Nontraditional educational program--Any specially designed program based on new or unconventional forms of education free of the time or place limitations of traditional classroom instruction.

Adult students--For this study, adult students are those who have received a doctoral degree in the College of Education, VPI&SU since 1973.

Split Residence--This is an option of fulfilling the residency requirement in which students fulfill two consecutive quarters and the third quarter is fulfilled not consecutively but within the next four quarters.

Significance of the Study

With the increase in external and nontraditional graduate degree programs in colleges and universities across the nation, the traditional requirement for full-time residential study is being reevaluated by colleges and universities. Since the new and innovative approaches require fewer major alterations in an incoming student's lifestyle, the requirement for residential study may need to be re-examined. The choice for decision makers is fairly clear--either to maintain the current requirement for full-time residential study, or to opt for one or more of the many nontraditional approaches.

This study is significant to VPI&SU since it could provide useful information to the administration and faculty on the perceptions concerning residency held by doctoral recipients from the College of Education. VPI&SU is the only land grant university in Virginia and is chartered to provide an education to the citizens of the Commonwealth. With such a vast and important mission, this institution has an obligation to consider every viable alternative in providing a sound education to its students.

This study, while limited to VPI&SU graduates from the College of Education, could provide information to other Colleges of Education. For instance, this information might be useful to other institutions in the process of reevaluating their policies on graduate education.

Finally, this study is significant to the field of adult education because the results will contribute to the very limited research on how adult students perceive studying in-residence in a traditional degree program. As increasing numbers of adult students are pursuing doctoral degrees, it is important for educational institutions to have available research on adult student characteristics to help them adjust to traditional graduate programs.

Therefore, with the procedures and questionnaires presented in this study, other institutions can conduct an analysis of students' perceptions of full-time residential study to evaluate their residency requirement. As more institutions are waiving their residency requirements, it is important to know how students will benefit or suffer from such a major innovation.

Limitations of the Study

This study is limited to all PhD and EdD graduates from the College of Education at Virginia Polytechnic Institute and State University. The results are not intended to represent post-masters graduates from any other institution.

Since this study is based on graduates' perceptions of the residency requirement, it does not include the perceptions of those students who have fulfilled the residency requirement but have not graduated. Therefore, the study is limited to the portion of individuals who completed a residency requirement and graduated.

Organization of the Study

Following the background information and purposes of the study discussed in Chapter 1, the relevant literature in the field is reviewed in Chapter 2. The major emphasis of Chapter 3 is on the methodology of the study, the design of the survey instrument, and the treatment of the survey data. In Chapter 4, the results of the study from the data are presented. The narrative in Chapter 5 includes a summary as well as a discussion of the conclusions and recommendations drawn from the results.

CHAPTER TWO

REVIEW OF LITERATURE

The review of the literature covers historical aspects of graduate education and of adult residential education programs. It also discusses studies that have been conducted on mature adults in higher education. Finally, this review deals with the current status of residency requirements in American graduate schools. Follow-up studies of doctoral graduates are reviewed in as far as they relate to the purposes and activities commonly associated with residency. But before beginning the review, it is helpful to consider two old, related, yet different, philosophies of education.

The first philosophy viewed the university as the ivory tower of academe. This essentially European view revered the university and required its students to be the brightest and most promising in order to be accepted. English universities such as Oxford and Cambridge historically have represented the pinnacle of higher education where the student dedicated himself/herself to a period of full-time residential apprenticeship under the watchful eyes of a community of scholars. Ideally, the student fulfilled the academically rigorous requirements intending to prove to his/her mentor that he/she was capable of representing the academic and intellectual philosophy of the university to the rest of the world. When this was accomplished to the satisfaction of the faculty, the student was bestowed the highest honor, the doctorate, and was sent out into society to teach others.

On the other hand, the second philosophy was basically problem centered in nature, and utilized residential programs to allow adults to continue their education. The "learning for life" programs it generated (Fraser, 1968) took the adult students from their families, jobs, and other civic and social responsibilities for weeks and months at a time. The Danish Folk Schools, for instance, dealt primarily with agricultural problems; the American Chatauqua movement was religiously oriented; the Workers Education Association in England dealt with labor problems (Grattan, 1955); and the University Summer Session provided in-service training for teachers (Houle, 1971). Adult education was a movement that encouraged adults to continue their education on all levels; the residential nature of the programs afforded time for uninterrupted study and encouraged the students to learn from each other.

Over the years, these two philosophies have come to influence, if not overlap, each other. Elements of each form the basis of residental study concepts today, as well as appear in the history and review which follow.

Graduate Education - Historical Background

Graduate education in the United States is just over a century old. The first graduate degree was conferred by Johns Hopkins University in 1876. The forces of the times--pressures of science upon classical curriculum, patriotic competition with the German system of education, dissatisfaction with the current character of collegiate instruction, and the inherent attraction of graduate study--culminated

in the establishment of graduate education at Johns Hopkins University (Berelson, 1960, p. 9).

To the German concept of graduate education, which emphasized original research initiated from within the university, the American universities added a research program of public service initiated from outside the university system. The Morrill Act of 1862 gave impetus to this movement to combine research and public service by establishing land grant colleges, one of which is VPI&SU. The Morrill Act reflected the desire of the American society to pursue scientific agriculture through free public education. Both the land grant movement and graduate education began at about the same time and existed side by side in many universities (Grigg, 1965, p. 6).

From 1900 to the beginning of World War I, these programs made for a dichotomy of purpose which the PhD program has never resolved. The German influence on independent and original research within the graduate school led to the research based doctorate, and the land grant college movement, supported by the Morrill Act, led to the doctorate in an applied field. In both forms, the doctorate was to win its place in American higher education.

From 1900 to 1940, higher education began to expand in significant ways. In fact, institutions offering the doctorate more than tripled, college faculties increased by five times, college enrollment by six and graduate enrollments and degrees by 13 and 17 times, respectively. In the twenty years from 1900 to 1920, earned doctorates increased by about 250 percent, and in the twenty years from 1920

to 1940, they increased by over 500 percent (Berelson, 1960, p. 25). This increase was fostered by the growing demand of schools for teachers holding the highest degrees and the accompanying technological and scientific advances made in this century.

Grigg (1965), in his review of the growth of graduate education, noted the following:

> Graduate education as initially conceived had as its goal the training of advanced students as research scholars in an academic environment which stressed the search for and transmission of knowledge within a community of scholars. This community was the university. When the advanced student had reached the point of proficiency, a Ph.D. degree would be conferred. He would then enter into and become a participating member of this community of scholars, and be judged by his peers, according to his performance. (p. 20)

However, Grigg felt that American graduate education has operated under a succession of compromises. By this he means the university community concept has never been fully realized in this country to the same degree it was in Germany. Nonetheless, Grigg also felt that the prestige of the degree has continued to increase in the United States.

Residential Adult Education

The literature shows that the idea of residential adult education has been discovered many times all over the world, each without the benefit of the knowledge of previous discoveries (Alford, 1966). However, Cyril Houle (1971) credited much of the meaning of residential adult education to two men, a Danish minister and an English scholar.

N. S. F. Grundtvig, a patriotic young pastor in Denmark, was committed to helping his country men rise from the depths of their

poverty and defeatism of the early and mid 1800's. Grundtvig had visited English colleges, and was deeply impressed by the maturity of viewpoint that grew from close communion with tutor and student. He influenced the establishment of a folk school to bring people together who, since their last schooling, had experienced five to eight years of adult responsibility. He provided them with long periods of study in a communal atmosphere. From the beginning, the folk school fostered a "total improvement of the Danes as men and women and of Denmark as a country" (Houle, 1971, p. 9). The Danish model of residential education eventually spread through Scandinavia, the rest of Europe and to the Western Hemisphere.

More than a century later, in the 1930's, Sir Richard Livingstone discovered what he believed were the secrets of the Danish Folk system's success: "It is given to adults; it is residential; it is essentially a spiritual force" (Livingstone, 1945, p. 47). From his study of the Danish system, Livingstone observed the following:

> Almost any subject is studied with much more interest and intelligence by those who know something of its subject-matter than by those who do not; and conversely, that it is not profitable to study theory without some practical experience of the facts to which it relates. (p. 7)

He continued to explain:

> To education, adults bring something which no school boy can ever have - a fully grown intelligence, a sense of value and meaning of education, and the practical experience of life, without which history, literature, and philosophy are lifeless phantoms. (p. 49)

Livingstone was convinced that through residential schools a professor could become acquainted with his students as individuals,

and together they would work in a deeply personal sense. The community life insured opportunities for students "to learn from each other's views and personalities, from contiguity, and from personal talk" (Livingstone, 1945, p. 51). Sir Richard specified that his new educational system would be for adults--young and old, because they all needed to learn. Since the education was residential, it was necessary to interrupt the normal course of work and family life for educational leave. Livingstone's ideas were given form through several residential colleges and societies, one of which was the People's Residential Education Association, founded in 1944.

Adults in Higher Education

There are many reasons cited in the literature for why adults return to full-time higher education. Glass and Harshberger (1974) explain that the middle-aged working adult may feel that he/she is becoming worthless in the eyes of society. A strong commitment to a career field and need to excel in that field may have motivated him/her to return to school.

In looking at Maslow's (1970) concept of need, returning to higher education is perhaps a result of an individual's attempt to fulfill a social need, if not an esteem or self-actualization need. Kuhlen (1956, p. 82) wrote that "it is perhaps in the late 30's or early 40's that the adult enters the critical period when he/she realizes that time and life are not infinite." Returning to higher education represents a new beginning or a new challenge to the adult student.

Bishop and Van Dyk (1977) contribute the rising participation of adults in higher education to factors such as the need to keep up with technological progress by learning new skills. Another factor is the increasing desire of men and women to further their education, thus, making professional advancement possible.

Challis (1976, p. 209) conducted a research project at Ealing Technical College in England in an attempt to "reveal some aspects of what it was like to be a mature adult student in an institution of higher education." He found that the dominant reasons for their attendance were career advancement and personal development. More than the younger students, the mature students knew what they wanted from higher education. What they wanted was a degree and the educational experiences leading to it. Challis found that part of the mature adult students' strong motivation to pursue higher education was evidenced by the financial and personal sacrifices they were willing to make. On the other hand, the younger students were unable to state their reasons for pursuing the degree with any clarity. Predictably, the mature students looked at higher education with more excitement than did younger students, who, as Challis reported, saw it as a continuation of drudgery.

Finally, Challis noted that the mature adult students felt that their experiences of life resulted in a closer involvement with and a better understanding of the material they studied. Adult students tended to see the teaching staff as social equals and were less inhibited by the authority inherent in a teacher role than were the

younger students. Correspondingly, Challis noted that the teaching staff felt that the mature students were their social equals.

The Residency Requirement: Purpose and Practice

One of the earliest studies conducted on the residency requirement for the doctorate in America was by Fitzpatrick in 1939. Questionnaires were sent to the institutional members of the Association of American Universities to determine their formulation of policies and actual administrative practices. Based on these responses, Fitzpatrick developed a set of optimum elements present in the responding institution's regulations. One of the elements he found was that "the minimum residence period of one year must be spent in actual physical residence at the university in undisturbed association with the department" (Fitzpatrick, 1939, p. 384). For purposes of his study, full-time residence was defined as residence devoted to graduate study and research to the exclusion of any other occupation or employment.

Another element common to the respondents to Fitzpatrick's questionnaire was that the graduate departments may not waive or reduce the minimum full-time residency requirement for the degree, but may, however, increase the requirement.

The composite results of his study led Fitzpatrick to define what he believed were the original purposes of residency:

> The residence requirement . . . for the Doctor's degree has its basis in two things. The one, the general aspect, relates to the university's judgment of the students as worthy of its degree. The other relates to the student himself - to give him the opportunity to reveal fully his capacity to do scholarly

> work. It proceeds on the assumption that a fairer judgment of the scholarly possibilities of the student and of a better piece of scholarly work can be made if, for at least a year, the student uses all his ability and his energy to do graduate work. It is important, too, for it relates to what is after all an important social problem - the creation of an intellectual elite, the training of future scholars as well as the intellectual guidance of our society. (p. 381-2)

Fitzpatrick thought that for all degrees the residency requirement was "well nigh universal" (p. 381). Indeed, that may have been the case in 1939, but over the last forty years, the residency requirement has been changed in a variety of ways. Some institutions have waived the requirement altogether. Table 1 examines the requirement at sixteen of the largest and oldest universities in the country. All of these schools have retained the requirement, but they have varying regulations accompanying the same.

Robertson (1971) conducted a study of doctoral programs in education to determine the degree to which institutions regarded a residency requirement as an integral part of the doctoral program. He found that the overwhelming response was in favor of the residency requirement. Of the 145 institutions offering doctoral programs in professional education that were surveyed, 97.8 percent of all PhD programs and 95.6 percent of all EdD programs required the completion of some type of residency.

Trautman (1977) later surveyed 81 institutions to determine their residency and admission requirements for the doctorate in educational administration. The results of his survey showed that the periods of residency at the institutions ranged from two semesters to three years. Trautman also found that the usual rule for the doctorate was that the

TABLE 1

Residency Requirements of 16 Benchmark Universities

Name of University	No. of Qtr./ Sem. Hrs. Required	Maximum/ Minimum Hrs.per Term	Are terms Contiguous?	Student Employment	Proximity of student to campus during full-time stdy	Ensurance of fulfillment of residency requirement
Un. of Kentucky	Ed.D.-72 sem hrs.: total of 3 yrs.(6 sem. of residence credit	2 full-time consecutive sem. (9 hrs. ec) proceeding Qualifying Exam, and 2 full-time uncons. sem. following. Rest is student's choice.		sliding scale is used	student must be present on campus for 2 consecutive semesters	student records are audited before degree awarded
Un. of Tennessee -Knoxville	Three quarters	9 hrs. min. per quarter	yes, but the grad. council has auth. to adjust	no regulations	must be present on campus for 3 qtrs.	Graduate Office
Un. of Virginia	Two sem.- Summer sessions not included	12 hrs. min. per semester	yes	limited to an assistantship/ instructorship of 88 hrs. per mo.	must be present on campus for 2 semesters	Students must submit a Record of Progress Form to the Grad. Ofs.
Un. of Arizona	75-100 sem. hrs. total: 2 sem. summer sessions not includ.	minimum-9, maximum-16 in any reg. semester	no	can hold asstship requiring no more than 20 hrs. wk, or 10 hrs. wk. in non-acad. job	must be present on Univ. campus for 2 semesters	Check is made prior to final oral examination

Table 1 (continued)

Name of University	No. of Qtr./ Sem. Hrs. Required	Maximum/ Minimum Hrs.per trm.	Are terms Contiguous?	Student Employment	Proximity of student to campus during full-time stdy	Ensurance of fulfillment of residency requirement
Kansas State Un.	Two quarters	12 course credits per term	yes	no regulation	no regulation	agreement is made bet. the student & faculty
Un. of Mass.	2 semesters	9 hrs. min. per sem.	yes	yes, for not more than 20 hrs. a week	must be present on campus	certified at time of grad.
Michigan State Un.	3 quarters	6 hrs. per qtr.	yes	no regulations	no regulation	Certified by committee
Un. of Nebr. -Lincoln	27 hrs. in an 18 mo. period	no max.,but min. is 9	yes, includ. summer sessions	yes,for not more than 20 hrs. per wk.	no regulation	check made at time of candidacy
N.C.State Un.	2 residence credits	flexible no. of hrs.	yes, includ. partial cred. for sum. ses.	no regulation	no regulation	
Penn. State Un.	3 quarters	min.-7 sem. hrs.(w.GRA) max.-9-12 (w/out GRA)	yes	no	must be present on campus	check made by Grad. School
Texas A & M	9 sem. hrs.	min.-9 sem. hrs.or 2 sum. ses.-max. of 16 sem. hrs.	yes	yes,for not more than 20 hrs. wk.	must be present on campus	check made by each Dept.

Table 1 (continued)

Name of University	No. of Qtr./ Sem. Hrs. Required	Maximum/ Minimum Hrs.per trm.	Are terms Contiguous?	Student Employment	Proximity of student to campus during full-time stdy	Ensurance of fulfillment of residency requirement
Un. of Maryland	2 semesters	min.-24 units per sem.(w. GRA,GTA). max.-36 units w/out GRA,GTA)	yes	yes, part-time only	must be present on campus	checked by Dept. & by Off. of Grad. Studies
Auburn Un.	3 quarters	min.-24 and max.-36 units per qtr.	yes,but not including sum. sessions only	yes,but only an asst.ship or fellowshp		Grad. faculty
Un. of Georgia	3 quarters	min.-10 hrs. per qtr.	yes	no regulations	no regulation	regulated by stud.advisors or maj.prof.
Iowa State Un.	3 quarters or 36 qtr. hrs.	12 hrs. ave. per qtr.	yes	no regulations	no regulation	Graduate Ofs.
Un. of Southern Calif.	2 semesters	min-8 units per sem.	yes	no regulations		Graduate Com.

Source: Office of Graduate Studies and Research, VPI&SU.

student reside on campus for one year and that he/she not be employed.

Huffman (1968) conducted a study at Indiana University on doctoral graduates' perceptions of their program in education. His data on residency requirements suggested that completion of the residency requirement in a short minimum period was more the exception than the rule. Huffman found that about one in eight individuals reported that the residency requirement was completed in a period of 30 months. One-fourth of the group had completed the residency requirement within a period of 40 to 49 months. Fully 50 percent of the entire group, which included all graduates from September 1, 1963 through August 31, 1964, reported that their residency requirement had taken five years or longer. Nearly 15 percent of the group indicated that the residency requirement had taken seven and a half years or longer. This is explained by the fact that more than 50 percent went through the program either as a largely or entirely part-time student. Only a little more than 26 percent of the students completed the programs mostly as a full-time student.

Mayshark (1973) conducted a study to determine the present status of the graduate residency requirement at a selected sample of colleges and universities. The results obtained from the responding 40 institutions indicated that a residency requirement consistent with, or well beyond NCATE's minimum standards, is practiced. However, the interpretation of the residency requirement in relation to the total time a student spends on campus varies. Generally, concurrent employment is permitted on a half-time basis.

Follow-up Studies of Doctoral Graduates

A review of the literature disclosed little research on student perception of the residency requirement itself. In some studies the subject was raised and discussed only indirectly. In others, it was treated as a component of a larger research investigation. An effort will be made in this section to survey those studies dealing either directly or tangentially with the residency requirement.

G. E. George (1970) conducted a study of 124 Ph.D. and 374 Ed.D. recipients to determine differences in personal, professional and occupational characteristics between educational administrators who completed their doctoral programs on a full-time basis and those who did so on a part-time basis. George found that educational administrators who were awarded the doctoral degree and had satisfied the residency requirement on a full-time basis had the same professional characteristics as those who satisfied the requirement on a part-time basis with respect to type of doctoral degree, degree status, undergraduate grade point average, number of memberships in professional organizations, number of articles published, number of workshops, conferences, and in-service programs attended, and number of professional trips in excess of 250 miles. Both groups perceived themselves as approximately the same with respect to increase in prestige among peers and superiors, opportunities for advancement, and anticipation of changing position. However, the educational administrators satisfying the residency requirement on a full-time basis had a greater expectation of receiving promotions in rank and increases in salary, than did their part-time counterparts.

Cook and Swanson (1964) conducted a study utilizing a path analysis approach to predict graduation. They surveyed 214 doctoral students in the PhD/EdD programs in Educational Administration at the State University of New York at Buffalo which had a one year residency requirement. The results of the statistical analysis showed that only full-time students had a strong relationship with graduation. The authors concluded that the more time spent in full-time study (up to three years) the more one is likely to obtain a degree.

DeSanctis (1970) conducted a follow-up study of 88 Ed.D. graduates from the Department of Educational Administration and Supervision at Rutgers. One of the objectives of his study was to determine the opinions of the doctoral graduates on selected characteristics of the Ed.D. program. In so doing, he questioned his population on their opinion of full-time study. DeSanctis found that more than 80 percent of the respondents expressed strong feelings in favor of interpersonal relations with faculty and students. Respondents who studied full-time were found to have more positive feelings about relationships to other graduate students and the helpfulness of the program advisor. Finally, he found that nearly 60 percent of the respondents gave a favorable rating to full-time study.

It is often said that the residency requirement promotes student-faculty interaction. As Huffman's (1968) study illustrates, this, if true, is indeed a valuable function. Huffman studied doctoral graduates' perceptions of the Indiana University graduate program. One of his findings was that doctoral graduates placed a high degree of

importance upon interaction between students and faculty. Although they were pleased with the opportunity for such interaction, a common feeling was that even greater interaction between faculty and students was needed.

Similarly, Somers (1970) conducted a follow-up study of 83 graduates of the doctoral program in Education at Ball State University in Indiana. He showed that the major strengths of the program were: (a) a capable faculty genuinely interested in students; (b) a flexible program tailored to the needs of students; and (c) an institutional atmosphere of friendliness and cooperation. Graduates, however, tended to feel that more seminars, independent study, and field experiences should be provided.

From a slightly different standpoint, Hartnett and Katz (1977) felt that there had been little direct attention given to graduate students, either because of the emphasis on research in doctoral education as opposed to student development, or because motivation and task-orientedness are taken for granted with graduate students. Their study focused on the processes by which students become scholars and scientists and the environmental factors which help or hinder these processes. Through questionnaires and hundreds of interviews, the authors collected information pertaining to the satisfactions, frustrations, successes, and failures of the graduate student. Some of the findings were:

1. Graduate students regard their relations with members of the faculty as the most important aspect of the quality of their graduate

experience. Unfortunately, many also report this is the single most disappointing aspect of their graduate experience.

