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**The attributes, teaching effectiveness, and educational
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colleges**

Franklin, Joseph W., Ed.D.

East Tennessee State University, 1994

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**300 N. Zeeb Rd.
Ann Arbor, MI 48106**

**The Attributes, Teaching Effectiveness, and Educational Commitment of
Part-Time Faculty in North Carolina
Community Colleges**

A Dissertation

Presented to

**the Faculty of the Department of Educational Leadership and Policy Analysis
East Tennessee State University**

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

by

Joseph W. Franklin

May 1994

APPROVAL

This is to certify that the Graduate Committee of

Joseph W. Franklin

met on the

Second day of May, 1994.

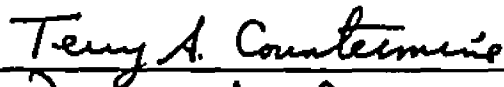
The committee read and examined his dissertation, supervised his defense of it in an oral examination, and decided to recommend that his study be submitted to the Graduate Council and the Associate Vice-President for Research and Dean of the Graduate School, in partial fulfillment of the requirements for the degree of Doctorate of Education.

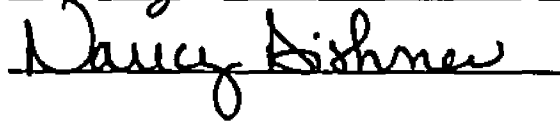


Chairman, Graduate Committee









Signed on behalf of the Graduate Council



Associate Vice-President for Research and
Dean, School of Graduate Studies

ABSTRACT

**The Attributes, Teaching Effectiveness, and Educational Commitment of
Part-Time Faculty in North Carolina
Community Colleges**

by

Joseph W. Franklin

This study evaluated the attributes, teaching effectiveness and educational commitment of part-time faculty in enrollment-funded community colleges. The Student Instructional Rating instrument was used to measure student perceptions of instructors in the community college. Twenty four community colleges were randomly selected from North Carolina. Within each college, four full-time and four part-time faculty were randomly selected to participate in the study. Attributes of part-time faculty were compared to attributes of full-time faculty. Teaching effectiveness was assessed from dimensions on the Student Instructional Rating instrument. Various dimensions on the SIR including Faculty/Student Interaction, Overall Quality of the Course, Course Difficulty, and Lectures were used to evaluate instructional effectiveness. A regression model was used to evaluate the attributes of teaching effectiveness for both full-time and part-time faculty and the slopes of regression coefficients were evaluated to determine how effective part-time instruction differed from effective full-time instruction.

Part-time faculty were perceived as effective when compared to their full-time counterpart on the dimensions of Faculty/Student Interaction. Other demographic attributes of part-time faculty were evaluated with no significant difference between

full-time and part-time faculty. However, full-time faculty were perceived more effective on Overall Quality of the Course, Lectures, Textbooks, and Reading Assignments. Part-time faculty commitment to non-instructional tasks was assessed and the implications for teaching effectiveness were examined. This study also discussed the shift in instructional workloads from part-time to full-time faculty as the number of part-time faculty increase.

IRB Number 01
Assurance Number M1194

IRB FORM 108

PROTOCOL NO. 93-027s

**EAST TENNESSEE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD**

PROJECT TITLE: The Attributes, Teaching Effectiveness, and Educational Commitment of Part-Time Faculty in North Carolina Community Colleges.

PRINCIPAL INVESTIGATOR: Joseph W. Franklin

The Institutional Review Board has reviewed the above-titled project on October 22, 1993 with respect to the rights and safety of human subjects, including matters of informed consent and protection of subject confidentiality, and finds the project acceptable to the Board.



Anthony J. DeLucia
Chairman, IRB

DEDICATION

Zenna Halsey Franklin and J. Warren Franklin have provided relentless encouragement and inspiration for this and many other projects. This study is dedicated to my parents.

ACKNOWLEDGMENT

The author wishes to thank Dr. W. Hal Knight, Chairperson of the doctoral committee, for his leadership and support throughout this project. His vision and encouragement provided the inspiration for the design and implementation of this study. Dr. Russell West assisted the researcher with many statistical questions and provided numerous hours for technical support. Special thanks is extended to Dr. Terry Counterline whose assistance with computer questions was extremely valuable. Dr. Donn Gresso and Dr. Nancy Dishner provided assistance, critical review, and encouragement.

Sharon Barnett provided assistance with many overwhelming tasks. Her dedication to the Educational Leadership and Policy Analysis Department is appreciated by this researcher and many other graduate students who have benefitted from her organizational skills and her dedication to students.

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CHAPTER 1

Introduction

*In coming to understand anything we are rejecting the facts
as they are for us in favour of the facts as they are
(Lewis, 1961, 137-138).*

According to Brint and Karabel (1989), the community college "has been one of the greatest success stories in the history of American higher education" (p. 9). Spawned by the 1947 President's Commission on Higher Education, America's public community colleges have grown rapidly from the late 1940s through the early 1990s (Richardson, 1992). Part-time faculty have been instrumental in this growth process. They have enabled administrators to respond quickly and efficiently to staffing needs throughout the history of the community college movement (Galbraith & Shedd, 1990).

The number of part-time faculty increased steadily during the twenty-five year period following the Truman Commission's initiative. By 1974 the number of part-time instructors equaled the number of full-time instructors nationwide (Cohen & Brawer, 1982). Today, the number of part-time faculty has stabilized at approximately 60% of the instructional force (Cain, 1989; McGuire, 1993).

New concerns over the growing dependence on part-time faculty were articulated in a report by the American Association of University Professors (AAUP) (1992). Noting the high ratios of part-time faculty in postsecondary education, the AAUP argued that part-time faculty were usually excluded from curriculum planning and they were not evaluated as thoroughly as full-time faculty. Further, they were more likely to teach lower level introductory courses (Mooney, 1992).

Responding to the claim that part-time instructors provide administrators with needed staffing flexibility, the AAUP report claims that full-time faculty are better teachers. Full-time faculty are more available to students, they are more familiar with the institution, and they are likely to have better access to instructional facilities.

The AAUP also asserted that part-time faculty represented a threat to full-time tenured faculty. Non-tenured part-time faculty provided administrators with an alternative to the employment and promotion of full-time faculty (Mooney, 1992; Mangan, 1991). This practice usurped the opportunity of full-time faculty for promotion and tenure (AAUP, 1992).

Further, Ernst Benjamin, general secretary of the AAUP, argued that the growing dependence on part-time instructors at community colleges is detrimental to minority students. Because more minority students attend community colleges than four-year institutions, they are exposed to part-time instructors more frequently. Therefore, the incidence of part-time instruction falls more heavily on minority and low-income students (AAUP, 1992).

In an attempt to control the employment of part-time faculty, the AAUP recommended that the number of part-time faculty should be limited to 15% of the total instructional population. Further, the report also suggested that part-time faculty be given better pay and opportunities to migrate to tenured, full-time positions (AAUP, 1992).

Opposition to the growing dependence upon part-time faculty was expressed by Mangan (1991) in the Chronicle of Higher Education.

That trend, most evident in two-year colleges, has angered many faculty groups, which argue that part-timers are being exploited to help colleges balance their budgets. Not only are they paid less than their full-time counterparts, but they generally receive few benefits and have little or no voice in policy making or faculty governance (p. A9).

Although the concern over part-time faculty proliferation continues (Mooney, 1992), there is little evidence to suggest any change in the supervision or the administration of part-time faculty. In the majority of cases, economic considerations take precedence over instructional quality (AAUP, 1992).

FTE-Based Funding in North Carolina Community Colleges

National trends of part-time faculty employment are reflected in state-administered community college systems. Specifically, North Carolina community colleges are funded according to enrollment or full-time equivalents (North Carolina Department of Community Colleges [NCDCC], 1991). Each full-time equivalent (FTE) represents incremental revenue to the host community college. Since salaries comprise 80% of a typical operating budget, hiring more part-time faculty is an effective way to minimize operating costs (Meisinger & Dubeck, 1984).

Due to their economic attractiveness, part-time faculty are employed extensively throughout the North Carolina Community College system. During the 1992 academic year 4,618 or 54.7% part-time faculty were employed compared to 3,825 or 45.3% full-time faculty for the same year (Nagy, 1993a). Part-time faculty taught in all

disciplines allowing North Carolina two-year colleges to respond to fluctuations in enrollment and provide dynamic program offerings (NCDCC, 1991).

Statement of the Problem

FTE-based funding systems provide incentives for growing enrollment and large ratios of adjunct instructors (Carson & Deming, 1990; Meisinger & Dubeck, 1984; Parsons, 1985). This practice subordinates the issue of instructional effectiveness while emphasizing student recruitment (Spinetta, 1990).