2. For developing relationships with others and for developing autonomy, students felt that the graduate and professional experience often has an inhibiting effect on student development.

3. Loneliness, severe anxiety, role confusion, and alienation are common maladies among graduate students.

4. Graduate departments base their choice of students on a great deal of information about the students, whereas the converse is not true.

5. Students do not feel they receive sufficient feedback about their work from their professors, or that they have sufficient opportunity for thinking and working with them.

The most recent study conducted on the perceptions of faculty and graduate students regarding a graduate program was by Vickery (1978) at East Texas State University. In Vickery's study, residency was one among several doctoral degree requirements examined. His findings indicated that over 95 percent of the surveyed group (including 130 faculty members, 183 currently enrolled graduate students, and 173 doctoral graduates) fulfilled a residency requirement while earning the doctorate. However, he found that the majority did not resign a job, take a sabbatical or another type of leave or absence, or receive a reduced workload in order to meet the residency requirement. Only 39 percent of the faculty members and 33 percent of the currently enrolled doctoral students agreed that time spent fulfilling the

residency requirement at E.T.S.U. created a deeper sense of commitment to scholarship. Additionally, less than 50 percent of the surveyed group were in agreement that time spent fulfilling the residency requirement is enhanced by additional educational opportunities offered within the various departments and the university in general. Vickery found that the trend was that fewer students seemed willing to fulfill the residency requirement in the traditional manner--where one leaves a position for an extended period of time in order to devote full time to academic endeavors. He concluded that the surveyed groups appeared to agree that there was a paucity of additional educational opportunities offered within the various departments and the university in general in fulfilling the residency requirement.

Summary

Together, the two basic philosophies discussed at the beginning of this chapter help explain the basis of the residency requirement. First, graduate education has, over the past 100 years, been built on a tradition of research and scholarly writing. American graduate schools have attempted to develop and maintain fairly rigorous academic standards similar to the German philosophy of graduate education to ensure the legitimacy of the doctoral degree. Second, residential adult education was conceived as a problem-centered approach to learning, the concept being that adults learn most effectively when they have specific reasons for wanting to continue their education, and have "greater life experiences" in the process.

A general profile of today's adult graduate student at VPI&SU appears to illustrate elements of both philosophies. Each student fulfills the academic requirements of the advanced degree, works with the resident community of scholars, takes all prescribed exams, and writes a research-oriented dissertation in order to demonstrate his/her academic achievements. Furthermore, the college has a policy of admitting students with a minimum of three years professional experience. The majority of the students are over 35 years of age, have families, and other civic and social responsibilities (Harder, 1977). Therefore, the adult student at VPI&SU who is taking time off from professional and personal responsibilities to return to residential education resembles the student described by Livingstone (1945), and fulfills the residency requirement for reasons articulated by Fitzpatrick (1939).

The follow-up studies indicated that students in graduate programs generally feel that they benefited from full-time study and close faculty-student interaction. Vickery's (1978) study, in which he predicted an emerging trend among students to be less willing to fulfill the residency requirement in the traditional manner, may have serious implications for graduate degree programs. The fact that external doctorates and other nontraditional approaches to graduate study are gaining momentum in this country is testimony to the fact that many busy adults are looking for the most economical package.

CHAPTER THREE

METHODOLOGY

The research methodology of this study is discussed in this chapter. The specific components of the methodology include the population, design of the investigation, instrumentation, procedures for data collection and methods of analyses.

Population

The population of this study consisted of the EdD and PhD recipients from the College of Education at VPI&SU since the College's establishment in 1971. Information regarding the population was obtained from the Office of Graduate Studies and Research, Alumni Office, Institutional Research, and the Office of Contract Research and Educational Services.

The College of Education offers advanced graduate programs leading to the Doctor of Education degree in seven fields and the Doctor of Philosophy degree in Educational Research and Evaluation. Doctoral programs are available in the following areas:

1. Administration and supervision of special education,
2. Adult and continuing education,
3. Career counseling and student personnel services,
4. Community college education,
5. Educational administration,
6. Educational research and evaluation,
7. Instructional supervision, and
8. Vocational-technical education.

The College of Education has conferred 305 doctoral degrees since 1973 (see Table 2). Over the past six academic years, there has been a substantial increase of doctoral graduates at VPI&SU; from 5 graduates in 1973 to 78 in 1978. Correspondingly, statewide there was an increase from 72 doctoral graduates in education in 1973 to 178 in 1978 (SCHEV Reports, 1973, 1978).

Although the total number of doctoral degrees conferred by the College of Education is 305, three of those degrees were awarded posthumously. Therefore, 302 graduates consituted the population of this study.

Field of Study

Educational Administration accounts for nearly one-third, or 32 percent of the total number of doctorates awarded since 1973. Vocational-technical education was the field that had the second highest percentage, 21 percent, of graduates (see Table 3). Administration and supervision of special education is a new program area in the College of Education authorized in 1977; no degrees had been awarded as of June, 1978.

Residency Options

There are basically six ways in which students fulfill the requirements for a post-masters degree in Education at VPI&SU (see Table 4). The six ways may be described as follows:

1. A student may come to Blacksburg and enroll on a full-time basis until all requirements are met.

TABLE 2

Degrees Conferred and Enrollment Data, Virginia Polytechnic Institute and State University

Year	Degrees Conferred
1973	5
1974	30
1975	47
1976	75
1977	70
1978	78
Total	305

TABLE 3

Doctoral Degrees Conferred by the College of Education, VPI&SU

Area	1973	1974	1975	1976	1977	1978	Total
			Doctor of Philosophy				
Educational Research & Evaluation	-	-	2	3	2	4	11
			Doctor of Education				
Adult and Continuing Education	-	1	1	4	3	2	11
Career Counseling & Student Personnel Services	-	3	3	9	8	9	32
Community College Education	-	1	4	8	8	15	36
Educational Administration	3	12	20	20	19	23	97
Instructional Supervision	1	9	9	13	12	9	53
Vocational-Technical Education	1	4	8	18	18	16	65
EdD total for yr.	5	30	45	72	68	74	294
Grand total for yr.	5	30	47	75	70	78	305

Source: Office of Graduate Studies, College of Education, VPI&SU.

TABLE 4

Current Alternatives to Fulfilling

Post-Masters Degree Requirements

	Coursework (CAGS)	Dissertation	Residency
1	On-campus, full-time	On-campus full-time	Three or more continuous quarters
2	On-campus, full-time	On-campus, full-time	Split residence
3	Off-campus	On-campus	a) 3 cont. qtrs. b) Split resid.
4	Off-campus (Mostly intact)	On-campus	a) 3 cont. qtrs. b) Split resid.
5	Intact program off-campus	Off-campus	a) 3 cont. qtrs. b) Split resid.
6	Intact program off-campus	On-campus	a) 3 cont. qtrs. b) Split resid.

2. A student may live in or near Blacksburg and choose to fulfill all requirements on a full-time continuous or split residence basis. Split residence indicates that a student enrolls full-time for two continuous quarters, and completes an additional quarter not consecutively, but within a five quarter period after the first quarter is fulfilled.

3. A student may complete the coursework at an off-campus location, and come to Blacksburg on a continuous or split residence basis to write the dissertation.

4. A student may complete the coursework in a partially intact program off-campus and come to BJacksburg on a continuous or split residence basis to take additional courses and/or write the dissertation.

5. A student may enroll in the fully intact program off-campus to fulfill both the coursework and dissertation requirements. Although the student only comes to Blacksburg for periodic visits, three quarters of full-time study are still required. An intact program is defined as a program in which all students are recruited at essentially the same time and are admitted as one group. Members of the group progress through the program together by taking courses as they are offered so that everyone begins and completes the program simultaneously.

6. A student may enroll in one of the intact programs off-campus, to complete the coursework requirements, and come to Blacksburg on a

continuous or split residence basis to write the dissertation. Students who complete the coursework requirements in an on-campus or off-campus location are usually eligible for a Certificate of Advanced Graduate Studies (CAGS). Many students who enroll in the off-campus intact programs are pursuing a certificate program, and not necessarily a doctorate.

Design of the Study

The design of the study was survey research. "Survey research focuses on people, the vital facts of people, and their beliefs, opinions, attitudes, motivation and behavior" (Kerlinger, 1964, p. 411). This type of research was selected because the study was designed to reveal the perceptions held by doctoral recipients of their experiences with residential study. Since the total graduate population was not extremely large, sampling was not used.

The survey was completed through the use of the mail questionnaire. Kerlinger noted that the two central disadvantages of this type of survey are (1) possible lack of response, and (2) the inability to check the responses given. Despite these potential problems the mail questionnaire was used for the following reasons. First, it had the potential of reaching a greater number of doctoral graduates. Second, it eliminated the extreme difficulty of personally interviewing such a large number of people, and third, it was the fastest, most efficient method of collecting the necessary information.

The investigator operated on the assumption that graduates from the College of Education gave accurate responses to the questions on

the instrument. The identity of each respondent was kept confidential and the instruments were coded only for purposes of non-respondent identification.

Instrumentation

Two instruments were utilized for the purpose of gathering data to provide information for the five research questions posed in Chapter 1. These instruments were: (1) a preliminary faculty questionnaire (see Appendix B), and (2) a doctoral graduate questionnaire (see Appendix C). Both instruments were developed by the investigator. However, the doctoral graduate questionnaire was based on questionnaires designed by Feldman (1974) and Harder (1977). This questionnaire was field tested for the purpose of examining the instrument in terms of clarity and readability of the questions. Doctoral level students from each of the program areas in the College of Education who had completed all, or most, of their residency requirement were asked to review the instrument. Appropriate modifications were made before sending the instrument to the population of the study. Since the Feldman (1974) and Harder (1977) studies were also based on survey research design and collected similar data, questions from these instruments were selected and included in the instrument for this study.

Preliminary Faculty Questionnaire

Through the process of reviewing reports, position papers, and letters from members of the Ad Hoc Committee on Residence and other faculty members, three basic reasons for residency emerged, (a) it

provides a period of time for scholarly studies and research, (b) it creates opportunities for extensive interaction with a community of scholars, and (c) it fosters socialization into the community of the university. In an attempt to operationalize these concerns, a list of 18 purposes and activities was developed.

The first aspect of residency examined in this instrument was "a period of time for scholarly studies and research." The six items in this category pertain to purposes of residential study that benefit the individual student: a period of full-time concentrated study, full-time access to a graduate level library, full-time access to computer facilities and other resources, an opportunity to combine theory and practice, a Graduate Teaching Assistantship (GTA), Graduate Research Assistantship (GRA), or Administrative Internship for "on-the-job" experiences, and an opportunity to live near the academic atmosphere of the university. These purposes are based on the historical aspects of graduate study (Fitzpatrick, 1939; Keyfitz, 1978).

The second aspect of residency examined was "opportunities for extensive interaction with a community of scholars." The seven items in this category were: frequent interaction with the major advisor, membership in on/off campus professional organizations, joint research with faculty members and fellow students, co-authorship of papers with faculty members and fellow students, attendance at on-campus professional seminars and conferences, attendance at off-campus professional seminars and conferences, and expanded opportunities for interaction between students and faculty members. Studies by Huffman (1968),

DeSanctis (1970) and Harnett and Katz (1977) revealed that many students place a high degree of importance on faculty-student interaction. Glass and Harshberger (1974, p. 215) found that "co-authorship with faculty increases the student's personal esteem and the effect of a [publisher] rejection slip is softened if shared by a professor."

Studies have also shown that students have perceived the impersonality of graduate departments as a serious problem related to graduate study (Centra, 1974). There is also evidence that women candidates who had negative experiences with graduate school faculty members were less likely to complete their doctoral degrees (Centra, 1974; Holmstrom & Holmstrom, 1974).

Finally, Vickery's (1978) study indicated that students at East Texas State University felt that there were too few additional educational opportunities offered to doctoral students studying in-residence, even though most had not fulfilled a traditional residency requirement. This complaint was directed toward the university as a whole, and not just to the individual departments.

The third aspect of residency was the student's "socialization into the community of the university." The five items in this category were: orientation activities for new post-masters students, graduate student clubs and organizations, social interaction with faculty and administrative staff, opportunities for on-campus extracurricular activities, and exposure to the philosophy of the university.

Harder's (1977) study indicated that students reported relatively little informal interaction with other students or with faculty in their program area. However, the respondents described the informal interaction they shared as "good or excellent". This study also indicated that females, to a greater extent than males, believe there is less opportunity to interact with faculty outside the classroom and that they do not feel as free to talk with faculty outside the classroom.

The 22 faculty members that were chosen to answer the preliminary questionnaire were program area leaders in the College of Education. The program area leaders were chosen since they function in both teaching and administrative roles. In many cases the program area leaders have been a part of policymaking groups in the College. These faculty members were asked to rate each of the 19 items on a five-point Likert scale in terms of how important they felt each item is to doctoral students who are studying in-residence. Faculty members were also requested to list additional activities they felt would enhance the value of residential study for doctoral students. The information collected from faculty members was utilized in three ways: to develop a section of the doctoral graduate's questionnaire, to provide a profile of faculty attitudes towards the ideal purposes and activities involved in residency, and to provide comparative information with the graduates' responses.

Doctoral Graduates Questionnaire

The doctoral graduates questionnaire consisted of five parts,

each designed to collect information in different areas. The following is an explanation of the instrument.

Part I of the questionnaire. Items 1 through 11 focused on the socio-demographic data of the graduates. These questions sought information regarding sex, age, marital status, children, family relocation, employment, family enrollment at VPI&SU, program area and income. These data were obtained in order to provide a descriptive profile of the doctoral graduates in terms of the total study and specific areas of information needs. Similar studies have shown that a student's perception of full-time study may be influenced by family responsibilities. A study conducted by Williams (1977) revealed that the adult undergraduate and graduate students at Bowling Green University cited family, job, and financial responsibilities as the greatest obstacles they encountered while pursuing higher education.

Part II of the questionnaire. Since there were several locations in Virginia where doctoral level courses were taught by VPI&SU faculty, it was important to know where and how the doctoral graduates pursued their degrees. It was possible that graduates' perceptions of full-time study might depend on the way they fulfilled the requirements. For example, off-campus students at VPI&SU reported less contact with faculty and fellow students, had more doubts about finishing their degrees, and shared less of a sense of identity to the college than did on-campus students (Harder, 1977). Therefore, Items 12, 13, 14, and 15 sought information regarding the logistical aspects of how each graduate completed his/her program. Items 10, 11, and 16 concerning

financial support were posed since limited finances may be an obstacle to graduate study (Centra, 1974; Stoddard, 1977; Williams, 1977).

Part III of the questionnaire. This section on activities involved in residential study sought specific information on activities in which graduates may have been involved during their period of full-time study. The responses to these questions were used to determine the extent to which each graduate participated in additional educational experiences (Vickery, 1977) such as presenting, publishing, and/or co-authoring papers (Glass & Harshberger, 1974). Items 17, 18, 19, 20, 21, 22, 26, and 27 requested specific information concerning educational activities, while Items 29, 30, 31, and 32 examined the degree and quality of interaction each graduate had with his/her advisor and other professors (Feldman, 1974; Harder, 1977). Finally Items 23, 24, and 25 were included to determine the graduates perceptions of the value of time allowed them through full-time residential study.

Part IV of the questionnaire. This section was identical to the questionnaire that was sent to the program area leaders that sought information on the importance of activities and purposes of residential study (see Appendix B). It was utilized so that ratings, or faculty and graduate responses, could be compared and contrasted. It was possible that each group had different expectations of residency, and did not agree on the importance of the items (Wilde, 1977).

Part V of the questionnaire. This section was included to provide respondents the opportunity to add any comments or thoughts they

had on the residency requirement at VPI&SU. The respondents were encouraged to give their opinion of the residency requirement and suggestions that would be used by the university in evaluating the past as well as planning for the future.

Data Gathering Procedure

The data were collected using the instruments previously described. The Preliminary Faculty Questionnaire was mailed to 22 faculty members via inter-office mail, for their responses. Follow-up calls were made to the secretaries to ask them to see that the faculty members completed the questionnaire. Completed questionnaires that were not returned via inter-office mail were collected by the investigator, so that a response rate of 100 percent was received.

The doctoral graduate mailing list was developed from a cross-listing of graduates' names and addresses obtained from the Alumni Office, the Office of Graduate Studies, College of Education, and the individual program area offices, where available. Mailing labels were obtained by computer printout from the Office of Graduate Studies and Research, College of Education.

The doctoral recipient questionnaire was mailed to the population of the study after it was field tested. The initial mailing included the instrument, a cover letter, and a stamped return-addressed envelope. The cover letter explained the purpose of the study, insured protection of the respondent, requested cooperation from the respondent, and presented detailed instructions (see Appendix C).

A follow-up of the non-respondents was made three weeks after the initial mailing. Since the instruments were coded for identification purposes, the non-respondents were sent a second mailing. The second mailing included another cover letter requesting cooperation and another instrument with a stamped return-addressed envelope (see Appendix D). Nearly three weeks after the second mailing, randomly selected non-respondents were telephoned to encourage them to respond. The response rate to both mailings was high so a third mailing was not scheduled. However, several of the remaining non-respondents were telephoned.

Data Gathering Timetable

Preliminary faculty questionnaire received	Nov. 1978
Field test conducted	Jan. 15 - 29
Modifications and printing of questionnaire	Jan. 29 - Feb. 1
Cover letters typed on magnetic card	Feb. 5 - 8
Cover letters, questionnaire and return envelopes mailed	Feb. 6
Second mailing	Feb. 28 - Mar. 2
Randomized phone calls	Mar. 26 - 30
Cut off data for questionnaire return	April 6

Procedures for the Analysis of the Data

The research questions as stated in Chapter 1 provided the basis for the analysis of the data. Descriptive statistics were utilized to meet the information needs. The Statistical Package for Social Sciences (SPSS) was employed to assist with the analyses (Nie, Hull, Jenkins, Steinbrenner, and Brent, 1970).

The methods used to analyze the data were discussed in terms of research questions (see Table 5). The research questions are listed with the statistical procedures employed for each question as follows:

1. What are the purposes and objectives of the residency requirement at VPI&SU? Responses from the faculty questionnaire were compared to the responses from Part IV of the doctoral graduates' questionnaire through frequency tabulation and percentages of responses. This was conducted for each of the 17 items. The differing and similar perceptions of each of the items were shown by the independent variable of faculty status and graduate status.

2. What are the activities that comprise the residency requirement? Crosstabulations were performed to respond to this research question. The responses to Items 17, 18, 19, 20, 21, 22, 26, 27, and 28 which sought specific information on activities were crosstabulated with the selected demographic variables of sex (Item 1), age (Item 2), marriage (Item 3), and program area (Item 10). The responses to Items 18-22 and 26-28 were also crosstabulated with fulfillment of requirements (Items 12-16).

3. What is the relationship between faculty and students during the process of residential study? Additional crosstabulations were performed to respond to this question. The responses to Items 29, 30, 31, and 32 which sought specific information on faculty-student relationships were crosstabulated with the selected demographic variables of sex (Item 1), age (Item 2), and program area (Item 10).

TABLE 5

Description of Data Analysis

Research Question	Research Area	Independent Variables	Cross-Tabulation (Perception Responses)	Statistical Procedure
#1	Policies, purposes, and objectives of residency requirement	Faculty status Graduate status	All item responses (17 items)	Frequency tabulations & percentages
			Dependent Variables	
#2	Activities that comprise the residency requirement	Sex (item 1) Age (item 2) Marital status (item 3) Program area (item 9) Fulfillment of requirements (items 12-16)	Items 17, 18, 19, 20, 21, 22, 26, 27, 28.	Frequency tabulations & percentages
#3	Faculty-student relationship during process of residential study	Sex (item 1) Age (item 2) Program area (item 9) Fulfillment of requirements (items 12-16)	Items 29, 30, 31, 32	Frequency tabulations & percentages
#4	Perceptions of value of residential study	Sex (item 1) Age (item 2) Program area (item 9) Fulfillment of requirements (items 12-16)	Items 23, 24, 25	Frequency tabulations & percentages
#5	Problems students encountered while fulfilling residency requirement	Sex (item 1) Age (item 2) Program area (item 9) Fulfillment of requirements (items 12-16)	Items 7, 10, 11	Frequency tabulations & percentages

The responses to Items 29-32 were also crosstabulated with fulfillment of requirements (Items 12-16).

4. In what ways do graduates perceive the residency experience as a meaningful part of their doctoral work? Crosstabulations were also performed to respond to this question. The responses to Items 23, 24, and 25 which sought specific information on perceptions of the residency experience were cross-tabulated with the selected demographic variable of sex (Item 1), age (Item 2), and program area (Item 10). The responses to Items 23-25 were also crosstabulated with fulfillment of requirements (Items 12-16).

5. What problems do students face as a result of the residency requirement? Additional cross-tabulations were performed to respond to this question. The responses to Items 7, 10, and 11 which sought specific information on problems related to residency were cross-tabulated with the selected demographic variable of sex (Item 1), age (Item 2), marriage (Item 3), and program area (Item 10). The responses to Items 7, 10, and 11 were also crosstabulated with fulfillment of requirements (Items 12-16).