Non-academic motives are prevalent in community college administration. Enrollment management is used to maintain funding levels and part-time faculty are employed to minimize personnel cost. Consequently, there is a need to determine those factors that are associated with effective part-time instruction in the community college. Therefore, this study will evaluate the issue of part-time instructor effectiveness in an FTE-funded college system. The following subproblems will be addressed:

1. What are the attributes of part-time faculty in North Carolina community colleges?
2. How effective are part-time faculty when compared to their full-time counterpart?
3. What attributes are associated with effective part-time faculty instruction?
4. How involved are part-time faculty in curriculum development, policy making and institutional planning, determining course content and determining the criteria for instructor evaluation?
5. Are the attributes of effective part-time instructors the same as the attributes of effective full-time instructors?

Purpose of the Study

The purpose of this study is to evaluate part-time instructor effectiveness. This study will also review the criticisms levied at part-time faculty and determine if these criticisms are covariates with effective instruction. The identification of effective teaching attributes will provide better instructor recruitment, selection, and evaluation of part-time instructors in an FTE-based funding system.

Hypotheses

The following hypotheses were derived from the research problems listed above.

All hypotheses were tested at the .05 alpha level of significance.

Hypothesis 1: There is no difference between the perceived Teaching Effectiveness of part-time and full-time community college faculty.

Hypothesis 2: There is no difference in the Overall Quality of the Course between part-time and full-time faculty.

Hypothesis 3: There is no difference in the Class Discussion of part-time and full-time faculty.

Hypothesis 4: There is no difference in the Lectures of part-time and full-time faculty.

Hypothesis 5: There is no difference in the Reading Assignments of part-time and full-time faculty.

Hypothesis 6: There is no difference in the perceived Course Difficulty of part-time and full-time faculty.

Hypothesis 7: There is no difference in the Examinations of part-time and full-time faculty.

Hypothesis 8: There is no difference in the Value of the Course between part-time and full-time faculty.

Hypothesis 9: There is no difference in the Quality of Instruction between part-time and full-time faculty.

Hypothesis 10: There is no difference in the Laboratory Exercises of part-time and full-time faculty.

Hypothesis 11: There is no difference in the Textbooks of classes taught by part-time and full-time faculty.

Hypothesis 12: Part-time instructors with other primary occupations are perceived to be more effective than part-time instructors without other primary occupations.

Hypothesis 13: Part-time instructors with discipline-related work experience are perceived to be more effective by their students than part-time instructors without discipline-related work experience.

Hypothesis 14: Part-time instructors with professional teaching preparation are perceived as more effective than part-time instructors without professional teaching preparation.

Hypothesis 15: Part-time instructor effectiveness is positively related to the number of years teaching experience.

Hypothesis 16: Part-time instructors with regularly scheduled office hours are perceived as more effective than part-time instructors without regularly scheduled office hours.

Hypothesis 17: Part-time instructors with clerical assistance are perceived to be more effective than part-time instructors without clerical assistance.

Hypothesis 18: Part-time instructor effectiveness is positively related to the number of hours preparation for the class.

Hypothesis 19: Part-time instructors who participate in policy making are perceived as more effective than part-time instructors who do not participate in policy making.

Hypothesis 20: Part-time instructors who participate in curriculum development are perceived as more effective than part-time instructors who do not participate in curriculum development.

Hypothesis 21: Part-time instructors who participate in institutional planning are perceived as more effective than part-time instructors who do not participate in institutional planning.

Hypothesis 22: Part-time instructors who have input in course content are more effective than part-time instructors who do not have input into course content.

Hypothesis 23: Part-time instructors who have input in determining the criteria for student evaluations are more effective than part-time instructors who do not have input into determining criteria for student evaluations.

Hypothesis 24: Attributes of effective part-time instruction including: teaching preparation, clerical assistance, access to computing facilities, non-instructional hours on campus, keeping regularly scheduled office hours and teaching experience, are no different for full-time and part-time instructors.

Significance of the Problem

Managing a successful curriculum involves many administrative duties including curriculum development, institutional planning, policy making, student advising, and a variety of related tasks. However, part-time instructors rarely participate in these out-of-class activities. Therefore, the growing number of part-time faculty in FTE-based funding systems shifts the administrative burden to a proportionally smaller number of full-time faculty. As the ratio of part-time to full-time faculty increases, the workload of full-time faculty also increases. Galbraith and Shedd (1990) stated, "When an instructor is paid only for his/her physical presence in the classroom, it negates professional growth, class preparation, and defines them (part-time faculty) as worthless" (p. 8).