Summary

The population for this study included the graduates from the doctoral program in Education at VPI&SU. The design of the study was survey research and the data were collected through a mailed questionnaire. The doctoral graduates questionnaire was based on other questionnaires utilized in similar studies and was field tested

on VPI&SU graduate students who had completed their residency requirement for an EdD or PhD in Education but had not graduated. A time table was established for gathering the data that included the initial mailing, one follow-up mailing and telephone calls to randomly selected non-respondents. Procedures for the analysis of the data included frequency and crosstabulations.

CHAPTER FOUR

RESULTS AND ANALYSIS OF THE DATA

The results of the questionnaires and the analyses of the data are presented in this chapter. Following a general profile of the doctoral graduate respondents, the data are analyzed in five sections to answer each of the five research questions posed in Chapter One. A sixth section presents the information gathered from the open-ended discussion question on the questionnaire.

Description of the Respondents

The records from the College of Education showed that as of June 1978, 305 doctoral degrees had been awarded, three posthumously. In an attempt to locate the graduates, 321 questionnaires were mailed since an accurate list of graduates' names and addresses was not available. Several of the questionnaires were mailed to VPI&SU students who had not graduated and others were returned due to an incorrect address. Two hundred and eighty usable questionnaires were returned by doctoral graduates from the College of Education, representing 92.7 percent of the established population of 302. Of the 280 respondents, 185 were males and 95 females, or 66 percent and 34 percent, respectively (see Table 6).

Age

The age distribution (see Table 7) showed that approximately 25 percent of the doctoral graduates were from 23 to 30 years of age. Another 25 percent were from 31 to 36; another 25 percent from 37 to

TABLE 6

Sex of Doctoral Graduates

Sex of Graduates	Number	Percent
Female	95	34
Male	185	66
Total	280	100

TABLE 7

Age of Doctoral Graduates

Age of Graduates	Number	Percent cum. freq.
23 - 30	72	25.7
31 - 36	75	52.5
37 - 42	65	75.7
43 - 60	68	100.0
Total	280	

42; and the remaining 25 percent were from 43 to 60 years of age. The average age of the doctoral graduates was approximately 37 years.

Marital Status

Table 8 shows a majority (78.5 percent) of the respondents were married when they fulfilled the residency requirement. The remaining respondents were single (12.5 percent); widowed or divorced (5.7 percent); separated (2.5 percent); or engaged (0.7 percent).

Dependent Children

Further biographical data revealed that 183 or 65.5 percent of the doctoral graduates had dependent children when they fulfilled their residency requirement (see Table 9). As shown in Table 10, of the married graduates, 73 or 26.1 percent moved their families to Blacksburg with them, while 127 or 45.4 percent moved to Blacksburg without their spouse and/or children. The table also indicates that the majority of the graduates were married, had families, and moved to Blacksburg to fulfill their residency requirement.

Work Experience

Nearly half, 131 or 46.8 percent, of the doctoral graduates said they had been in the professional work force for 10 years or more before fulfilling the residency requirement for a doctorate at VPI&SU. An additional 51 or 18.2 percent had seven to nine years of experience. Only 12.1 percent of the respondents said they had three or fewer years of professional experience (see Table 11).

TABLE 8

Marital Status of Doctoral Graduates While Fulfilling Residency Requirement

Marital Status	Number	Percent
Engaged	2	0.7
Married	220	78.6
Separated	7	2.5
Single (never married)	35	12.5
Single (widowed or divorced)	16	5.7
Total	280	100.0

TABLE 9

Number of Dependent Children of Doctoral Graduates While Fulfilling Residency Requirement

No. of children	Per Graduate Student	Percentage
None	95	33.9
One	60	21.4
Two	86	30.7
Three or more	37	13.6
No response	1	0.4
Total	280	100.0

TABLE 10

Relocation of Graduate Students and Family

to Fulfill Residency Requirement

	No. of responses	Percentage
Spouse and/or children also moved to Blacksburg	73	26.1
Spouse and/or children did not move to Blacksburg	127	45.4
Already lived in Blacksburg	39	13.9
Did not fulfill residency requirement in Blacksburg	5	1.8
No spouse or children	36	12.9
Total	280	100.0

TABLE 11

Number of Years in the Professional Work Force

Before Fulfilling Residency Requirement

Number of years	No. of responses	Percentage
Three years or less	34	12.1
Four to six years	63	22.5
Seven to nine years	51	18.2
Ten or more years	131	46.8
No response	1	0.4
Total	280	100.0

Enrollment

The overwhelming majority, 230 or 82.1 percent, of the respondents reported they had fulfilled the residency requirement by enrolling full-time for three consecutive quarters. Other graduates fulfilled the requirements on a split residence or other basis (see Table 12).

Registration

Students generally fulfilled their residency requirement by registering for coursework, the internship, dissertation hours, or some combination of the three. While all of these are acceptable, the data showed that 168 or 60 percent of the graduates fulfilled their residency requirement by registering for coursework and dissertation. Forty-one or 14.7 percent of the respondents registered for coursework only and 28 or 10.0 percent registered for coursework, internship and dissertation (see Table 13).

Finally, 221 or 78.9 percent of the responding doctoral graduates were enrolled at VPI&SU in Blacksburg while completing their doctorate. The remaining 59 graduates had been enrolled at the Northern Virginia, Tidewater, and FCC facilities (see Table 14).

Summary

The doctoral graduate from the College of Education at VPI&SU can be described as having an average age of 37, being married with children, and having 10 or more years of professional work experience. These graduates generally fulfilled their residency requirement on a

TABLE 12

Fulfillment of Residency Requirement

by Doctoral Graduates

Method of fulfillment	No. of responses	Percentage
Full time 3 consecutive quarters	230	82.1
Split residence	38	13.6
Other	9	3.2
No response	3	1.1
Total	280	100.0

TABLE 13

Registration During Fulfillment of Residency Requirement

Registration	No. of Responses	Percentage
Coursework	41	14.7
Dissertation	9	3.2
Coursework and dissertation	168	60.0
Coursework and internship	26	9.3
Dissertation and internship	5	1.8
Other	3	1.1
All three	28	10.0
Total	280	100.0

TABLE 14

VPI&SU Locations for Doctoral Study and

Enrollment Data - 1972 to 1978

Location	No. of Responses	Percentage
Northern Virginia	24	8.6
Tidewater	17	6.1
Federal City College (UDC)	8	2.9
Other	9	3.2
Blacksburg	221	78.9
No response	1	0.4
Total	280	100.0

full-time, three consecutive quarter basis in Blacksburg, and registered for coursework and dissertation credits.

Findings

The data which were obtained from the questionnaires were analyzed by utilizing an SPSS program. The description of the data analysis is illustrated in Table 5. Each of the research questions were answered by crosstabulating the independent variables of sex, age, marital status, program area and fulfillment of requirements by the perception responses listed for each research question.

Research Question 1

What purposes and activities of residency do faculty members and doctoral graduates perceive to be important?

To ascertain the purposes and activities of the residency requirement at VPI&SU, a list of 17 activities was developed from papers, letters, reports and position papers from the Ad Hoc Committee on Residency and faculty members. After this list was developed, it was circulated to the program area leaders. They were requested to rate each of the activities on a five point scale from "very important" to "of no importance". Later, the doctoral graduates were also requested to rate the 17 items on the same scale. The responses from the program area leaders were then compared and contrasted with the doctoral graduates responses to determine the similarities and differences in the ratings (Figure 1). As the result of this process, a list of activities was developed emanating from the composite thinking of both groups.

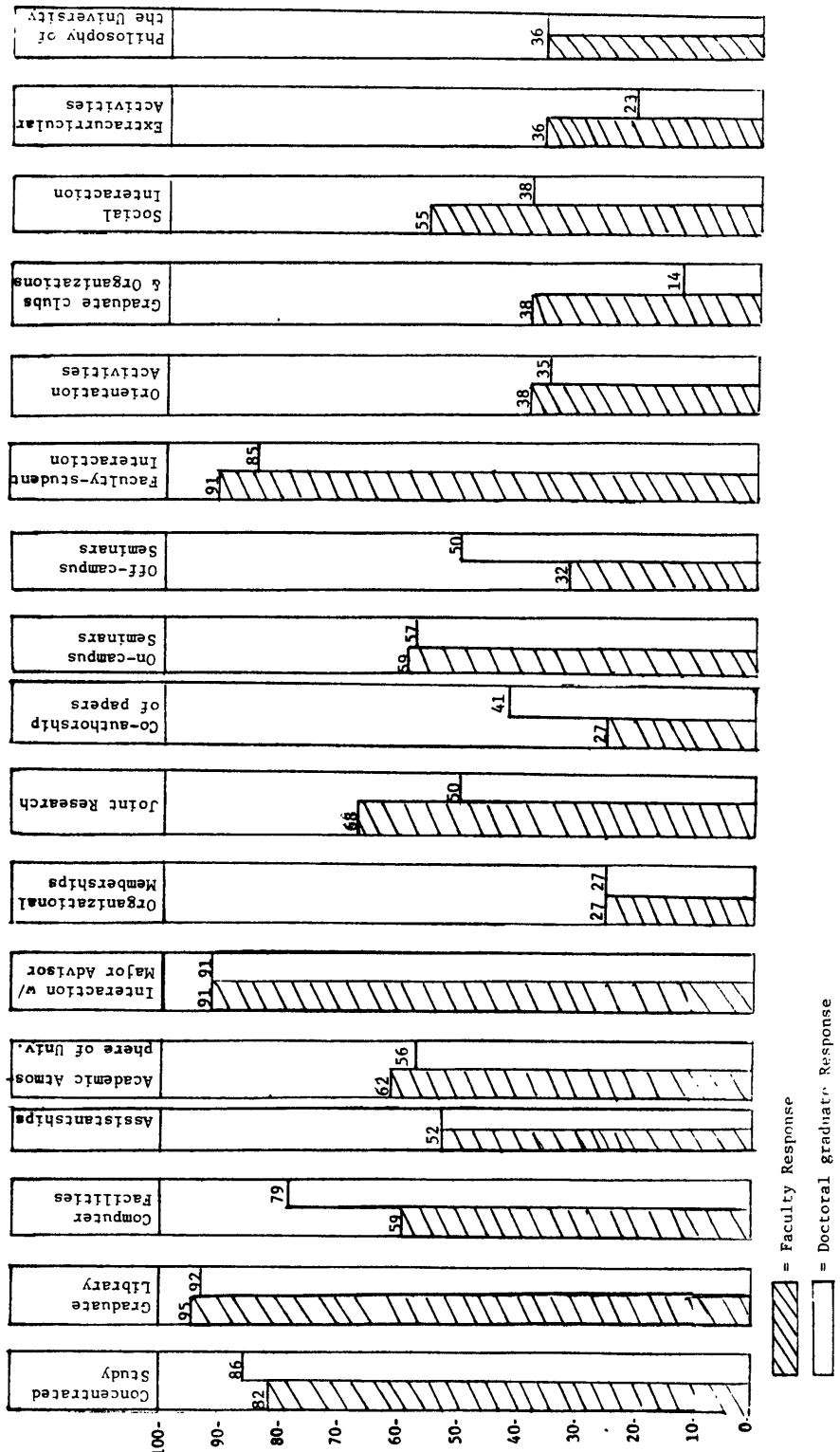

Figure 1

Combined Responses of "Very Important" and "Important" Given by Program Area Leaders and Doctoral Graduates

The responses from the program area leaders were very similar to the doctoral graduates' responses and the two groups were in general agreement on most of the items. Figure 1 shows the combined rating of "very important" and "important", by percentage of total response to the question for each activity.

Full-time study. A period of full-time concentrated study was deemed very important or important by 82 percent of the program area leaders and by 86 percent of the doctoral graduates. This shows that the overwhelming majority of respondents considered this item as an integral part of the residency requirement (Table 15).

Library. Similarly, access to a graduate level library was rated very high by the respondents in both groups. The data showed that 95 percent of the faculty respondents and 92 percent of the doctoral graduates rated this item as very important or important (Table 16).

Computer. Access to computer facilities received a stronger endorsement from the doctoral graduates than by the program area leaders. While 79 percent of the doctoral graduates rated this item as very important or important, only 59 percent of the program area leaders rated it the same way. However, an additional 36.4 percent of the program area leaders and 13.3 percent of the graduates rated it as moderately important (Table 17).

Graduate Assistantship. When asked to rate the value of a GTA, GRA, or Administrative Internship for on-the-job experience, 52 percent of the individuals in both groups rated it as very important or important (Table 18). Approximately one-third of each group rated graduate assistantships as moderately important.

TABLE 15

Importance of a Period of Full-time Concentrated Study

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very impt.	16	72.7	173	62.2
Important	2	9.1	66	23.7
Moderately impt.	3	13.6	22	7.9
Of little impt.	1	4.6	14	5.0
Of no impt.	-	-	3	1.1
	22	100.0	278	100.0
	Mean = 4.50 Missing cases = 0		Mean = 4.41 Missing cases = 2	

TABLE 16

Importance of Access to a Graduate Level Library

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	11	50.0	211	75.9
Important	10	45.5	46	16.5
Moderately impt.	1	4.5	14	5.0
Of little impt.	-	-	3	1.1
Of no importance	-	-	4	1.4
	22	100.0	278	100.0
	Mean = 4.45 Missing cases = 0		Mean = 4.64 Missing cases = 2	

TABLE 17

Importance of Access to Computer Facilities

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	5	22.7	138	49.6
Important	8	36.4	83	29.9
Moderately impt.	8	36.4	37	13.3
Of little impt.	-	-	14	5.0
Of no importance	1	4.5	6	2.2
	22	100.0	278	100.0
	Mean = 3.72 Missing cases = 0		Mean = 4.20 Missing cases = 2	

TABLE 18

Importance of G.T.A., G.R.A. or Administrative Internship for On-the-job Experiences

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	4	19.1	81	29.0
Important	7	33.3	64	22.9
Moderately impt.	7	33.3	87	31.2
Of little impt.	2	9.5	27	9.7
Of no importance	1	4.8	20	7.2
	21	100.0	279	100.0
	Mean = 3.52 Missing cases = 1		Mean = 3.57 Missing cases = 1	

Academic atmosphere. Sixty-two percent of the faculty members said that living near the academic atmosphere of the university was very important or important to doctoral students. Slightly fewer doctoral graduates, 56 percent, thought the same. The majority of both groups, however, endorsed it as very important or important. Nonetheless, 38 percent of the program area leaders and 44 percent of the graduates rated it as less than important (Table 19).

Interaction with advisor. Interaction with the major advisor was rated as very important or important by an overwhelming 91 percent of both groups (Table 20). Comments on the open-ended question also reflected the perceived importance of interaction.

Memberships. Membership in on- and off-campus professional organizations was not very important to the majority of individuals in both groups. In fact, only 27 percent of the faculty members and 27 percent of the graduates rated this item as very important or important. This means that 73 percent of both groups felt that these memberships were less than important (Table 21).

Joint research. Joint research with faculty members and/or fellow students received a greater endorsement from the faculty members than by the doctoral graduates. Sixty-eight percent of the program area leaders and 50 percent of the doctoral graduates rated joint research as very important or important (Table 22).

Co-authorship. In rating co-authorship of papers with faculty members and/or fellow students, more doctoral graduates thought this to be a very important or important item than did the program area

TABLE 19

Importance of an Opportunity to Live Near the Academic Atmosphere of the University

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	5	23.8	80	28.7
Important	8	38.1	77	27.6
Moderately impt.	4	19.1	58	20.8
Of little impt.	2	9.5	39	14.9
Of no importance	2	9.5	25	9.0
	21	100.0	279	100.0
	Mean = 3.57 Missing cases = 1		Mean = 3.53 Missing cases = 1	

TABLE 20

Importance of Interaction with the Major Advisor

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	16	72.7	175	62.9
Important	4	18.2	79	28.4
Moderately impt.	2	9.1	16	5.8
Of little impt.	-	-	7	2.5
Of no importance	-	-	1	0.4
	22	100.0	278	100.0
	Mean = 4.63 Missing cases = 0		Mean = 4.51 Missing cases = 2	

TABLE 21

Importance of Membership in On- and Off-Campus Professional Organizations

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	1	4.6	23	8.3
Important	5	22.7	53	19.1
Moderately impt.	7	31.8	99	35.6
Of little impt.	6	27.3	67	24.1
Of no importance	3	13.6	36	12.9
	22	100.0	278	100.0
	Mean = 2.77 Missing cases = 0		Mean = 2.85 Missing cases = 2	

TABLE 22

Importance of Joint Research with Faculty and Students

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	4	18.2	53	19.1
Important	11	50.0	86	30.8
Moderately impt.	5	22.7	78	28.0
Of little impt.	2	9.1	39	14.0
Of no importance	-	-	23	8.1
	22	100.0	278	100.0
	Mean = 3.77 Missing cases = 0		Mean = 3.39 Missing cases = 2	

leaders. Twenty-seven percent of the program area leaders and 41 percent of the doctoral graduates rated it as very important or important (Table 23). The mean rating of the program area leaders was 2.95, indicating an average rating of little importance to moderately important. However, the mean rating for the doctoral graduates was 3.13 indicating an average rating of moderately important to important.

Seminars. The majority of both groups, 59 percent of the program leaders and 57 percent of the graduates, rated attendance at on-campus professional seminars and conferences as very important or important (Table 24). However, when asked to rate attendance at off-campus professional seminars and conferences, 32 percent of the program area leaders and 50 percent of the graduates rated it as very important or important. Apparently the doctoral graduates saw more value in attending off-campus seminars, than did the program area leaders (Table 25).

Faculty-student interaction. Opportunities for interaction between faculty members and students received a very strong endorsement from both groups. Ninety-one percent of the program area leaders and 85 percent of the doctoral graduates rated faculty-student interaction as very important or important (Table 26).

Orientation. Orientation activities for new post-masters students did not prove to be of much importance to either group. Only 38 percent of the program area leaders and 35 percent of the doctoral graduates rated it as very important or important (Table 27).

Clubs and organizations. Similarly, a low percentage of both responding groups thought that graduate student clubs and organizations

TABLE 23

Importance of Co-authorship of Papers

with Faculty and Students

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	1	4.5	33	11.9
Important	5	22.7	80	28.8
Moderately impt.	9	41.0	86	30.9
Of little impt.	6	27.3	50	18.1
Of no importance	1	4.5	30	10.3
	22	100.0	278	100.0
	Mean = 2.95 Missing cases = 0		Mean = 3.13 Missing cases = 2	

TABLE 24

Importance of Attendance at On-Campus Professional Seminars and Conferences

Opinion	Faculty		Graduates	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	5	22.7	75	27.0
Important	8	36.4	85	30.6
Moderately impt.	8	36.4	76	27.3
Of little impt.	1	4.5	25	9.0
Of no importance	-	-	17	6.1
	22	100.0	278	100.0
	Mean = 3.54 Missing cases = 0		Mean = 3.63 Missing cases = 2	

TABLE 25

Importance of Attendance at Off-Campus Professional Seminars and Conferences

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	-	-	50	18.0
Important	7	31.8	90	32.4
Moderately impt.	8	36.4	91	32.7
Of little impt.	3	13.6	32	11.5
Of no importance	4	18.2	15	5.4
	22	100.0	278	100.0
	Mean = 1.55 Missing cases = 0		Mean = 3.46 Missing cases = 2	

TABLE 26

Importance of Opportunities for Interaction Between Faculty Members and Students

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	16	72.8	141	50.5
Important	4	18.2	97	34.8
Moderately impt.	1	4.5	24	8.6
Of little impt.	1	4.5	13	4.7
Of no importance	-	-	4	1.4
	22	100.0	279	100.0
	Mean = 4.59 Missing cases = 0		Mean = 4.28 Missing cases = 1	

TABLE 27

Importance of Orientation Activities for New Post-Masters Students

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted ercent	Absolute Freq.	Adjusted Percent
Very important	3	14.3	40	14.3
Important	5	23.8	59	21.1
Moderately impt.	6	28.6	80	28.7
Of little impt.	6	28.6	58	20.8
Of no importance	1	4.7	42	15.1
	21	100.0	279	100.0
	Mean = 3.14 Missing cases = 1		Mean = 2.99 Missing cases = 1	

were very important or important, with only 38 percent of the faculty group and 14 percent of the graduate group thinking so. This means that 62 percent of the program area leaders and 86 percent of the graduates thought student clubs and organizations was less than important (Table 28).

Social interaction. More of the program area leaders (55 percent) felt that social interaction with students and faculty and administrative staff was very important or important. Only 38 percent of graduates thought it was very important or important (Table 29).

Extracurricular activities. When asked to rate opportunities for on-campus extracurricular activities, 36 percent of the program area leaders and 23 percent of the graduate group indicated that it was very important or important (Table 30).

University philosophy. Finally, both groups were asked to rate the importance of exposure to the philosophy of the university. Thirty-six percent of the respondents in both groups indicated that it was very important or important (Table 31).

Summary. The data showed several purposes and activities of residency that were perceived to be important by faculty members and doctoral graduates. These purposes and activities were:

1. Access to a graduate level library;
2. Interaction with the major advisor;
3. Faculty-student interaction;
4. A period of full-time concentrated study;
5. Access to computer facilities;

TABLE 28

Importance of Graduate Student Clubs and Organizations

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	3	13.6	8	2.9
Important	5	22.7	32	11.5
Moderately impt.	9	41.0	87	31.2
Of little impt.	3	13.6	90	32.3
Of no importance	2	9.1	62	22.1
	22	100.0	279	100.0
	Mean = 2.77 Missing cases = 0		Mean = 2.40 Missing cases = 1	

TABLE 29

Importance of Social Interaction with Faculty and Administrative Staff

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	7	31.8	35	12.5
Important	5	22.7	72	25.8
Moderately impt.	8	36.4	105	37.6
Of little impt.	1	4.5	41	14.7
Of no importance	1	4.5	26	9.4
	22	100.0	279	100.0
	Mean = 3.72 Missing cases = 0		Mean = 3.17 Missing cases = 0	

TABLE 30

Importance of Opportunities for On-Campus Extracurricular Activities

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	1	4.5	16	5.7
Important	7	31.8	48	17.2
Moderately impt.	5	22.8	92	33.0
Of little impt.	7	31.8	82	29.4
Of no importance	2	9.1	41	14.7
	22	100.0	279	100.0
	Mean = 2.90 Missing cases = 0		Mean = 2.69 Missing cases = 1	

TABLE 31

Importance of Exposure to the Philosophy of the University

Opinion	Faculty		Graduate	
	Absolute Freq.	Adjusted Percent	Absolute Freq.	Adjusted Percent
Very important	3	13.6	31	11.1
Important	6	27.2	71	25.4
Moderately impt.	7	32.0	83	29.7
Of little impt.	3	13.6	55	19.0
Of no importance	3	13.6	39	14.0
	22	100.0	279	100.0
	Mean = 3.13 Missing cases = 0		Mean = 3.00 Missing cases = 0	

6. Living near the academic atmosphere of the university;
7. On-campus seminars and conferences;
8. Joint research with faculty members and/or fellow students;
9. Assistantships.

The four purposes and activities of residency which received the highest endorsement from both of the responding groups were: access to a graduate level library, interaction with the major advisor, faculty-student interaction, and a period of full-time concentrated study.

The two groups were most similar in rating interaction with the major advisor (91 percent rated it as very important or important), assistantships (52 percent), exposure to the philosophy of the university (36 percent), and membership in professional organizations (27 percent).

The major difference in responses occurred when the two groups rated: graduate student clubs and organizations (24 percent discrepancy), access to computer facilities (20 percent discrepancy), joint research with faculty members and/or fellow students (18 percent discrepancy), and off-campus seminars and conferences (18 percent discrepancy).

Faculty members tended to rate, on the average, the non-academic purposes and activities commonly associated with residency higher than did the doctoral graduates. However, both groups rated the non-academic activities lower, on the average, than the academic activities.

Research Question #2

What are the activities that comprise the residency requirement?

Items 17 through 22 and 26 through 29 on the graduate student questionnaire sought information for this research question. Each item is discussed separately.

Presentation of paper. The majority of the respondents, 63.9 percent, reported that they had not presented a paper at a meeting of an academic or professional society during, or as a result of, residential study. Of the 100 students reporting that they had, 64 presented their paper alone and 36 co-presented with a faculty member or fellow student (Table 32). The data revealed that VTE graduates presented a proportionately higher percentage of papers (43.4 percent) than did C & I graduates (42.8 percent) or AES graduates (32.0 percent) (Table 33).[1]

Publication. Similarly, the majority of the doctoral graduates (65.9 percent) did not prepare and submit an article for publication in an academic or professional journal during, or as a result of, studying in-residence (Table 34). Of the 94 graduates who did, 53 authored the article alone and 41 co-authored with a faculty member or fellow student. Only slightly more male graduates, 35.9 percent, prepared and submitted an article than did female graduates, 30.5 percent. As the graduates increased in age the incidence of co-authorship

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[1]Since many of the larger crosstabulations had too many small cells, it was necessary to collapse some of the item responses. The 7 program areas were collapsed into three doctoral granting divisions: AES, C & I, and VTE. All data are reported by the divisions and not by the program areas.

TABLE 32

Presentation of Paper at a Meeting of an Academic or Professional Society, by Sex

Row pct [1] Col. pct Total pct	Presented	Co-presented	None pres.	Row total
Male	38	23	121	182
	20.9	12.6	66.5	65.7
	59.4	63.9	68.4	
	13.7	8.3	43.7	
Female	26	13	56	95
	27.4	13.7	58.9	34.3
	40.6	36.1	31.6	
	9.4	4.7	20.2	
Column Total	64	36	177	277
	23.1	13.0	63.9	100.0

[1] A cross-tabulation is a joint frequency distribution of cases according to two or more, or in this table, three classificatory variables (Nie et al., 1970, p.218). The first number in each cell indicates the n of cases in that cell. The second number is the percentage of the row, or horizontal axis by each variable on the vertical axis. The third number indicates the percentage of the column or the vertical axis by each variable on the horizontal axis. The fourth number is the percentage of the total population for each cell.

TABLE 33

Presentation of Paper at a Meeting of an Academic or Professional Society, by Division

Row pct. Col. pct. Total pct.	Presented	Co-presented	None pres.	Row total
AES	36	22	123	181
	19.9	12.2	68.0	65.1
	56.3	61.1	69.1	
	12.9	7.9	44.2	
C & I	9	6	20	35
	25.7	17.1	57.1	12.6
	14.1	16.7	11.2	
	3.2	2.2	7.2	
VTE	19	8	35	62
	30.6	12.9	56.5	22.3
	29.7	22.2	19.7	
	6.8	2.9	12.6	
Column Total	64	36	178	278
	23.0	12.9	64.0	100.0

TABLE 34

Preparation of Article for Publication, by Sex

Row pct. Col. pct. Total pct.	Article	Co-authored	None	Row total
Male	37	28	116	181
	20.4	15.5	64.1	65.6
	69.8	68.3	63.7	
	13.4	10.1	42.0	
Female	16	13	66	95
	16.8	13.7	69.5	34.4
	30.2	31.7	36.3	
	5.8	4.7	23.9	
Column	53	41	182	276
Total	19.2	14.9	65.9	100.0

of articles decreased. Nearly 24 percent of the students in the 23-30 age group co-authored an article for publication whereas only 4.0 percent in the 43-60 age group did so (Table 35).[2]

On-campus seminars, off-campus seminars. The overwhelming majority, 227 or 81.9 percent, of the doctoral graduates did attend on-campus professional seminars and conferences while they were fulfilling their residency requirement (Table 36). Almost as many of the graduates, 220 or 79.9 percent, attended off-campus professional seminars and conferences during, or as a result of, residency (Table 37).

There were more students in the 31-36 age group that attended seminars than in any other age group. Students in this age group had a proportionately higher attendance at both on-campus (86.5 percent) and off-campus (83.8 percent) than did the students in the other three age groups (Tables 38, 39).

Of those attending seminars, the single students represented a proportionately higher attendance than did the married, widowed, divorced or separated students. In fact, 85.3 percent of the single students population said they attended on-campus seminars and 88.2 percent said they attended off-campus seminars (Tables 40, 41).

Of those attending seminars, the students in Vocational Technical Education had proportionately the highest attendance record. At

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[2]Item 19 has not been analyzed due to a lack of response apparently prompted by an oversight in the instrument.

TABLE 35

Preparation of Article for Publication, by Age

Row pct. Col. pct. Total pct.	Article	Co-authored	None	Row total
Age				
23 - 30	11	17	43	71
	15.5	23.9	60.6	27.3
	21.2	45.9	25.1	
	4.2	6.5	16.5	
31 - 36	15	9	51	75
	20.0	12.0	68.0	28.8
	28.8	24.3	29.8	
	5.8	3.5	19.6	
37 - 42	16	9	39	64
	25.0	14.1	60.9	24.6
	30.8	24.3	22.8	
	6.2	3.5	15.0	
43 - 60	10	2	38	50
	20.0	4.0	76.0	19.2
	19.2	5.4	22.2	
	3.8	0.8	14.6	
Column Total	52	37	171	260
	20.0	14.2	65.8	100.0

TABLE 36

Attendance at On-campus Professional Seminars and Conferences, by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Sex			
Male	149	33	182
	81.9	18.1	65.7
	65.6	66.0	
	53.8	11.9	
Female	78	17	95
	82.1	17.9	34.3
	34.4	34.0	
	28.2	6.1	
Column Total	227	50	277
	81.9	18.1	100.0

TABLE 37

Attendance at Off-campus Professional Seminars and Conferences, by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Sex			
Male	142	39	181
	78.5	21.5	65.6
	64.5	69.6	
	51.4	14.1	
Female	78	17	95
	82.1	17.9	34.4
	35.5	30.4	
	28.3	6.2	
Column Total	220	56	276
	79.7	20.3	100.0

TABLE 38

Attendance at On-campus Seminars and Conferences, by Age

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Age			
23 - 30	53	18	71
	74.6	25.4	27.2
	25.0	36.7	
	20.3	6.9	
31 - 36	64	10	74
	86.5	13.5	28.4
	30.2	20.4	
	24.5	3.8	
37 - 42	55	10	65
	84.6	15.4	24.9
	25.9	20.4	
	21.1	3.8	
43 - 60	40	11	51
	78.4	21.6	19.5
	18.9	22.4	
	15.3	4.2	
Column Total	212	49	261
	81.2	18.8	100.0

TABLE 39

Attendance at Off-campus Seminars and Conferences,

by Age

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Age			
23 - 30	51	20	71
	71.8	28.2	27.3
	24.8	37.0	
	19.6	7.7	
31 - 36	62	12	74
	83.8	16.2	28.5
	30.1	22.2	
	23.8	4.6	
37 - 42	53	12	65
	81.5	18.5	25.0
	25.7	22.2	
	20.4	4.6	
43 - 60	40	10	50
	80.0	20.0	19.2
	19.4	18.5	
	15.4	3.8	
Column Total	206	54	260
	79.2	20.8	100.0

TABLE 40

Attendance at On-campus Professional Seminars and Conferences, by Marital Status

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Engaged	1	1	2
	50.0	50.0	0.7
	0.4	2.0	
	0.4	0.4	
Married	184	35	219
	84.0	16.0	78.8
	80.7	70.0	
	66.2	12.6	
Separated	3	4	7
	42.9	57.1	2.5
	1.3	8.0	
	1.1	1.4	
Single	29	5	34
	85.3	14.7	12.2
	12.7	10.0	
	10.4	1.8	
Single, widowed or divorced	11	5	16
	68.8	31.3	5.8
	4.8	10.0	
	4.0	1.8	
Column Total	228	50	278
	82.0	18.0	100.0

TABLE 41

Attendance at Off-campus Professional Seminars and Conferences, by Marital Status

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Engaged	2	0	2
	100.0	0.0	0.7
	0.9	0.0	
	0.7	0.0	
Married	169	49	218
	77.5	22.5	78.7
	76.5	87.5	
	61.0	17.7	
Separated	6	1	7
	85.7	14.3	2.5
	2.7	1.8	
	2.2	0.4	
Single	30	4	34
	88.2	11.8	12.3
	13.6	7.1	
	10.8	1.4	
Single widowed or divorced	14	2	16
	87.5	12.5	5.8
	6.5	3.6	
	5.1	0.7	
Column Total	221	56	277
	79.8	20.2	100.0

on-campus seminars, 93.5 percent of the VTE students attended while 82.9 percent and 77.9 percent of the C & I and AES students attended, respectively (Table 42). Similarly, at off-campus seminars, 91.9 percent of the VTE students attended while 88.2 percent and 74.0 percent of the C & I and AES students attended, respectively (Table 43). Finally, 85.0 percent of the students fulfilling their doctoral degree in Blacksburg attended on-campus seminars whereas 70.7 percent of the students who attended other VPI&SU locations attended on-campus seminars (Table 44).

Academic journals. When asked if they subscribed to new or additional academic or professional journals during, or as a result of, residency, 183 or 66.1 percent indicated that they had (Table 45). Slightly more female graduates, 70.2 percent, subscribed to new professional journals than did male graduates. Graduates from the C & I division reported the highest proportionate increase in journal subscriptions with an increase of 76.5 percent. There was also a 67.7 percent increase in subscriptions among VTE graduates and 63.2 among AES graduates as a result of their residency experience (Table 46).

Orientation activities. As part of the activities associated with residential study, the doctoral graduates were asked if they had attended orientation activities as a new post-masters student at VPI&SU. Many of the respondents (114 or 41.3 percent) indicated they were not aware of such activities (Table 47). However, 42 or 15.2 percent said they had attended a formal orientation to VPI&SU; 66 or 23.9 percent attended the orientation for graduate assistants, and 54

TABLE 42

Attendance at On-campus Professional Seminars and Conferences, By Division

Row pct. Col. pct. Total pct.	Yes	No	Row total
Program			
AES	141	40	181
	77.9	22.1	65.1
	61.8	80.0	
	50.7	14.4	
C & I	29	6	35
	82.9	17.1	12.6
	12.7	12.0	
	10.4	2.2	
VTE	58	4	62
	93.5	6.5	22.3
	25.4	8.0	
	20.9	1.4	
Column Total	228	50	278
	82.0	18.0	100.0

TABLE 43

Attendance at Off-campus Professional Seminars and Conferences, by Division

Row pct. Col. pct. Total pct.	Yes	No	Row total
Program			
AES	134	47	181
	74.0	26.0	65.3
	60.6	83.9	
	48.4	17.0	
C & I	30	4	34
	88.2	11.8	12.3
	13.6	7.1	
	10.8	1.4	
VTE	57	5	62
	91.9	8.1	22.4
	25.8	8.9	
	20.6	1.8	
Column Total	221	56	277
	79.8	20.2	100.0

TABLE 44

Attendance at On-campus Professional Seminars and Conferences, by Location of Student

Row pct. Col. pct. Total pct.	Yes	No	Row Total
Other VPI&SU location	41 70.7 18.0 14.7	17 29.3 34.0 6.1	58 20.9
Blacksburg only	187 85.0 82.0 67.3	33 15.0 66.0 11.9	220 79.1
Column Total	228 82.0	50 18.0	278 100.0

TABLE 45

Subscription to New or Additional Academic or Professional Journals, by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row total
Sex			
Male	117	66	183
	63.9	36.1	66.1
	63.9	70.2	
	42.2	23.8	
Female	66	28	94
	70.2	29.8	33.9
	36.1	29.8	
	23.8	10.1	
Column Total	183	94	277
	66.1	33.9	100.0

TABLE 46

Subscription to New or Additional Academic or Professional Journals, by Division

Row pct. Col. pct. Total pct.	Yes	No	Row total
Program			
AES	115	67	182
	63.2	36.8	65.5
	62.8	70.5	
	41.4	24.1	
C & I	26	8	34
	76.5	23.5	12.2
	14.2	8.4	
	9.4	2.9	
VTE	42	20	62
	67.7	32.3	22.3
	23.0	21.1	
	15.1	7.2	
Column Total	183	95	278
	65.8	34.2	100.0

TABLE 47

Attendance at Orientation Activities,

by Sex

Row pct. Col. pct. Total pct.	Formal Orientation	Orient. Grad. Asst.	Aware Not att.	Not Aware	Row total
Sex					
Male	35	43	37	66	181
	19.3	23.8	20.4	36.5	65.6
	83.3	65.2	68.5	57.9	
	12.7	15.6	13.4	23.9	
Female	7	23	17	48	95
	7.4	24.2	17.9	50.5	34.4
	16.7	34.8	31.5	42.1	
	2.5	8.3	6.2	17.4	
Column Total	42	66	54	114	276
	15.2	23.9	19.6	41.3	100.0

or 19.6 percent of the respondents reported they were aware of an orientation activity but did not attend.

Of the students who indicated they were not aware of any orientation activities, more than 50 percent were female and 56 percent were 43 to 60 years of age (Table 48). Responses showed that 44.4 percent of the students in the AES Division; 34.3 percent in C & I; and 35.5 percent in VTE were unaware of orientation activities at VPI&SU (Table 49). In addition, 50.0 percent of the students who had enrolled at a VPI&SU location other than Blacksburg[3] were not aware of orientation activities and 38.8 percent of the students in Blacksburg were unaware of the same (Table 50). There was a relationship between the student's employment during residency and participation in orientation programs. This is evidenced by the fact that nearly forty percent of the students holding part-time jobs (which includes graduate assistantships) attended an orientation program. Only 18.4 percent of the students on educational leave or working part-time at their jobs, and 8.1 percent employed in some other part-time capacity attended an orientation activity (Table 51).

Clubs and organizations. There did not appear to be a very high incidence of doctoral graduates joining graduate student clubs or organizations while they fulfilled the residency requirement. In

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[3]The responses to item 14 were collapsed into two divisions. Responses from students who had attended Northern Virginia, Tidewater, Federal City College or other location were categorized under the label "other VPI location". The remaining student responses were labeled "Blacksburg only".

TABLE 48

Attendance at Orientation Activities,

by Age

Row pct. Col. pct. Total pct.	Formal Orientation	Orient.for Grad.Asst.	Aware Not att.	Not Aware	Row total
Age					
23 - 30	9	20	9	33	71
	12.7	28.2	12.7	46.5	27.3
	23.7	30.8	17.6	31.1	
	3.5	7.7	3.5	12.7	
31 - 36	13	25	14	22	74
	17.6	33.8	18.9	29.7	28.5
	34.2	38.5	27.5	20.8	
	5.0	9.6	5.4	8.5	
37 - 42	8	14	20	23	65
	12.3	21.5	30.8	35.4	25.0
	21.1	21.5	39.2	21.7	
	3.1	5.4	7.7	8.8	
43 - 60	8	6	8	28	50
	16.0	12.0	16.0	56.0	19.2
	21.1	9.2	15.7	26.4	
	3.1	2.3	3.1	10.8	
Column Total	38	65	51	106	260
	14.6	25.0	19.6	40.8	100.0

TABLE 49

Attendance at Orientation Activities,

by Division

Row pct. Col. pct. Total pct.	Formal Orientation	Orient. for Grad.Asst.	Aware Not att.	Not Aware	Row total
Program					
AES	19	40	41	80	180
	10.6	22.2	22.8	44.4	65.0
	45.2	60.6	74.5	70.2	
	6.9	14.4	14.8	28.9	
C & I	3	15	5	12	35
	8.6	42.9	14.3	34.3	12.6
	7.1	22.7	9.1	10.5	
	1.1	5.4	1.8	4.3	
VTE	20	11	9	22	62
	32.3	17.7	14.5	35.5	22.4
	47.6	16.7	16.4	19.3	
	7.2	4.0	3.2	7.9	
Column Total	42	66	55	114	277
	15.2	23.8	19.9	41.2	100.0

TABLE 50

Attendance at Orientation Activities,

by Location of Student

Row pct. Col. pct. Total pct.	Formal Orientation	Orient.for Grad.Asst.	Aware, Not att.	Not Aware	Row total
Other VPI&SU location	10 17.2 23.8 3.6	6 10.3 9.1 2.2	13 22.4 23.6 4.7	29 50.0 25.4 10.5	58 20.9
Blacksburg only	32 14.6 76.2 11.6	60 27.4 90.9 21.7	42 19.2 76.4 15.2	85 38.8 74.6 30.7	219 79.1
Column Total	42 15.2	66 23.8	55 19.9	114 41.2	277 100.0

TABLE 51

Attendance at Orientation Activities,

by Employment of Student

Row pct. Col. pct. Total pct.	Formal Orientation	Orient.for Grad.Asst.	Aware Not att.	Not Aware	Row total
Educational leave	23 15.1 54.8 8.3	28 18.4 42.4 10.1	39 25.7 70.9 14.1	62 40.8 54.4 22.4	152 54.9
Part-time	11 12.5 26.2 4.0	35 39.8 53.0 12.6	6 6.8 10.9 2.2	36 40.9 31.6 13.0	88 31.8
Other	8 21.6 19.0 2.9	3 8.1 4.5 1.1	10 27.0 18.2 3.6	16 43.2 14.0 5.8	37 13.4
Column Total	42 15.2	66 23.8	55 19.9	114 41.2	277 100.0

fact, 73.3 percent of the population did not join such an organization (Table 52). However, female graduates reported a slightly higher incidence of joining than did male students. This is evidenced by the fact that 23.6 percent of the men and 32.6 percent of the female graduates did join a student club or organization.

Graduate student clubs and organizations received a stronger endorsement from VTE graduates--43.5 percent had joined (Table 53). This, when compared to the 20.4 percent in AES and 28.6 percent in C & I who joined, shows that AES and C & I graduates did not participate to the same extent.

How or when a student fulfilled the residency requirement had very little influence on whether they joined a graduate club or not. All of the crosstabulations indicated a fairly low concern for these organizations.

Informal meetings. Students were also asked how often they met with other graduate students on an informal basis for meals, parties, etc. either on- or off-campus. The data show that 40.4 percent of the male and 45.7 percent of the female students met once a week or more (Table 54). The next highest percentages reported in this item revealed that 18.6 percent of the male and 19.1 percent of the female students met only a few times a year. Students who enrolled for three consecutive quarters indicated a higher rate of informal meetings than did the other students. This is indicated on Table 55 that shows that 44.5 percent of the students who fulfilled their residency requirement full-time for three consecutive quarters met once a week or more with

TABLE 52

Membership in Graduate Student Clubs and Organizations, by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row total
Sex			
Male	43	139	182
	23.6	76.4	65.7
	58.1	68.5	
	15.5	50.2	
Female	31	64	95
	32.6	67.4	34.3
	41.9	31.5	
	11.2	23.1	
Column Total	74	203	277
	26.7	73.3	100.0

TABLE 53

Membership in Graduate Student Clubs and Organizations, by Division

Row pct. Col. pct. Total pct.	Yes	No	Row total
Program			
AES	37	144	181
	20.4	79.6	65.1
	50.0	70.6	
	13.3	51.8	
C & I	10	25	35
	28.6	71.4	12.6
	13.5	12.3	
	3.6	9.0	
VTE	27	35	62
	43.5	56.5	22.3
	36.5	17.2	
	9.7	12.6	
Column Total	74	204	278
	26.6	73.4	100.0

TABLE 54

Informal Meetings with Other Graduate Students,

by Sex

Row pct. Col. pct. Total pct.	Once a week or more	2-3 month	1 month	Few times a year	Once a year or less	Row total
Sex						
Male	74	34	24	34	17	183
	40.4	18.6	13.1	18.6	9.3	66.1
	63.2	73.9	77.4	65.4	54.8	
	26.7	12.3	8.7	12.3	6.1	
Female	43	12	7	18	14	94
	45.7	12.8	7.4	19.1	14.9	33.9
	36.8	26.1	22.6	34.6	45.2	
	15.5	4.3	2.5	6.5	5.1	
Column Total	117	46	31	52	31	277
	42.2	16.6	11.2	18.8	11.2	100.0

TABLE 55

Informal Meetings with Other Graduate Students,

by Fulfillment of Residency Requirement

Row pct. Col. pct. Total pct.	Once a week or more	2-3 month	1 month	Few times a year	Once a year or less	Row total
Full-time	102	40	26	42	19	229
3 consecutive	44.5	17.5	11.4	18.3	8.3	83.0
quarters	87.2	87.0	83.9	80.8	63.3	
	37.0	14.5	9.4	15.2	6.9	
Split-	10	5	5	8	9	37
residency	27.0	13.5	13.5	21.6	24.3	13.4
	8.5	10.9	16.1	15.4	30.0	
	3.6	1.8	1.8	2.9	3.3	
Other	4	1	0	2	2	9
	44.4	11.1	0.0	22.2	22.2	3.3
	3.4	2.2	0.0	3.8	6.7	
	1.4	0.4	0.0	0.7	0.7	
Summer	1	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.4
	0.9	0.0	0.0	0.0	0.0	
	0.4	0.0	0.0	0.0	0.0	
Column	117	46	31	52	30	276
Total	42.4	16.7	11.2	18.8	10.9	100.0

their colleagues. Students who fulfilled their requirement by another option met less frequently. However, students who are not on campus full-time have fewer opportunities to meet with other students.

Summary. In the second research question, doctoral graduates were asked about the activities that were commonly associated with residential study. The data showed that the VPI&SU graduates have not participated in these activities to a very large extent. In fact, the data showed that relatively few graduates had presented a paper at a meeting of an academic or professional society. Of the 36.1 percent of the graduates who had presented a paper, 23.1 percent presented it alone, and 13.0 percent co-presented the paper with a faculty member or fellow student. Few of the doctoral graduates had prepared and submitted an article for publication in an academic or professional journal. Only 34.1 percent of the doctoral graduates did submit an article for publication. Of this percentage, the data indicated that 19.2 percent of the graduates submitted their article alone, and 14.9 percent co-submitted it with a faculty member or fellow student.

Most of the graduates had attended both on-campus and off-campus professional seminars and conferences. The data indicated that 81.0 percent of the graduates attended on-campus seminars, and a similar 79.7 percent attended off-campus seminars. More students in the 31 to 36 age category attended these seminars than in any other age group, and students in the VTE division attended more than other students. In addition to attending seminars and conferences, the majority of the doctoral graduates subscribed to new or additional academic or

professional journals during, or as a result of the residency requirement. More female graduate students increased their number of professional journals than male graduates, and more C & I graduates increased these subscriptions than AES or VTE graduates.

Awareness of orientation activities was very low among the graduates. Slightly more than one-half of the female graduate population, and more than 36 percent of the male population were unaware of any orientation activities at VPI&SU. The data also indicated that the students in the 43 to 60 age category were less informed about orientation activities than any other age group. Further, students in the AES division were also the least informed about orientation activities. All of the crosstabulation tables concerning orientation activities show that a large number of graduates were unaware of any orientation activities.

The majority of the responding doctoral graduates did not appear to join graduate student clubs and organizations. More than 73 percent of the graduates did not join a graduate student club or organization. However, of the students who did join, more of them were female, and more of them were enrolled in the VTE division. The doctoral graduates were also asked how often they met informally with other graduate students. Approximately 40 percent of the male graduates and 45 percent of the female graduates met once a week or more. The rest indicated they met a couple of times a month to only once a year or less.

Research Question #3

What is the relationship between faculty and students during the process of residential study?

Items 29 through 32 sought the information for this research question. Each item is discussed separately in terms of the cross-tabulations.

Interaction with advisor. The majority, 203 or 73.3 percent, of the doctoral respondents reported that the interaction they had with their major advisor was frequent (Table 56). Male doctoral graduates reported a proportionately higher degree (78.1 percent) of frequent interaction with their major advisor than did the female graduates (63.8 percent). However, 27.7 percent of the female students indicated they had a moderate degree of interaction with their major advisor. Even among the 43 to 60 age group, 78 percent described their interaction as frequent (Table 57). Students who completed all of their doctoral work in Blacksburg reported a slightly higher degree of frequency of interaction with their advisor than did the students who attended other VPI&SU facilities (65.5 percent) (Table 58). Of all responding graduates, 23.5 percent used the term "moderate" to describe their student advisor interaction and 3.2 percent used the term "seldom".

Personal advice. Similarly, the majority, 235 or 84.5 percent, of the doctoral graduates felt there was a professor in their department to whom they could turn for advice on personal matters (Table 59). The male graduates (88.0 percent) were more likely to seek advice from

TABLE 56

Frequency of Interaction with Advisor, by Sex

Row pct. Col. pct. Total pct.	Frequent	Moderate	Seldom	Row total
Sex				
Male	143	39	1	183
	78.1	21.3	0.5	66.1
	70.4	60.0	11.1	
	51.6	14.1	0.4	
Female	60	26	8	94
	63.8	27.7	8.5	33.9
	29.6	40.0	88.9	
	21.7	9.4	2.9	
Column Total	203	65	9	277
	73.3	23.5	3.9	100.0

TABLE 57

Frequency of Interaction with Advisor, by Age

Row pct. Col. pct. Total pct.	Frequent	Moderate	Seldom	Row total
Age				
23 - 30	55	14	2	71
	77.5	19.7	2.8	27.2
	28.5	23.3	25.0	
	21.1	5.4	0.8	
31 - 36	50	23	2	75
	66.7	30.7	2.7	28.7
	25.9	38.3	25.0	
	19.2	8.8	0.8	
37 - 42	49	15	1	65
	75.4	23.1	1.5	24.9
	25.4	25.0	12.5	
	18.8	5.7	0.4	
43 - 60	39	8	3	50
	78.0	16.0	6.0	19.2
	20.2	13.3	37.5	
	14.9	3.1	1.1	
Column Total	193	60	8	261
	73.9	23.0	3.1	100.0

TABLE 58

Frequency of Interaction of Advisor, by Location of Student

Row pct. Col. pct. Total pct.	Frequent	Moderate	Seldom	Row total
Other VPI&SU location	38 65.5 18.6 13.7	19 32.8 29.2 6.8	1 1.7 11.1 0.4	58 20.9
Blacksburg only	166 75.5 81.4 59.7	46 20.9 70.8 16.5	8 3.6 88.9 2.9	220 79.1
Column Total	204 73.4	65 23.4	9 3.2	278 100.0

TABLE 59

Availability of Personal Advice from a Faculty Member, by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row total
Sex			
Male	161	22	183
	88.0	12.0	65.8
	68.5	51.2	
	57.9	7.9	
Female	74	21	95
	77.9	22.1	34.2
	31.5	48.8	
	26.6	7.6	
Column Total	235	43	278
	84.5	15.5	100.0

a faculty member than were female graduates (77.9 percent). However, 12.0 percent of the male graduates and 22.1 percent of the female graduates indicated that they did not feel there was a faculty member in their department to whom they could turn for advice on personal matters.

Employment. Nearly one-half (48.7 percent) of the responding graduates said there was a faculty member who took a special interest in helping them get a job when they graduated (Table 60). Other graduates (42.2 percent) indicated they did not receive such assistance from a faculty member, and another 25 or 9.0 percent wrote on the instrument that they were already employed. Again, more male graduates (51.4 percent) felt they received job location assistance from a faculty member than did the female graduates (43.6 percent). Of course, the age of the student could have influenced the faculty members concern with helping them find a job. The 23 to 30 age group reported the highest incidence of assistance in locating a job. In fact, the crosstabulation table shows the older the student, the lower the incidence of job finding assistance the higher the incidence of those already having jobs. Table 61 indicates that 64.8 percent of the 23-30 age group received assistance in finding a job when they graduated. Of the graduates in the 31-36 age group, one-half or 50.7 percent received such assistance. Similarly, in the 37 to 42 age group, 49.2 percent of the respondents said they received job locating assistance. Finally, the respondents in the 43 to 60 age group indicated that 26.0 of them had assistance from a faculty member in their department in helping them find a job.

TABLE 60

Availability of Assistance in Locating a Job from a Faculty Member, by Sex

Row pct. Col. pct. Total pct.	Yes	No	Employed	Row total
Sex				
Male	94	71	18	183
	51.4	38.8	9.8	66.1
	69.6	60.7	72.0	
	33.9	25.6	6.5	
Female	41	46	7	94
	43.6	48.9	7.4	33.9
	30.4	39.3	28.0	
	14.8	16.6	2.5	
Column	135	117	25	277
	48.7	42.2	9.0	100.0

TABLE 61

Availability of Assistance in Locating a Job

from a Faculty Member, by Age

Row pct. Col. pct. Total pct.	Yes	No	Employed	Row total
Age				
23 - 30	46	24	1	71
	64.8	33.8	1.4	27.2
	35.7	22.2	4.2	
	17.6	9.2	0.4	
31 - 36	38	31	6	75
	50.7	41.3	8.0	28.7
	29.5	28.7	25.0	
	14.6	11.9	2.3	
37 - 42	32	24	9	65
	49.2	36.9	13.8	24.9
	24.8	22.2	37.5	
	12.3	9.2	3.4	
43 - 60	13	29	8	50
	26.0	58.0	16.0	19.2
	10.1	26.9	33.3	
	5.0	11.1	3.1	
Column Total	129	108	24	261
	49.4	41.4	9.2	100.0

Role of student. Most of the graduates thought that the faculty member with whom they had the most contact regarded them as a colleague (62.9 percent) (Table 62). However, almost twice as many male students (67.0 percent) felt this way than did the female students (58.9 percent). Graduates who felt they were not considered a colleague generally felt like a student (26.9 percent), and apprentice (7.6 percent), or an employee (2.5 percent). The crosstabulation tables revealed similar results. Graduates generally felt they were considered a colleague by their major professor. However, the exception was that 62.5 percent of the Dulles students felt they were considered a student, and 25.0 percent felt they were considered a colleague (Table 63).

Summary. The majority of the responding graduates reported frequent interaction with their major advisor. Male graduates reported a proportionately higher degree of interaction than did female graduates, and students who fulfilled their degree requirements in Blacksburg reported a higher degree of interaction than the students who attended another VPI&SU location. More than 75 percent of each of the age groups except the 31 to 36 age group said they had frequent interaction with their major advisor. Sixty-seven percent of the 31 to 36 age group reported frequent interaction. More than 84 percent of the responding graduates said there was a faculty member in their department to whom they could turn for advice on personal matters. Proportionately more male students felt they had an advisor on personal matters than did female students.

TABLE 62

Perceived Role of Student, by Sex

Row pct. Col. pct. Total pct.	Student	Employee	Apprentice	Colleague	Row total
Sex					
Male	47	4	12	117	180
	26.1	2.2	6.7	65.0	65.5
	63.5	57.1	57.1	67.6	
	17.1	1.5	4.4	42.5	
Female	27	3	9	56	95
	28.4	3.2	9.5	58.9	34.5
	36.5	42.9	42.9	32.4	
	9.8	1.1	3.3	20.4	
Column Total	74	7	21	173	275
	26.9	2.5	7.6	62.9	100.0

TABLE 63

Perceived Role of Student, by Off-campus

Location of Student

Row pct. Col. pct. Total pct.	Student	Employee	Apprentice	Colleague	Row total
Dulles	5	1	0	2	8
	62.5	12.5	0.0	25.0	2.9
	6.8	14.3	0.0	1.2	
	1.8	0.4	0.0	0.7	
FCC	1	0	0	2	3
	33.3	0.0	0.0	66.7	1.1
	1.4	0.0	0.0	1.2	
	0.4	0.0	0.0	0.7	
Tidewater	1	0	0	5	6
	16.7	0.0	0.0	83.3	2.2
	1.4	0.0	0.0	2.9	
	0.4	0.0	0.0	1.8	
Danville	1	0	0	0	1
	100.0	0.0	0.0	0.0	0.4
	1.4	0.0	0.0	0.0	
	0.4	0.0	0.0	0.0	
None	66	6	21	164	257
	25.7	2.3	8.2	63.8	93.5
	89.2	85.7	100.0	94.8	
	24.0	2.2	7.6	59.6	
Column Total	74 26.9	7 2.5	21 7.6	173 62.9	275 100.0

Approximately one-half of the respondents indicated there was a faculty member who took a special interest in helping them get a job when they graduated. The other half either did not receive assistance in this area or did not need it since they were on educational leave. Younger students reported the highest incidence of receiving assistance from a faculty member in finding a job.

Most of the graduates thought that the faculty member with whom they had the most contact regarded them primarily as a colleague. Again, more male students felt this way than did female students. The remaining graduates said the faculty member with whom they had the most contact regarded them as a student, apprentice or employee. An additional finding was that most of the students who attended the Dulles facility felt they were regarded as a student. Only 25 percent of the Dulles students felt they were regarded as a colleague.

Research Question #4

Do graduates perceive the residence experience as a meaningful part of their doctoral work?

Items 23 through 25 sought the information for this research question. Each item is discussed in terms of the crosstabulations.

Protected time. The doctoral graduates were asked if residency provided periods of time for concentrated study which they would not have otherwise had. The overwhelming majority of respondents (223 or 81.7 percent) replied that residency did provide the time for concentrated study (Table 64). A large majority of the male graduates (83.3

TABLE 64

Availability of Time for Concentrated Study,

by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row total
Sex			
Male	150	30	180
	83.3	16.7	65.9
	67.3	60.0	
	54.9	11.0	
Female	73	20	93
	78.5	21.5	34.1
	32.7	40.0	
	26.7	7.3	
Column Total	223	50	273
	81.7	18.3	100.0

percent) felt they had time they would not have had without residency, while 78.5 percent of the female graduates felt the same.

The students who enrolled full-time for three consecutive quarters reported a higher count of affirmative responses 83.7 percent, than did the students who fulfilled their residency requirement by a split residence (69.4 percent) or other option (62.5 percent) (Table 65). Similarly, more students (180 or 82.9 percent) who fulfilled their requirements in Blacksburg felt they had more time for concentrated study than did the students who had attended another VPI&SU location (75.4 percent) (Table 66).

Computer facilities. Again, the majority (198 or 72.5 percent) of the respondents indicated that residency provided opportunities to utilize computer facilities they would not have had access to elsewhere (Table 67). An almost equal proportion of male (73.3 percent) and female (71.0 percent) graduates reported that access to the computer facilities was greatest during residency. However, the cross-tabulations show that the younger age groups felt they had greater access to computer facilities during residency, than did the older age groups. This is evidenced by the fact that 82.9 percent of the 23 to 30 age group, 71.6 of the 31 to 36 age group, 68.8 percent of the 37 to 42 age group and 64.0 percent of the 43 to 60 age group said residency provided time for utilization of computer facilities not available to them elsewhere (Table 68). As was expected, those students who fulfilled their doctoral requirements in Blacksburg had greater access to computer facilities (77.5 percent) than did the

TABLE 65

Availability of Time for Concentrated Study,

by Fulfillment of Residency Requirement

Row pct. Col. pct. Total pct.	Yes	No	Row total
Full-time, 3 consecutive quarters	190 83.7 86.0 69.9	37 16.3 72.5 13.6	227 83.5
Split residency	25 69.4 11.3 9.2	11 30.6 21.6 4.0	36 13.2
Other option	5 62.5 2.3 1.8	3 37.5 5.9 1.1	8 2.9
Summer	1 100.0 0.5 0.4	0 0.0 0.0 0.0	1 0.4
Column Total	221 81.3	51 18.8	272 100.0

TABLE 66

Availability of Time for Concentrated Study,

by Location of Student

Row pct. Col. pct. Total pct.	Yes	No	Row total
Other VPI&SU location	43 75.4 19.3 15.7	14 24.6 27.5 5.1	57 20.8
Blacksburg only	180 82.9 80.7 65.7	37 17.1 72.5 13.5	217 79.2
Column Total	223 81.4	51 18.6	274 100.0

TABLE 67

Opportunity to Utilize Computer Facilities,

by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row total
Sex			
Male	132	48	180
	73.3	26.7	65.9
	66.7	64.0	
	48.4	17.6	
Female	66	27	93
	71.0	29.0	34.1
	33.3	36.0	
	24.2	9.9	
Column Total	198	75	273
	72.5	27.5	100.0

TABLE 68

Opportunity to Utilize Computer Facilities,

by Age

Row pct. Col. pct. Total pct.	Yes	No	Row total
Age			
23 - 30	58	12	70
	82.9	17.1	27.1
	31.0	16.9	
	22.5	4.7	
31 - 36	53	21	74
	71.6	28.4	28.7
	28.3	29.6	
	20.5	8.1	
37 - 42	44	20	64
	68.8	31.3	24.8
	23.5	28.2	
	17.1	7.8	
43 - 60	32	18	50
	64.0	36.0	19.4
	17.1	25.4	
	12.4	7.0	
Column Total	187 72.5	71 27.5	258 100.0

students who attended other VPI&SU facilities (51.8 percent) (Table 69). Students who held a part-time job during residency such as an assistantship reported a higher percentage of affirmative responses (87.1 percent) concerning opportunities for computer utilization than did the students who were on educational leave from their jobs (62.9 percent) or who were working part-time in a non-educational job or other type of employment (76.3 percent) (Table 70).

Intellectual and professional needs. Finally, the doctoral graduates were asked if their intellectual and professional needs were met as a result of full-time residential study. Of the 270 reponses to this item, 224 or 83.0 percent indicated that they were met (Table 71). Eighty-five percent of the male and 78.0 percent of the female graduates felt their intellectual and professional needs were met. In the older age groups, the respondents generally had slightly fewer affirmative responses to this item. In the 23 to 30 age group, 87.0 percent said their needs were met, in the 31 to 36 age group 82.7 percent, in the 37 to 42 age group 82.8 percent, in the 43 to 60 age group 74.5 percent (Table 72). Of the 126 graduates who fulfilled their doctoral requirements in Blacksburg, 186 or 86.1 percent said these needs were met as a result of full-time residential study, while 38 or 69.1 percent of the student population who attended other VPI&SU locations gave the same response (Table 73).

Summary. The majority of the doctoral graduates said that residency did, in fact, provide periods of time for concentrated study which they would otherwise not have had without the residency

TABLE 69

Opportunity to Utilize Computer Facilities,

by Location of Student

Row pct. Col. pct. Total pct.	Yes	No	Row total
Other VPI&SU location	29 51.8 14.6 10.6	27 48.2 35.5 9.9	56 20.4
Blacksburg only	169 77.5 85.4 61.7	49 22.5 64.5 17.9	218 79.6
Column Total	198 72.3	76 27.7	274 100.0

TABLE 70

Opportunity to Utilize Computer Facilities,

by Employment of Student

Row pct. Col. pct. Total pct.	Yes	No	Row total
Educational leave	95 62.9 48.0 34.7	56 37.1 73.7 20.4	151 55.1
Part-time	74 87.1 37.4 27.0	11 12.9 14.5 4.0	85 31.0
Other	29 76.3 14.6 10.6	9 23.7 11.8 3.3	38 13.9
Column Total	198 72.3	76 27.7	274 100.0

TABLE 71

Fulfillment of Intellectual or Professional Needs,

by Sex

Row pct. Col. pct. Total pct.	Yes	No	Row total
Sex			
Male	153	26	179
	85.5	14.5	66.3
	68.3	56.5	
	56.7	9.6	
Female	71	20	91
	78.0	22.0	33.7
	31.7	43.5	
	26.3	7.4	
Column Total	224	46	270
	83.0	17.0	100.0

TABLE 72

Fulfillment of Intellectual or Professional Needs,

by Age

Row pct. Col. pct. Total pct.	Yes	No	Row total
Age			
23 - 30	60	9	69
	87.0	13.0	27.1
	28.6	20.0	
	23.5	3.5	
31 - 36	62	13	75
	82.7	17.3	29.4
	29.5	28.9	
	24.3	5.1	
37 - 42	53	11	64
	82.8	17.2	25.1
	25.2	24.4	
	20.8	4.3	
43 - 60	35	12	47
	74.5	25.5	18.4
	16.7	26.7	
	13.7	4.7	
Column Total	210	45	255
	82.4	17.6	100.0

TABLE 73

Fulfillment of Intellectual or Professional Needs,

by Location of Student

Row pct. Col. pct. Total pct.	Yes	No	Row total
Other VPI&SU location	38 69.1 17.0 14.0	17 30.9 36.2 6.3	55 20.3
Blacksburg only	186 86.1 83.0 68.6	30 13.9 63.8 11.1	216 79.7
Column Total	224 82.7	47 17.3	271 100.0

requirement. As could be expected, the students who fulfilled all their degree requirements in Blacksburg said they had time for concentrated study more often than did the students who had attended another VPI&SU location. Similarly, the students who enrolled full-time for three consecutive quarters reported having this time for concentrated study more than did the students who fulfilled the residency requirement by some other option. Residency also appeared to provide opportunities for most of the respondents to utilize computer facilities. Male graduates and the younger age groups were proportionately more inclined to attribute increased availability of computer use to the time provided by the residency requirement.

The highest percentage of positive results for this research question appeared when 83.0 percent of the doctoral graduates indicated that their intellectual and professional needs were met as a result of full-time residential study. Also, the younger the student the more likely they were to report that these needs were met. Additionally, the students who came to Blacksburg to fulfill their requirements reported more affirmative responses to this item than did the students who attended another VPI&SU location. The majority of the respondents in each of these groups, however, agreed that their intellectual and professional needs were met as a result of full-time residential study.

Research Question #5

What problems do students face as a result of the residency requirement?

Items 7, 10, and 11 sought the information to provide data for this research question. The items are also discussed in terms of the crosstabulations.

Family relationship. The doctoral graduates were asked about the effect residency had on their relationship with their spouse and/or children. The data showed that 98 or 35.8 percent indicated it had no effect and 88 or 32.1 percent said residency had a negative effect on their relationship with their family. Thirty-eight or 13.9 percent had no family while studying in-residence (Table 74).

Male graduates reported a higher incidence of domestic problems associated with residency than did female graduates. However, female graduates said they did not have a spouse and/or children (57.9) percent) more often than did the male graduates (42.1 percent).

The older the graduate student, the more often they said residency had no effect on their relationship with their family. The data indicated that 28.2 percent of the 23 to 30 age group, 30.1 percent of the 31 to 36 age group, 36.9 percent of the 37 to 42 age group and 42.0 percent of the 43 to 60 age group said residency had no effect on their family relationship (Table 75). Also, as the age of the graduate increased, the fewer number of families were reported. This was indicated by the fact that 31.0 percent of the 23 to 30 age group, 11.0 percent of the 31 to 36 age group, 9.2 percent of the 37 to 42 age group, and 4.0 percent of the 43 to 60 age group said they had no spouse and/or children.

TABLE 74

Effect Residency had on Family Relationship,

by Sex

Row pct. Col. pct. Total pct.	Substan- ially	Moder- ately	Slightly	No effect	we became closer	No family	Row total
Sex							
Male	18	24	28	58	40	16	184
	9.8	13.0	15.2	31.5	21.7	8.7	67.2
	75.0	82.8	80.0	59.2	80.0	42.1	
	6.6	8.8	10.2	21.2	14.6	5.8	
Female	6	5	7	40	10	22	90
	6.7	5.6	7.8	44.4	11.1	24.4	32.8
	25.0	17.2	20.0	40.8	20.0	57.9	
	2.2	1.8	2.6	14.6	3.6	8.0	
Column Total	24 8.8	29 10.6	35 12.8	98 35.8	50 18.2	38 13.9	274 100.0

TABLE 75

Effect Residency had on Family Relationship,

by Age

Row pct. Col. pct. Total pct.	Substan- ially	Moder- ately	Slightly	No effect	We became closer	No family	Row total
Age							
23 - 30	6	6	5	20	12	22	71
	8.5	8.5	7.0	28.2	16.9	31.0	27.4
	25.0	21.4	14.3	23.0	25.5	57.9	
	2.3	2.3	1.9	7.7	4.6	8.5	
31 - 36	5	10	13	22	15	8	73
	6.8	13.7	17.8	30.1	20.5	11.0	28.2
	20.8	35.7	37.1	25.3	31.9	21.1	
	1.9	3.9	5.0	8.5	5.8	3.1	
37 - 42	8	7	12	24	8	6	65
	12.3	10.8	18.5	36.9	12.3	9.2	25.1
	33.3	25.0	34.3	27.6	17.0	15.8	
	3.1	2.7	4.6	9.3	3.1	2.3	
43 - 60	5	5	5	21	12	2	50
	10.0	10.0	10.0	42.0	24.0	4.0	19.3
	20.8	17.9	14.3	24.1	25.5	5.3	
	1.9	1.9	1.9	8.1	4.6	0.8	
Column	24	28	35	87	47	38	259
	9.3	10.8	13.5	33.6	18.1	14.7	100.0

Graduates in the VTE division reported a higher incidence of residency having no effect on their family relationship (40.3 percent) and 21.0 percent of this group reported they became closer with their families as a result of residency (Table 76). Correspondingly, 35.2 percent in AES and 29.4 percent in C & I reported residency had no effect, and 16.8 percent in AES and 20.6 percent in C & I reported residency brought them closer. While the majority of graduates did not appear to have domestic problems resulting from residency, 24 or 9.7 percent said their relationship suffered substantially, 29 or 10.5 percent said it suffered moderately, and 36 or 13.1 percent said it suffered slightly. Students who fulfilled all their degree requirements in Blacksburg had fewer domestic problems related to residency than those students who had enrolled at other VPI&SU locations. Only 5.5 percent of the Blacksburg students reported their relationship had suffered substantially, while 21.4 percent of the students who had enrolled at other VPI&SU locations reported the same (Table 77).

Decrease in income. The data also indicated that many of the doctoral students accepted a decrease in income to fulfill the residency requirement. The data indicated that 106 or 38.7 percent accepted up to a 25 percent decrease, 73 or 26.6 percent accepted a 26 to 50 percent decrease, 63 or 23.0 percent accepted a 51 to 75 percent decrease and the remaining 32 or 11.7 percent accepted more than a 75 percent decrease in income to fulfill the residency requirement (Table 78). The decreases in income accepted were fairly similar between male and female graduate students. However, as the graduate

TABLE 76

Effect Residency had on Family Relationship,

by Division

Row pct. Col. pct. Total pct.	Substan- ially	Moder- ately	Slightly	No effect	We became closer	No family	Row total
Program							
AES	20	20	24	63	30	22	179
	11.2	11.2	13.4	35.2	16.8	12.3	65.1
	83.3	69.0	66.7	64.3	60.0	57.9	
	7.3	7.3	8.7	22.9	10.9	8.0	
C & I	1	3	4	10	7	9	34
	2.9	8.8	11.8	29.4	20.6	26.5	12.4
	4.2	10.3	11.1	10.2	14.0	23.7	
	0.4	1.1	1.5	3.6	2.5	3.3	
VTE	3	6	8	25	13	7	62
	4.8	9.7	12.9	40.3	21.0	11.3	22.5
	12.5	20.7	22.2	25.5	26.0	18.4	
	1.1	2.2	2.9	9.1	4.7	2.5	
Column Total	24 8.7	29 10.5	36 13.1	98 35.6	50 18.2	38 13.8	275 100.0

TABLE 77

Effect of Residency on Family Relationship,

by Location of Student

Row pct. Col. pct. Total pct.	Substan- ially	Moder- ately	Slightly	No effect	We became closer	No family	Row total
Other VPI&SU	12	7	7	17	9	4	56
location	21.4	12.5	12.5	30.4	16.1	7.1	20.4
	50.0	24.1	19.4	17.3	18.4	10.5	
	4.4	2.6	2.6	6.2	3.3	1.5	
Blacksburg	12	22	29	81	40	34	218
	5.5	10.1	13.3	37.2	18.3	15.6	79.6
	40.0	75.9	80.6	82.7	81.6	89.5	
	4.4	8.0	10.6	29.6	14.6	12.4	
Column	24	29	36	98	49	38	274
Total	8.8	10.6	13.1	35.8	17.9	13.9	100.0

TABLE 78

Decrease in Income Accepted by Students to Fulfill Residency Requirement, by Sex

Row pct. Col. pct. Total pct.	0-25%	26-50%	51-75%	75%+	Row total
Sex					
Male	71	46	42	21	180
	39.4	25.6	23.3	11.7	65.7
	67.0	63.0	66.7	65.6	
	25.9	16.8	15.3	7.7	
Female	35	27	21	11	94
	37.2	28.7	22.3	11.7	34.3
	33.0	37.0	33.3	34.4	
	12.8	9.9	7.7	4.0	
Column Total	106	73	63	32	274
	38.7	26.6	23.0	11.7	100.0

student got older, the number of low decreases was generally higher and the number of 51 to 75 percent decreases was generally lower (Table 79). For example, the percentage of 0 to 25 percent decreases went from 30.0 percent to 39.2 percent, to 46.2 percent, to 42.9 percent at the age groups of 23 to 30, 31 to 36, 37 to 42, and 43 to 60, respectively. Additionally, the 51 to 75 percent decreases went from 28.6 percent to 28.4 percent, to 18.5 percent, to 10.2 percent from the youngest to the oldest age group.

Students enrolled in C & I accepted proportionately higher decreases in income to fulfill the residency requirement than did students in AES and VTE (Table 80). This is indicated by the fact that 48.5 percent of the C & I graduates accepted more than a 50 percent decrease in income while 38.7 percent in VTE and 30.3 percent in AES accepted the same. When the frequency of responses from students who fulfilled their requirement in Blacksburg or other VPI&SU locations was crosstabulated with decrease in income, the percentage of Blacksburg students who accepted a 51 to 75 percent decrease (25.6 percent) was more than double the percentage of students who accepted the same decrease and had enrolled in another VPI&SU location (Table 81). Finally, the graduates who were on educational leave or still working part-time at their jobs accepted a lesser decrease in income than those students who had part-time jobs (Table 82).

Financial sources. The doctoral graduates were given a list of 10 possible sources of income (Item 10) and were asked to indicate which ones were primary when they fulfilled the residency requirement.

TABLE 79

Decrease in Income Accepted by Students to Fulfill

Residency Requirement, by Age

Row pct. Col. pct. Total pct.	0-25%	26-50%	51-75%	75%+	Row total
Age					
23 - 30	21	18	20	11	70
	30.0	25.7	28.6	15.7	27.1
	20.8	26.9	34.5	34.4	
	8.1	7.0	7.8	4.3	
31 - 36	29	17	21	7	74
	39.2	23.0	28.4	9.5	28.7
	28.7	25.4	36.2	21.9	
	11.2	6.6	8.1	2.7	
37 - 42	30	15	12	8	65
	46.2	23.1	18.5	12.3	25.2
	29.7	22.4	20.7	25.0	
	11.6	5.8	4.7	3.1	
43 - 60	21	17	5	6	49
	42.9	34.7	10.2	12.2	19.0
	20.8	25.4	8.6	18.8	
	8.1	6.6	1.9	2.3	
Column Total	101 39.1	67 26.0	58 22.5	32 12.4	258 100.0

TABLE 80

Decrease in Income Accepted by Students to Fulfill

Residency Requirement, by Division

Row pct. Col. pct. Total pct.	0-25%	26-50%	51-75%	75%+	Row total
Program					
AES	77	47	31	23	178
	43.3	26.4	17.4	12.9	64.7
	72.0	64.4	49.2	71.9	
	28.0	17.1	11.3	8.4	
C & I	10	8	12	5	35
	28.6	22.9	34.3	14.3	12.7
	9.3	11.0	19.0	15.6	
	3.6	2.9	4.4	1.8	
VTE	20	18	20	4	62
	32.3	29.0	32.3	6.4	22.5
	18.7	24.7	31.7	12.5	
	7.3	6.5	7.3	1.5	
Column Total	107 38.9	73 26.5	63 22.9	32 11.6	275 100.0

TABLE 81

Decrease in Income Accepted by Students to Fulfill Residency Requirement, by Location of Student

Row pct. Col. pct. Total pct.	0-25%	26-50%	51-75%	75%+	Row total
Other VPI&SU location	27 48.2 25.2 9.8	16 28.6 21.9 5.8	7 12.5 11.1 2.5	6 10.7 18.8 2.2	56 20.4
Blacksburg only	80 36.5 74.8 29.1	57 26.0 78.1 20.7	56 25.6 88.9 20.4	26 11.9 81.3 9.5	219 79.6
Column Total	107 38.9	73 26.5	63 22.9	32 11.6	275 100.0

TABLE 82

Decrease in Income Accepted by Students to Fulfill Residency Requirement, by Employment of Student

Row pct. Col. pct. Total pct.	0-25%	26-50%	51-75%	75%+	Row total
Educational leave	67 44.4 62.6 24.4	42 27.8 57.5 15.3	27 17.9 42.9 9.8	15 9.9 46.9 5.5	151 54.9
Part-time	22 25.3 20.6 8.0	22 25.3 30.1 8.0	29 33.3 46.0 10.5	14 16.1 43.8 5.1	87 31.6
Other	18 48.6 16.8 6.5	9 24.3 12.3 3.3	7 18.9 11.1 2.5	3 8.1 9.4 1.1	37 13.5
Column Total	107 38.9	73 26.5	63 22.9	32 11.6	275 100.0

Since there were too many categories to make the crosstabulation frequencies meaningful, they were divided into two larger categories. Non-academic job, spouse's job, savings, investments, aid from family, and loans from family and friends were grouped into a category labeled personal finances. Fellowship or grant, assistantship, government or institutional loans and other sources of income such as the G.I. Bill were grouped into a category labeled outside assistance. With this collapse of categories, the data indicated that 178 or 64.0 percent of the doctoral graduates had outside assistance while they fulfilled their residency requirement (Table 83). Of the male graduates, 129 or 70.5 percent received outside assistance and 54 or 29.5 percent had personal finances. Of the female graduates, 49 or 51.6 percent received outside assistance and a similar 46 or 48.8 percent had their own personal finances. Thus, there is some indication that the type of financial assistance or primary source of income students used during residency was related to the sex of the student. One possible explanation, judging from the number of "write-ins" on the instrument, was that several of the male graduate students were on a G.I. Bill which was considered to be outside assistance. The data also indicates that the percentage of students using personal finances dropped slightly, but evenly, with the older students (Table 84). For example, 33.3 percent of the 23 to 30 age group used personal finances, 26.0 percent of the 30 to 36 age group, 20.8 percent of the 37 to 42 age group, and 19.8 percent of the 43 to 60 age group.

TABLE 83

Primary Source of Income when Fulfilling Residency Requirement, by Sex

Row pct. Col. pct. Total pct.	Personal Finance	Outside Finance	Row total
Sex			
Male	54	129	183
	29.5	70.5	65.8
	54.0	72.5	
	19.4	46.4	
Female	46	49	95
	48.4	51.6	34.2
	46.0	27.5	
	16.5	17.6	
Column Total	100	178	278
	36.0	64.0	100.0

TABLE 84

Primary Source of Income when Fulfilling Residency Requirement, by Age

Row pct. Col. pct. Total pct.	Personal Finance	Outside Finance	Row total
Age			
23 - 30	32	39	71
	45.1	54.9	27.1
	33.3	23.5	
	12.2	14.9	
31 - 36	25	50	75
	33.3	66.7	28.6
	26.0	30.1	
	9.5	19.1	
37 - 42	20	45	65
	30.8	69.2	24.8
	20.8	27.1	
	7.6	17.2	
43 - 60	19	32	51
	37.3	62.7	19.5
	19.8	19.3	
	7.3	12.2	
Column Total	96	166	262
	36.6	63.4	100.0

Summary. There was some indication that the residency requirement had an effect on graduates' relationship with their spouse and/or children. Slightly more than 32 percent reported a negative effect while approximately 18 percent said it had a positive effect on their relationship. The remaining graduates reported no effect or had neither a spouse nor children during residency.

Most of the male graduate students financed their schooling through outside assistance while the female graduates reported a fairly equal proportion of outside assistance and personal finances. Even with outside assistance and personal finances, many of the doctoral graduates reported that they had accepted a decrease in income to fulfill their residency requirement. Most of the graduates accepted up to a 25 percent decrease in income while others reported a decrease of as much as 75 to 100 percent of their income while fulfilling their residency requirement.

Additional Comments from Doctoral Graduates

The final question on the instrument asked the doctoral graduates for comments or suggestions concerning the residency requirement at VPI&SU. The graduates were encouraged to give their opinions in order that the graduate school could use them in evaluating past programs and planning for the future.

Most of the respondents did offer additional information. From reviewing the additional comments, four general types surfaced. They are: 1) comments advocating the residency requirement, 2) comments criticizing the residency requirement, 3) comments on problems created

by the residency requirement, and 4) comments recommending changes in the residency requirement. Each of these type responses are discussed with direct quotations from the questionnaires themselves.

Comments Advocating the Residency Requirement

A review of the open-ended responses showed that the overwhelming majority of the responses were in favor of the residency requirement. The graduates felt that their period in full-time residential study was of great value to their personal and professional development. As one graduate wrote, "Having gone through the experience I can tell you that I benefited tremendously from having the ability to devote full time and attention to my work and professional growth." This was a very important aspect of the residency requirement since many of the graduates initially came to VPI&SU for professional advancement in their jobs. One Educational Administration graduate wrote, "I experienced considerable growth during residency, therefore I consider it a vital part of the program." An Instructional Supervision graduate added, "Although I felt differently when I began the residency requirement, I now feel it was quite valuable and would say to please keep it as a requirement. . . . Professionally it was certainly a 'plus'." From a Vocational-Technical Education graduate came, "When my son enters the doctoral program I hope that the residency requirement is in effect. My work--and it was work--at VPI&SU was the most wonderful professional experience of my life. If the residency requirement had not been in effect, something (or much) in the nature of professional contacts, growth and opportunities may have been lost." Another

graduate added, "My experience at Tech was great. I feel better prepared than I feel my employment requires." A 1977 graduate wrote that "VPI's practices are the most enlightened of any in the State."

Several graduates felt that the three quarter requirement was necessary to obtain maximum benefits from the program. For example, one wrote, "I feel very strongly about EdD/PhD students spending at least one academic year in full time study without the demands of a full-time job." Another wrote, "I hope that VPI&SU does not get away from the three quarter residency requirement. There is no substitute for spending a year of concentrated study in a University atmosphere." Also, "A one year residency requirement was both beneficial and necessary in order to become oriented to student life. One year does not seem necessarily long in terms of time and coursework involved." Similarly, another graduate added, "I do not believe that you can immerse yourself as well in academia, professional growth through interaction, use of resources, etc. on an'out-patient' basis." A couple of graduates seemed to attribute their success in the program to the residency requirement. One said, "I worked full time for VPI&SU and honestly feel that if I was not required to meet the residency requirement, I would not have received the maximum benefits of the program." Another stated that "the most value derived from my residency centers in the fact that it forced me to get away from my job. Had I attempted to remain employed while completing final coursework and dissertation requirements, my studies would have been prolonged due to interruptions created by my position." A counseling

graduate added, "My residency was of great value to me. It was a good experience and allowed me to complete my degree much faster. I am still not sure it should be required. I'd have finished the degree eventually though not nearly as well or as professionally well grounded."

Several graduates appreciated having the time to devote to pursuing the terminal degree. As one expressed it, "I benefited considerably during my full time studies at Tech and have continued my professional associations with faculty and graduate students. It is frustrating to maintain a teaching position and take a part-time graduate load." Another Educational Administration graduate wrote, "My two years of on-campus study were great. It provided me with opportunities to change my environment and to meet new and interesting people. By changing my environment, I was able to see that I had other skills, some more important, than I thought I had." Still another Educational Administration graduate added, "If any changes in residency are made, they should be in the direction of ensuring that all doctoral students have an extended period of full-time concentrated study. I gained more from the work which I completed while in residency at Tech than at any other time during my graduate studies. If I had not had this opportunity I feel that I would have been cheated." The value of concentrated time for study was further emphasized by a graduate who wrote, "residency allowed time for more concentrated and creative study. My work would not have been as good as it was if I hadn't had the residency time." From another graduate in Educational

Administration came the comment, "I feel that the residency requirement should be maintained. Without it I personally would have had difficulty organizing and structuring my time in order to properly pursue my course of study." Finally, a true prodigy of VPI&SU wrote, "After having been a student at the university from freshman to PhD over a period of 11 years, I realize and strongly support the residency requirement."

Another important aspect of the residency requirement that was brought out by the graduates was the expanded opportunity for interaction with faculty members and other graduate students. Some of the comments follow:

> It is very important that VPI&SU retains its residency requirement since on-campus study and interpersonal/professional relationships are an important part of the graduate program.
>
> I feel the residency requirement is an integral part of the program. It promotes a more professional attitude and provides opportunities for interaction with faculty and administrative personnel. It offers an opportunity to meet and form lasting professional relationships which should prove professionally valuable and personally satisfying.
>
> As far as completing the program is concerned, I think the close contact between student and advisor and between student and fellow graduate students leads to a sharing of ideas which would otherwise be lost.
>
> I support the residency requirement at Tech. To obtain a doctorate without fulfilling the residency requirement seems somewhat like getting a degree through correspondence school. Close interaction with one's major professor and other faculty members cannot be overemphasized.
>
> Residency enabled me to have the opportunity to interact with scholars in my area of concentration and other educators who have contributed to my philosophy of education and life.

While several graduates stressed the importance of having a close working relationship with their advisors and dissertation committee members, others experienced a true sense of comraderie with their fellow graduate students. One graduate commented, "The residency requirement enables the graduate student to be in close touch with other students working towards a common goal. There is no substitute for this opportunity to share with others." An Instructional Supervision graduate added, "It should remain a requirement and strictly adhered to. The experience enabled me to feel a part of the campus community and expanded my horizons because we were all working for common goals." Another wrote, "Fortunately the interaction and new friendships with other graduate students as well as the generally inspiring climate of VPI/Blacksburg more than made up for other deficiencies." Briefly, another graduate wrote, "The residency requirement helped me to develop closer ties to VPI&SU."

Other graduates felt that the residency requirement ensured a quality program and high standards of scholarship. From an Educational Administration graduate came, "Three quarters of residency should be required in the doctoral program. This is essential not only to maintain university standards but to ensure quality work from students." Similarly, other comments were:

> The residency requirement keeps the standards high and the degrees meaningful as well as prestigious.
>
> If the program were less demanding academically--as it would be if it were possible to fulfill the requirements long distance without the standards of intellectual discourse surrounding the student full-time, the quality of the student would further deteriorate.

Several graduates warned that the "lack of the residency requirement weakens the degree" and "produces 'doctors' of education who are academically naive." There was a comment on the NOVA approach that stated, "Under no circumstances should the College of Education consider a 'NOVA' approach to the terminal degree. The external degree is absolutely worthless to the holder." Another graduate failed "to see how one could do justice to the details of a doctoral degree program in any setting other than as an on-campus full-time student." Similarly, a VTE graduate wrote, "I do not feel that a doctorate level degree can be legitimately earned without full-time access to university resources." "The lack of continuity involved with no residency requirement for students" concerned one graduate because it would be "another degradation of academic ability of VPI&SU graduates." Finally a graduate noted that "the requirement continues to be valid and rewarding. Easing off would tend to prostitute the total experience and degrees are wholesale enough as it is. More ought to be done to increase the value of assistantships and the number and value of fellowships."

Graduates recommended that the residency requirement should be fulfilled in three consecutive quarters. One PhD graduate wrote, "I feel very strongly about the benefits of being on-campus and would urge all students to do so to the maximum extent possible." However another graduate added, "I feel the residency requirement is fine as it presently is. There is no need to decrease or increase it. There are so many things to be gained from the experience that it would be unthinkable to abandon it."

To these advocates of the requirement, residency provided time to become a part of the university and to utilize library, computer and other resources to a full extent. These graduates valued the interaction they shared with faculty members and advisors, as well as with fellow graduate students. They reasoned that the residency requirement is a major ingredient of a prestigious and academically sound degree. These graduates formed friendships and professional ties that have stayed with them since receiving their doctorate. One graduate summed the value of residential study up by stating, "It is very important to the mental, intellectual and social health of a graduate student, especially a doctoral candidate."

Comments Criticizing the Residency Requirement

The graduates who were highly critical of the residency requirement felt that it was a "useless anachronism" or a "medieval notion that is out of touch with the needs of today's graduate students." Others felt that "much of the residential experience is based on jumping through hoops" and that the "only justification for it was the 'union ticket' mentality or the 'institution rites'." One Educational Administration graduate stated, "I personally think that residency is of very little importance in a doctoral program."

Others provided more specific complaints such as, "Contact with mentors was a myth. Faculty members in my department (Community College Education) wanted to make sure we were in residence but really didn't want to be bothered until they realized that the date for completion of residencies, dissertation, etc. was drawing near . . ."

The lack of interaction with faculty was a major complaint of the critics of the residency requirement. As one Community College Education graduate explained, "Interaction would have been helpful but it was not available except when an appointment was made. I found during my residency that I never saw nor met other students or faculty members other than my committee members, and I only saw them by appointment. It was a totally unsatisfactory experience." Similarly, another Community College Education graduate added, "Before moving to Blacksburg, I had been told repeatedly about the importance of living in the collegial atmosphere. Once there, wherever it existed, it eluded me. Since I was living on campus, faculty were far less concerned with me than when I had driven in from a distance for an appointment. As far as I was concerned, the benefit of residence was the 'protected time' for studying and writing." Additionally, one VTE graduate summed his experience by writing, "Residency did not enhance the quality of interaction with my colleagues; it had nothing to do with my ability to complete the program and did nothing to increase my chances for success once I finished the program."

The other major criticism was with having to leave full-time employment. On graduate stated, "The residency requirement is too strict at VPI&SU. With the job situation as it is today, an employee may not be able to leave his or her employment for such a long time and be assured of a sabbatical or finding other employment when the residency is completed." Another graduate felt that "The residency requirement imposes an extreme hardship on some students who could,

without it, receive a quality education and a degree. Some students do not complete their studies because of the residency requirement." Finally another graduate explained that, "It is possible that a 'break' of one or two years from a given position might be of more negative value to an education than other opportunities for advancement as a result of a new PhD."

Problems of the Residency Requirement

The comments in this category differed from those in the preceding category in that they were from individuals who offered somewhat more constructive criticism and from those who were not necessarily opposed to the requirement itself, but who wanted to stress the specific difficulties they encountered with full-time residential study.

Major problems that were cited in the review of the literature for doctoral students were associated with finances, family, and employment. Some of the comments follow:

> The financial impact for one married with family and with a good job is serious.
>
> For financial reasons, it is more reasonable to require a student to earn some number of course credits at Blacksburg, rather than requiring three quarters of full-time enrollment.
>
> For long term professionals who live in the Dulles area, the residency requirement is expensive and unrealistic.
>
> Attending graduate school is very difficult for a man with a family and a job since obtaining an advanced degree does not necessarily mean economic or professional advancement.
>
> It is very hard for a younger person because of family responsibilities to finance.

Some of the graduates felt that "some well-qualified professionals simply cannot leave a job to fulfill this requirement." Another graduate felt that the "residency requirement may have validity for the young, inexperienced graduate student, but for the mature professional, the residency requirement may in fact be nothing more than an additional and unnecessary burden which may discourage otherwise academically talented students." In speaking for the mature student, an Educational Administration graduate wrote, "The mature adult, who is probably a practicing educator is likely to achieve better results from his study time if he is in the surroundings of his own home. It seems counter-productive to establish constraints which require that he physically reside within 'X' miles of VPI or spend 'Y' number of hours physically present on campus."

The central on-campus problem that a few graduates reported was the lack of faculty support. Graduates complained of "poor working relationships with members of the administrative staff" and of "lack of concern on the part of the professors for what the graduate students were experiencing." Another graduate added, "Faculty members spent more time in dehumanizing students than in challenging their intellectual ability." A Northern Virginia graduate "found the support from the faculty of the N. Virginia extension to be extraordinary. During my residency, however, I found it difficult and often impossible to find VPI faculty to obtain their advice on my dissertation."

Recommendations

The recommendations made by graduates were numerous and varied. However, there were identifiable clusters of recommendations such as calls for greater flexibility, for shortening residency requirement, for additional physical locations for residential study, and for stricter or more equal enforcement of the residency requirement.

Concerning flexibility, several graduates expressed a need for "university policy that is flexible enough to recognize individual differences and student needs," and for "alternatives to the traditional residency requirement." A graduate explained, "I feel that programs should be designed as nearly as practical to the requirements of each individual. Some individuals would benefit from residency while others would not. In my case the residency requirement was justified because I was in the educational administration program and had not had experience as an administrator. The residency requirement permitted time for an internship which improved my program." On the other hand, a 51 year old community college education graduate wrote, "Universities must concentrate on cooperative arrangements with other institutions in order that adult students may complete their doctoral work away from their degree granting university."

Another graduate suggested that "Tech could do more with providing 'residency' in other parts of the state (i.e., library facilities, mobile staff, etc.)." While these graduates recognized that "residency is very important" they also felt that "some excellent graduate students find it impossible to meet the present residency requirement."

Another recommendation made by a few of the respondents was that the "residency requirement could be lessened some." The recommendation was repeated by a counseling graduate who favored "some form of intensive residency," but said "reducing the requirement to 1 or 2 quarters might be a viable alternative in view of the large number of in-service professionals enrolled."

Several graduates expressed a concern with the Blacksburg requirement. While they believed in the philosophy of full-time study, they did not believe Blacksburg to be the only place where this can be effectively accomplished. An Instructional Supervision graduate wrote, "Assuming that the student has the facilities needed to do the doctoral level work, there is not a single compelling reasons to live near Tech. The quality of the work done is more important than where the student lives while doing it." Another graduate explained that "atmosphere for academic ability is not solely a function of place, but of time, supportiveness and motivation in the environment." Similarly, one wrote, "The quality of professional guidance and collegueship is not solely determined by location on a campus."

A graduate who started in a VPI location other than Blacksburg wrote, "What appears to be a particular idiocy of the residency requirement is that it can reduce or nearly eliminate contact with the faculty members who have had major importance in developing a dissertation topic (at a location other than Blacksburg). I think the requirement of three quarters of full-time study is sound, but the requirement of residency in Blacksburg is absurd." Concerning

consortia agreements, an educational administration graduate wrote, "I feel that the period of residence was beneficial. However, I think that where there is a consortium agreement, as with Old Dominion University and VPI&SU, the residency requirement should be fulfilled at either place. Periodic visits to VPI's campus to meet with committee members should be a requirement for those who complete a residency requirement away from campus."

Finally, a very revealing comment came from a graduate who said,

> I have very mixed reactions. My year of residency almost put us into bankruptcy and nearly ruined our marriage. I'm not sure I would do it again. However, it was also a growth experience that has probably been the most valuable to me. Living in the DC Metro area, I have access to libraries, computers, universities, seminars, etc. not available in the Blacksburg area. . . . The location was not a prime factor or advantage to me.

Some of the respondents felt that the residency requirement "should be interpreted and administered the same throughout all of the Colleges in the University. . . .and that it should be enforced." It was even reported by an instructional supervision graduate that "Several students from northern Virginia fulfilled the residency requirement with an address in Blacksburg."

The library facility in Blacksburg was another source of concern among the doctoral graduates. "Do something about the library. It is perhaps the poorest for a major university in the south," came from one graduate. Another one wrote, "I hope that the library facilities have been increased both in latitude and depth of copies. It was ironic that we in northern Virginia have access to the Library of Congress, George Washington University, Georgetown University, and

other libraries, were forced to go to Blacksburg for a really meager collection."

Other recommendations from the graduate respondents include the following:

> It should be required by the graduate school that all students engaged in residency for the doctoral degree must co-sponsor a major research study before graduation; this does not include the dissertation.
>
> In my opinion, the residency requirement at VPI&SU should challenge doctoral candidates more in the areas of research and evaluation; not in the form of more courses but participation in scholarly research studies.
>
> Professional interaction and involvement on-campus should be encouraged during residency.
>
> Orientation to the whole dissertation process is very important.
>
> University and college orientation on a regular basis is needed for all full-time students.
>
> More effort should be made to involve graduate students from all Colleges in the University in some activities - at least in the Fall.
>
> I feel strongly that residency is important. However, in view of the fact that VPI&SU offers no on-campus housing for graduates, improvements in parking arrangements are badly needed.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary and conclusions of the study, along with recommendations which may improve the full-time residential experience for doctoral students and recommendations for further study.

Summary

The problem which was explored in this study was: What are the perceptions held by doctoral graduates of their academic, professional and personal experiences related to the residency requirement? Five research questions were posed to provide guidance for the collection of data for this study. They are described in detail in the summary and conclusions sections of this chapter.

The overall purpose of this study was to provide a procedure for evaluating full-time residential study in a doctoral program as perceived by graduates. Specifically, the objectives were: 1) to define the purposes and activities of the residency requirement in the College of Education at VPI&SU as articulated by the faculty and administrative staff; 2) to determine the graduates' perceptions of their academic, professional and personal experiences while fulfilling the residency requirement at VPI&SU; and 3) to compare and contrast the perceptions of the faculty and the graduates with respect to the residency requirement.

With the increase in external and non-traditional graduate degree programs in colleges and universities throughout the nation, the

traditional requirement for full-time residential study should be re-evaluated. The administrative staff and faculty at VPI&SU have shown concern for evaluating and modifying the current residency requirement. The results of this study should provide detailed information on how graduates of the College of Education perceived their residential experience. This study is significant in that it provided decision makers with information on how graduates perceived their academic, professional, and personal experiences related to the residency requirement at VPI&SU.

A review of the literature disclosed little research on student perception of the residency requirement itself. The subject was discussed indirectly in some studies while treated as a component of a larger research investigation in others.

The survey research design was used as the basis for this study. Survey research was selected because the study was designed to reveal the perceptions held by doctoral students of their experiences related to residential study. The population of the study consisted of the EdD and PhD graduates from the College of Education at VPI&SU since the Colleges' establishment in 1971. A total of 302 graduates and 22 program area leaders in the College of Education comprised the population of this study. Information for the research questions posed in Chapter One was provided through two instruments: a preliminary faculty questionnaire sent to the 22 program area leaders and a doctoral graduate questionnaire mailed to the graduates. The information collected from the program area leaders helped develop a section

of the doctoral graduate questionnaire, provided a profile of faculty attitudes concerning residency, and provided information with which to compare the graduates responses. The doctoral graduates questionnaire was designed to collect information in five areas: 1) socio-demographic information from each respondent, 2) method of fulfilling the residency requirement, 3) activities undertaken during, or as a result of, residential study, 4) opinion of purposes and activities of full-time residential study, and 5) open-ended discussion question.

An initial mailing followed by a second mailing and phone calls was conducted to gather the data for this study. A return of 92.7 percent of the total population was received.

The Statistical Package for Social Sciences was used to determine frequency and percentage distributions, means and crosstabulations (Nie et al., 1970). Data from the open-ended question were grouped in four general areas for discussion.

The graduate profile indicated that of the 280 respondents, 185 were male and 95 were female. The youngest students were from 23 to 30 years of age and the oldest were from 43 to 60; most were married and had dependent children when they fulfilled the residency requirement. Also, the majority, 82.1 percent, of the graduates fulfilled their residency requirement in Blacksburg on a full-time basis for three consecutive quarters and enrolled for coursework and dissertation hours. More of the graduates came to Blacksburg without their families than those who moved their families with them. Finally, nearly half, 131 or 46.8 percent, of the doctoral graduates said

that they had been in the professional work force for 10 years or more.

The following summaries are given relative to each research question.

Research Question #1

What purposes and activities of residency do faculty members and doctoral graduates perceive to be important?

Additional findings showed that the four purposes and activities of residency deemed most important by faculty members and doctoral graduates were: 1) a period of full-time concentrated study, 2) access to a graduate level library, 3) interaction with the major advisor, and 4) faculty-student interaction.

Other purposes and activities that were considered important to doctoral students in residence included access to computer facilities, graduate assistantships, an opportunity to live near the academic atmosphere of the university, joint research with faculty members and fellow students, and on-campus seminars and conferences.

Purposes and activities that were considered less than important to doctoral students during residency by both of the responding groups included membership in on- and off-campus professional organizations, orientation activities, graduate clubs and organizations, extra-curricular activities, and exposure to the philosophy of the university.

Research Question #2

What are the activities that comprise the residency requirement?

Most of the students, 63.9 percent, reported they had not presented a paper at a meeting of an academic or professional society, during, or as a result of, residency. Similarly, 65.9 percent of the graduate population did not prepare and submit an article for publication in an academic or professional journal during, or as a result of, residency. Female graduates presented more papers than male graduates while male graduates prepared more articles for publication.

The majority, 81.9 percent, of the graduates reported they had attended on-campus and 79.7 percent attended off-campus professional seminars and conferences while they were fulfilling their residency requirement. More women attended these seminars than men, and more VTE graduates attended than did AES or C & I graduates.

The majority, 66.1 percent, of the graduates also reported they had subscribed to new or additional journals during, or as a result of, residency. Slightly more female graduates subscribed to new professional journals than did male graduates.

When asked if they had attended orientation activities as a new post-masters student, approximately 39 percent had attended, 20 percent were aware of orientation activities but chose not to attend, and 41 percent were not aware of any activities. More students with assistantships attended than did the students who were on educational leave or working part time at another job.

Approximately 70 percent of the graduate student population did not join a graduate student club or organization while they were fulfilling their residency requirement. Of the students who did, a slightly higher percentage were female graduates and more VTE graduates joined than did AES and C & I students. The doctoral graduates did meet more often on an informal basis; most of them met informally with one another once a week or more. Female graduates reported a higher rate of informal meetings than did the male graduates. Students who enrolled for three consecutive quarters indicated a higher rate of informal meetings than did the other students.

Research Question #3

What is the relationship between faculty and students during the process of residential study?

The majority, 73.3 percent, of the doctoral graduates reported they had frequent interaction with their major advisor. Male graduates reported a proportionately higher degree, 78.1 percent, of frequent interaction than did the female graduates, 63.8 percent. More students who enrolled for three consecutive quarters reported they had frequent interaction with their advisor than did the students who attended other VPI&SU facilities.

More than 84 percent of the doctoral graduates felt there was a professor in their department to whom they could turn for advice on personal matters. This was indicated by 88 percent of the male graduates and 77.9 percent of the female graduates reporting that such advice was available to them.

Nearly one-half, 48.7 percent, of the graduates said there was a faculty member who took a special interest in helping them locate a job when they graduated. More male graduates, 51.4 percent, felt they received job location assistance than female graduates, 43.6 percent, and the 23 to 30 age group reported the highest incidence of such assistance.

Nearly 63 percent of the responding graduates thought the faculty member with whom they had the most contact regarded them as a colleague. This was reported by 67 percent of the male graduates and 58.9 percent of the female graduates. Graduates who felt they were not considered a colleague felt they were considered a student, 26.9 percent; an apprentice, 7.6 percent; or employee, 2.5 percent.

Research Question #4

In what ways do graduates perceive the residence experience as a meaningful part of their doctoral work?

The majority, 81.7 percent, of the doctoral graduates reported that residency provided time for concentrated study which they otherwise would not have had. More than 72 percent of the graduates also indicated that residency provided opportunities to utilize computer facilities which they would not have had access to elsewhere. More, 77 percent, Blacksburg students felt they had access to computer facilities than did the students who had attended another VPI&SU location, 51.8 percent.

Finally, 83 percent of the graduates indicated that their intellectual and professional needs were met as a result of full-time

residential study. Eighty-five percent of the male graduates and 78 percent of the female graduates said their intellectual and professional needs were met. The graduates in the 23 to 30 age group were more likely to indicate their needs had been met. Similarly, the students who had fulfilled all of their requirements in Blacksburg indicated their needs were met more often than did the students who had attended another VPI&SU location.

Research Question #5

What problems do students face as a result of the residency requirement?

The data showed that 35.8 percent of the graduates felt that residency had no effect on their relationship with their spouse and/or children while 32.1 percent said residency had a negative effect on their relationship. More than 18 percent indicated it strengthened their relationship and 13.9 percent had no spouse or children when they were studying in-residence. The older students and the students enrolled in VTE reported proportionately fewer domestic problems arising from residency than the rest of the population. There were more single female graduates enrolled in the College of Education than male graduates which is one indication why male graduates experienced more domestic problems during residency than did female graduates.

Many of the doctoral graduates accepted a decrease in income to fulfill the residency requirement. The data indicated that 38.7 percent accepted up to a 25 percent decrease, 26.6 percent accepted a 26 to 50 percent decrease, 23.0 percent accepted a 51 to 75 percent

decrease, and the remaining 11.7 percent accepted more than a 75 percent decrease. The older students accepted proportionately smaller decreases than younger students, and the students in the AES division accepted smaller decreases than the students in the C & I and VTE division.

More students, 64 percent, received financial assistance from outside sources such as fellowships and grants, assistantships, loans and the G.I. Bill than from personal sources such as savings, spouse's job and aid from family. Male graduates used outside sources of financial assistance, 70.5 percent, more than personal finances, 29.5 percent. Female graduates used outside sources, 51.6 percent, slightly more than personal finances, 48.4 percent.

Conclusions

From an analysis of the data collected for this research study, the following conclusions were drawn regarding doctoral students in the College of Education, VPI&SU.

1. It was concluded that doctoral students in the College of Education were generally student-oriented in the sense that they only completed the work that was necessary to obtain the degree. They did not tend to go beyond the academic requirements of their studies to present papers outside the classroom, prepare and submit articles for publication or take an active part in the activities or organizations of the College. They did, however, express an interest in attending both on- and off-campus seminars and in co-authoring papers. Therefore, while the graduates did not actively participate in many of the

activities that comprise the residency requirement, they endorsed them as important aspects of full-time residential study.

2. There appeared to be a difference in the rate of participation in the activities that comprise the residency requirement among students in each academic division. This was evidenced by the fact that students who were enrolled in the VTE division proportionately presented more papers, attended more on- and off-campus seminars, and joined graduate clubs and organizations more often than the graduates enrolled in the AES and C & I divisions. Whether these students were given more time to participate in the activities or received more encouragement from faculty members is uncertain. However, VTE students were more involved in the activities that comprise the residency requirement than were other graduate students.

3. From this study, it was concluded that the relationship between faculty and students during the process of residential study was described as mutually satisfying and rewarding. This conclusion was based on the fact that faculty members and doctoral graduates strongly endorsed the value of faculty-student interaction during residency. Additionally, the graduates reported that their interaction with faculty generally, and their major advisor specifically, was both frequent and helpful. Studies cited in the review of the literature indicated that faculty-student interaction was very important to graduate students. This study provided additional evidence that VPI&SU graduates are no different relative to their opinion of faculty-student interaction.

4. There was a difference in how female and male graduates perceived their experiences in residency. Female graduates did not feel they were an integral part of the male dominated faculty and student populations. Female graduates met proportionately less frequently with their advisors; felt less able to discuss personal problems with faculty members; and did not feel as willing to solicit assistance from faculty members in finding employment after graduation. Even though the female graduates felt they received less support from faculty members, more of them presented papers, attended on-campus seminars and conferences, subscribed to additional journals, and met informally with other graduate students than male graduates. This can be partially explained by the fact that more women were without a spouse or children when they fulfilled their residency requirement than were the men. Since women had fewer family obligations, they had more time to participate in additional activities. Also, since women didn't feel they were an integral part of the male dominated community, they attempted to compensate by participating in other activities.

5. The results of this study revealed that the residency experience was a meaningful part of doctoral study. The graduates indicated that residency provided them time to pursue uninterrupted study with library and computer facilities. As a result, doctoral graduates in the College of Education felt that their intellectual and professional needs had been met as a result of residency. This can be partially explained by the fact that students who came to Blacksburg full-time to fulfill their residency requirement indicated that the

residential experience was meaningful to them more often than did the students who had attended other VPI&SU locations. Therefore, since most of the graduates fulfilled their requirements in Blacksburg, it was reasonable to assume that there was a relationship between fulfilling the requirement in Blacksburg on a full-time basis and achieving the most benefits from the residency experience.

6. Based on the findings of this study, it was concluded that graduates had relatively few domestic problems that resulted from fulfilling the residency requirement. The literature revealed that family relationships often suffer when graduate students uproot and move, or temporarily leave their families to pursue graduate studies. Often the academic pressures and accompanying loss of income cause both emotional and economic hardships on family relationships. However, this was more the exception than the rule in this study. Few graduates had unsurmountable family problems during residency while some even reported that the time spent in residency brought them closer together.

7. From an analysis of the relationship between residency and financial concerns of the graduate student, it was concluded that doctoral graduates were willing to accept a decrease in income to fulfill the residency requirement. This is evidenced by the fact that almost two-thirds of the doctoral graduates accepted a decrease of over twenty-five percent of their income to fulfill the residency requirement. These graduates normally were granted educational leave from their jobs, with or without pay, quit their jobs and accepted an assistantship, loan, grant, or other part-time work, or lived on their

spouse's income. Regardless of how they chose to finance their education, they were willing to make the sacrifice for the post-masters degree.

8. From an analysis of the relationship between residency and age of the doctoral graduate, it was concluded that younger students tended to have more meaningful experiences in residency. The younger students made substantial financial sacrifices but also gained a great deal from their experiences during residency. The data showed that the younger students accepted a proportionately higher decrease in income and suffered a proportionately higher degree of negative effects on their relationship with their spouse and/or children during residency than did the older students. Yet the younger students presented more papers, received more job location assistance from faculty members, and stated that their professional and intellectual needs were met as a result of residency.

The younger students could only surmise what professional advancement or recognition a doctorate would bring while the older students had already been in the work force for 10 or more years and knew why it was necessary for them to have the credentials that accompany the post-masters degree.

Recommendations

The following recommendations were given which may improve the full-time residential experience for doctoral students in the College of Education, VPI&SU.

1. Faculty members and graduates both indicated that joint research was an important aspect of full-time doctoral level study. However, the findings of this study showed that little joint research had been conducted in the last six years. Faculty members and administrative staff may want to consider and discuss the possibility of increasing the amount of joint research conducted in the College of Education.

Two possible ways of increasing the research, if it is deemed necessary, is to: 1) ensure that graduate assistants hired by the College of Education conduct more research with the faculty member(s) to which they are assigned, and 2) increase the number of mini-grants that are awarded each year by the College of Education. Since students must have a co-signing faculty member to submit a proposal for a mini-grant, if more proposals are funded, more research would be conducted.

2. Co-authorship of papers for presentation and publication was mildly endorsed by faculty members and more strongly endorsed by doctoral graduates. Unfortunately, the data from this study showed there have been few papers that have been co-authored for presentation or publication. Since the doctoral graduates have expressed an interest in these activities, faculty members may want to make a special effort to ask more students to assist them in writing papers. Students periodically write papers as a joint project for classes or seminars. It may be extremely beneficial if faculty members would encourage and help them submit these papers for publication. Additionally, it may enhance the residency experience if more students

were encouraged to present papers either alone or with faculty members at professional conferences. The professional contacts and personal enrichment that comes from presenting papers may help flavor the residency experience for many students.

3. Attendance at off-campus seminars proved to be of greater value to graduate students than faculty members seemed to be aware of. Since graduates felt they benefited from off-campus seminars and conferences, more should be done to provide them every opportunity to attend, if at all possible.

4. Several students expressed a concern about the library facilities on the Blacksburg campus. The doctoral graduates generally said that access to a graduate level library was an essential aspect of full-time study, but several students expressed concern about the inadequacy of the library facility on the Blacksburg campus. Many felt that the VPI&SU library does not have a graduate level library of the size and magnitude needed to support the doctoral program. A recommendation is offered to encourage the College to conduct an investigation on the specific problems students have encountered with the library. This study may want to seek specific information on the types of materials students feel they need, the availability of these materials, and the availability of library assistance for graduate students.

5. Faculty-student interaction is one of the most important aspects of a doctoral program. It is the sharing and integrating of knowledge, and the forming of professional relationships. With the

recent decision to permit students to fulfill the residency requirement in Dulles, it is recommended that faculty and staff be careful not to let this interaction lose its frequency or quality.

6. As indicated earlier, financial constraints were one of the most serious deterrents to full-time study. It is recommended that the administrative staff of the College of Education try to find more ways of providing tuition assistance to students.

7. Event though there is not enough data from this study to recommend initiating additional orientation activities for new post-masters students, there is enough to recommend that the College of Education ascertain if there is a need for orientation programs for future post-masters students. This could be done by asking the students who are presently enrolled if they feel orientation activities would have been helpful to them when they began their doctoral studies.

8. A recommendation is made to the College of Education to be more sensitive to female students' needs and concerns. The data collected in this study provided further evidence to the information revealed in the review of the literature that indicated female graduate students feel less a part of the collegial atmosphere and are less likely to complete their degrees than male students. The literature also showed that women reported more negative experiences with graduate school faculty. The College of Education should appoint a committee of faculty members and graduate students to consider this concern and request that specific recommendations are made to provide ways in which female graduates are treated the same as male students by all faculty members.

9. This study should be duplicated to evaluate the residency requirement at the VPI/Dulles facility. The perceptions of the doctoral graduates from the College of Education in Blacksburg from 1973 to 1978 have been reported. It would be a valuable comparison to ascertain the perceptions of the Dulles graduates after the program has been established and graduated a group of doctoral graduates. This study can also be duplicated to be used as an on-going evaluation for all future doctoral graduates in the College of Education on the Blacksburg campus.

10. This study can be duplicated in other Colleges of Education to determine the perceptions of other doctoral graduates. Such information would yield a clearer picture of how the residency requirement in doctoral programs of Education is generally perceived by its students.

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APPENDIX A

FACULTY QUESTIONNAIRE

TO: Selected Faculty/Administrative Staff in the College of Education, VPI&SU

FROM: Elizabeth Stuart, Graduate Student in Adult and Continuing Education

I am presently developing a survey instrument which will be used to collect information for my doctoral dissertation on the nature of residential study in the College of Education at VPI&SU. Since the questions on the instrument will be based on those purposes and activities that faculty members feel are a necessary part of fulfilling the residency requirement for an EdD or PhD, your judgement of the value of each item is very important.

Below are three groups of purposes and activities commonly associated with residential study on a post-master's level. Please circle the number that indicates your rating of each item in terms of how important you think each one is to doctoral students who are studying in residence. Also, please list any additional activities you feel enhance the value of residential study for doctoral students.

5 means "very important"
4 means "important"
3 means "moderately important"
2 means "of little importance"
1 means "of no importance"

I. A PERIOD OF TIME FOR SCHOLARLY STUDIES AND RESEARCH

5	4	3	2	1	A period of full-time concentrated study
5	4	3	2	1	Full-time access to a graduate level library
5	4	3	2	1	Full-time access to computer facilities and other resources
5	4	3	2	1	An opportunity to combine theory and practice

5 4 3 2 1 A GTA, GRA, or Administrative Internship for "on-the-job" experiences

5 4 3 2 1 An opportunity to live near the academic atmosphere of the University

Others:

5 4 3 2 1

5 4 3 2 1

5 4 3 2 1

II. OPPORTUNITIES FOR EXTENSIVE INTERACTION WITH A COMMUNITY OF SCHOLARS

5 4 3 2 1 Frequent interaction with the major advisor

5 4 3 2 1 Membership in on/off campus professional organizations

5 4 3 2 1 Joint research with faculty members and fellow students

5 4 3 2 1 Co-authorship of papers with faculty members and fellow students

5 4 3 2 1 Attendance at on-campus professional seminars and conferences

5 4 3 2 1 Attendance at off-campus professional seminars and conferences

5 4 3 2 1 Expanded opportunities for interaction between students and professors

Others:

5 4 3 2 1

5 4 3 2 1

5 4 3 2 1

III. SOCIALIZATION INTO THE COMMUNITY OF THE UNIVERSITY

5 4 3 2 1 Orientation activities for new post-master's students

5	4	3	2	1	Graduate student clubs and organizations
5	4	3	2	1	Social interaction with faculty and administrative staff
5	4	3	2	1	Opportunities for on-campus extracurricular activities
5	4	3	2	1	Exposure to the philosophy of the University

Others:

5	4	3	2	1	
5	4	3	2	1	
5	4	3	2	1	

APPENDIX B

DOCTORAL RECIPIENTS QUESTIONNAIRE

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH

February 6, 1979

Dear

With the increase of mature adult students returning to graduate schools, and the recent emergence of external degree programs, the traditional residency requirement has become subject to re-evaluation by university faculty and administration. In an effort to provide a basis for evaluating the effects of residency, I am conducting this study to determine the perceptions held by doctoral graduates of their academic, professional and personal experiences related to full-time residential study.

Please complete the enclosed questionnaire keeping in mind that it pertains to the time you spent, in most cases in Blacksburg, as a full-time resident student. The questionnaire should not take more than five minutes of your time, but please feel free to add any comments or thoughts you may have. This dissertation is being supported by the Office of Graduate Studies and Research since the results will be used to evaluate the traditional residency requirement and plan for future post-masters degree programs. Therefore, your assistance is very important.

As you know, a high response rate is essential to an accurate and meaningful study. I have, therefore, coded the instrument only to identify non-respondents. I would appreciate having the instrument returned to me in the self-addressed stamped envelope no later than February 23, 1979.

Let me thank you in advance for your assistance in this study.

Sincerely,

Elizabeth Stuart
Graduate Student - Adult and
Continuing Education

DOCTORAL GRADUATES QUESTIONNAIRE

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Directions: Below are questions designed to determine the perceptions held by doctoral recipients of their academic, professional and personal experiences related to the residency requirement. Some of the questions seek specific biographical information while others pertain to activities involved in residential study. Please answer each question by placing an "X" in the numbered box that indicates your choice of the responses given and by filling in the blank spaces where applicable. Your anonymity is insured so please answer every question.

Part I: GENERAL INFORMATION

1. Your sex: [1] = Male [2] = Female

2. Your age when fulfilling your residency requirement?_____

3. Your marital status when fulfilling your residency requirement?

[1] = Engaged
[2] = Married
[3] = Separated
[4] = Single (never married)
[5] = Single (widowed or divorced)

4. Number of dependent children when fulfilling your residency requirement?

[1] = None
[2] = One
[3] = Two
[4] = Three or more

5. Did your spouse and/or children move to Blacksburg with you when you fulfilled your residency requirement?

[1] = Yes
[2] = No
[3] = Already lived in Blacksburg
[4] = Did not fulfill residency requirement in Blacksburg
[5] = No spouse or children

6. Were any other members of your family enrolled in VPI&SU while you were fulfilling your residency requirement? (Please specify whether undergraduate or graduate)

[1] = Spouse: Program _____
[2] = Son(s) or Daughter(s): Program_____
[3] = Other: Program_____
[4] = None

7. If married, did you feel that your relationship with your spouse and/or children suffered as a result of fulfilling your residency requirement?

[1] = Yes, substantially
[2] = Yes, moderately
[3] = Yes, slightly
[4] = Had no effect
[5] = No, we became closer
[6] = No spouse or children

8. How many years had you been in the professional work force before you decided to fulfill your residency requirement for a doctoral degree?

[1] = Three years or less
[2] = Four to six years
[3] = Seven to nine years
[4] = Ten or more years

9. What was your program at Virginia Polytechnic Institute and State University?

[1] = Adm. and Supervision of Special Educ.
[2] = Adult and Continuing Education
[3] = Career Counseling & Personnel Services
[4] = Community College Education
[5] = Educational Administration
[6] = Educational Research and Evaluation
[7] = Instructional Supervision
[8] = Vocational-Technical Education

10. Which of the following was your primary source of income when you fulfilled your residency requirement? (Check more than one if applicable)

[1] = Fellowship or grant
[2] = Assistantship
[3] = Non-academic job
[4] = Spouse's job
[5] = Savings
[6] = Investments
[7] = Aid from family
[8] = Loans from family or friends
[9] = Gov't or Institutional loans
[10] = Other

11. Did you accept a decrease in income to fulfill your residency requirement?

[1] = 0 to 25 percent decrease
[2] = 26 to 50 percent decrease
[3] = 51 to 75 percent decrease
[4] = More than a 75 percent decrease

Part II: METHOD OF FULFILLING THE RESIDENCY REQUIREMENT

12. How did you fulfill your residency requirement?

[1] = Full-time enrollment for three consecutive quarters
[2] = Full-time enrollment for two consecutive quarters and one additional quarter
[3] = Other, please explain_____

13. When fulfilling your residency requirement, did you register for:

[1] = Coursework only
[2] = Dissertation only
[3] = Coursework and Dissertation
[4] = Coursework and Internship
[5] = Dissertation and Internship
[6] = Other, please explain_____

14. Were you enrolled at any time during your doctoral program at another VPI&SU location?

[1] = Northern Virginia
[2] = Tidewater
[3] = Federal City College or U.D.C.
[4] = No
[5] = Other, please specify_____

15. Were you enrolled in an Intact Program (as part of a group that was admitted and attended most scheduled classes together)?

[1] = Yes, please specify location_____
[2] = No

16. While you were completing your residency requirement, did you: (Check more than one if applicable)

[1] = Work part time at your present job
[2] = Obtain an assistantship
[3] = Obtain a leave of absence from employment with pay
[4] = Obtain a leave of absence from employment without pay
[5] = Work part time in a non-educational job
[6] = None of the above

Part III: ACTIVITIES INVOLVED IN RESIDENTIAL STUDY

While you were studying in residence, or as a result of it, did you:

17. Present a paper at a meeting of an academic or professional society

[1] = Yes
[2] = Yes, co-presented with a faculty member and/or fellow student
[3] = No

18. Prepare and submit an article for publication in an academic or professional journal?

[1] = Yes
[2] = Yes, co-authored with a faculty member and/or fellow student

[3] = No

19. Engage in scholarly or research work beyond that required of your coursework that led to professional recognition (i.e. grant, publication, academic award, etc.)?

[1] = Yes [2] = No

20. Attend any on-campus professional seminars or conferences?

[1] = Yes [2] = No

21. Attend any off-campus professional seminars or conferences

[1] = Yes [2] = No

22. Subscribe to new or additional academic or professional journals?

[1] = Yes [2] = No

23. Did residency provide periods of time for concentrated study which you would not have otherwise had?

[1] = Yes [2] = No

24. Did residency provide opportunities for you to utilize computer facilities you would not have had access to elsewhere?

[1] = Yes [2] = No

25. Were your intellectual or professional needs met as a result of full-time residential study?

[1] = Yes [2] = No

26. Did you attend any orientation activities as a new post-masters student at VPI&SU?

[1] = Yes, formal introduction to Tech [3] = No, though I was aware of them

[2] = Yes, for GTA, GRA, or AI's only [4] = No, I was not aware of any

27. Did you belong to any graduate student clubs or organizations while fulfilling your residency requirement?

[1] = Yes [2] = No

28. On the average, how often did you meet informally (meals, parties, etc.) either on or off campus with other graduate sutdents,

[1] = Once a week or more [4] = A few times a year

[2] = Two or three times a month [5] = Once a year or less

[3] = About once a month

29. How would you describe the frequency of interaction you had with your major advisor?

[1] = Frequent [3] = Seldom

[2] = Moderate

30. Was there a faculty member in your department you felt free to turn to for advice on personal matters?

[1] = Yes [2] = No

31. Was there a faculty member in your department who took a special interest in helping you get a job when you graduated?

[1] = Yes [2] = No

32. In your opinion, did the faculty member with whom you had the most contact regard you primarily as:

[1] = A student [3] = An apprentice

[2] = An employee [4] = A colleague

33. What academic year did you receive your EdD or PhD?

[1] = 1972-73 [4] = 1975-76

[2] = 1973-74 [5] = 1976-77

[3] = 1974-75 [6] = 1977-78

Part IV: OPINION OF PURPOSES AND ACTIVITIES

Directions: Below is a list of purposes and activities commonly associated with residential study on a post-masters level. Please circle the number which indicates your rating of each item in terms of how important you think each one is to doctoral students.

5 = very important
4 = important
3 = moderately important
2 = of little importance
1 = of no importance

5	4	3	2	1	A period of full-time concentrated study
5	4	3	2	1	Access to a graduate level library
5	4	3	2	1	Access to computer facilities -
5	4	3	2	1	GTA, GRA or Administrative Internship for on-the-job experiences
5	4	3	2	1	An opportunity to live near the academic atmosphere of the University
5	4	3	2	1	Interaction with your major advisor
5	4	3	2	1	Membership in on and off campus professional organizations
5	4	3	2	1	Joint research with faculty members and/or fellow students
5	4	3	2	1	Co-authorship of papers with faculty members and/or fellow students
5	4	3	2	1	Attendance at on-campus professional seminars and conferences
5	4	3	2	1	Attendance at off-campus professional seminars and conferences
5	4	3	2	1	Opportunities for interaction between faculty members and students
5	4	3	2	1	Orientation activities for new post-masters students
5	4	3	2	1	Graduate student clubs and organizations
5	4	3	2	1	Social interaction with faculty and administrative staff
5	4	3	2	1	Opportunities for on-campus extracurricular activities
5	4	3	2	1	Exposure to the philosophy of the University

Part V: OPEN-ENDED QUESTION

Please feel free, in the space below, to give us any comments or suggestions you may have about the residency requirement at VPI&SU. Your opinion is very important to us in evaluating the past and planning for the future. Thank you very much.

Ms. Elizabeth Stuart
AES Division/Education
207 University City Office Bldg.
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia 24061

APPENDIX C

COVER LETTER FOR FOLLOW-UP QUESTIONNAIRE

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH

February 28, 1979

A couple of weeks ago I wrote to you and asked you to complete and return a questionnaire on the residency requirement for the doctoral degree at Virginia Polytechnic Institute and State University. Although the initial response was high, I am still anxious to hear from those of you who have not yet responded.

In case you have misplaced the questionnaire, I am enclosing another one for your convenience. Please complete this instrument when you have a few minutes and return it to me in the enclosed self-addressed envelope no later than March 12, 1979. If you have already mailed the instrument, please disregard this reminder and accept my sincere appreciation for helping to make this a well documented study.

If you have not completed your doctoral degree, please so indicate on the front of the questionnaire and return it to me unanswered in the enclosed envelope. As I said before, the questionnaires are coded only for the purpose of identifying non-respondents.

Thank you for your assistance in this study.

Sincerely,

Elizabeth Stuart
Graduate Student- Adult and
Continuing Education

The vita has been removed from the scanned document

AN ANALYSIS OF THE RESIDENCY REQUIREMENT FOR THE DOCTORAL DEGREE IN THE COLLEGE OF EDUCATION, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

by

Elizabeth Stuart

(ABSTRACT)

The purpose of this study was to determine the perceptions held by doctoral recipients of their academic, professional and personal experiences related to the residency requirements from 1971 when the College of Education was established to 1978.

Two questionnaires were developed to provide information on the purposes and activities commonly associated with residency, the activities that comprise the residency requirement, the faculty student relationship during residency, the value of residency as perceived by doctoral graduates, and the problems encountered by students during residency.

This descriptive study addressed two populations at VPI&SU. A preliminary questionnaire was sent to 22 faculty members and a detailed questionnaire was mailed to 302 graduates of the College of Education, VPI&SU. The data were tabulated and reported in frequency distributions and crosstabulations.

Analysis of the research findings of this study led to the following conclusions about the residency requirement in the doctoral program:

1. Doctoral graduates in the College of Education were generally student-oriented in the sense that they only completed the work that was necessary to obtain the degree.

2. There was a difference in the rate of participation in the activities that comprise the residency requirements among students by each academic division.

3. The relationship between faculty and students during the process of residential study was mutually satisfying and rewarding.

4. Female graduates did not feel they were an integral part of the male dominated faculty and student populations.

5. The residency experience was perceived to be a very meaningful part of doctoral study by the doctoral graduates.

6. Graduates reported relatively few problems with their relationship with their spouse and/or children during residency.

7. Doctoral graduates were willing to accept a decrease in income to fulfill the residency requirement.

8. Younger graduates tended to feel they sacrificed more but gained more professionally and intellectually than older students during residency.