Contrary to a growing body of literature criticizing the employment of part-time faculty, the economies of part-time faculty employment continue to influence staffing decisions. As stated by Galbraith and Shedd (1990) "In far too many instances, teaching assignments are given to people not equal to the task" (p. 8). As part-time faculty continue to grow in number, attributes of teaching effectiveness must be identified and incorporated into recruitment, selection and placement strategies of part-time faculty (Galbraith & Shedd, 1990).

Community college funding procedures are partially responsible for the employment of large numbers of part-time instructors (Meisinger & Dubeck, 1984, p 185). Formula budgeting is an accounting procedure for estimating college needs through one or more aggregates such as enrollment or full-time equivalents (FTEs). FTE-based funding systems compensate each community college according to the

enrollment generated by the college. Unlike performance based systems, FTE-based systems consider enrollment as the primary criteria for school funding. Administrators in FTE-based systems experience considerable pressure to reach enrollment goals. These pressures affect the administrative decision making process and ultimately the employment of faculty (Meisinger & Dubeck, 1984). Therefore, this study will evaluate the effectiveness of part-time faculty in an FTE-based funding system.

Limitations

The evaluation of instructor effectiveness is difficult to measure. Because community college instruction is primarily the responsibility of the state, part-time faculty are employed under different assumptions in each state system. Further, community college nomenclature varies from one state to another with many nuances in the data collection and reporting procedures. Problems of heterogeneity were controlled by evaluating part-time instructor effectiveness within the boundaries of one state community college system. The limitations of this design include the following:

1. The North Carolina Community College System was selected because it is an FTE-based funding system. Performance-based systems were excluded from the study to control for performance-based influences on administrative hiring policies.
2. The study will evaluate teaching effectiveness in postsecondary curriculum courses. Continuing education and adult basic education courses were not be included in the study.

3. **Teaching Effectiveness** was evaluated by student ratings of instruction using the **Student Instructional Rating (SIR) Instrument**. The association between student achievement and overall ratings of instructors has been evaluated by Cohen (1981), Law (1988), Feldman (1989) and Centra (1976, 1992). Further discussion is provided in Chapter 2.
4. The relationship between grade expectancy and instructor evaluations (Centra, & Creech, 1976; Arnett, Arnold, & Cochran, 1989) was evaluated. Due to a modest Pearson Product Moment Coefficient of .03, statistical controls for grade expectancy were not implemented.

Definitions

The following definitions will be used throughout this study:

College Transfer--a two-year program of study with a recognized articulation path to one or more four-year colleges or universities. Degree offerings include Associate of Arts, Associate of Fine Arts and Associate of Science. "Students must take a required complement of liberal arts courses including courses in English, the humanities, mathematics, science and social sciences" (NCDCC, 1993, p. vii).

Communication--A measure of the instructor's ability to use challenging questions, interesting discussion and illustrations to clarify course material (Centra, 1992).

Course Organization and Planning--A factor derived from the SIR instrument in Centra's (1973, 1992) analysis. It measures the realization of course objectives as perceived by students. According to Centra (1992), Course Organization and

Planning describes "The extent to which teachers are perceived by students as well-organized; how well they prepare for each class, summarize major points in lectures or discussions, and make their instructional objectives clear to students" (p. 9).

Course Difficulty--A factor on the SIR Instrument indicating the perceived difficulty, pace and amount of work associated with a course.

Faculty-Student Interaction--A factor on the SIR instrument, sometimes referred to as Teacher-Student Relationship, that measures the instructor's concern for student progress and the awareness of the student's need for assistance. According to Centra (1992), Faculty/Student Interaction is the degree to which students felt free to ask questions and the degree to which the instructor was receptive to other opinions.

Full-time Faculty--An instructor contracted for a nine to twelve-month contract . This employee is entitled to all the fringe benefits provided by the college for full-time service (i.e., retirement, insurance, paid vacation and holidays, and other similar benefits). Full-time faculty also have non-teaching duties such as student advising, curriculum development, and participation on institutional committees.

Institutional Commitment--a composite measure of faculty participation in college policy-making, curricula planning and decision making.

Lectures--An SIR factor that measures the perceived effectiveness of a teacher's lectures.

Non Instructional Hours on Campus--The average number of hours per week an instructor is available for student interaction outside of the classroom. This item measures instructor involvement in non-instructional activities with students.

Part-time Faculty-- A temporary or hourly paid teacher.

Pedagogical Deliverables--Course handouts and supplemental materials provided by the instructor for a specific course.

Policy Making--A measure of instructor involvement in policy decisions at the department, division or college level.

Professional Teacher Preparation--a variable derived from the Faculty Demographic Questionnaire (FDQ) that measures the instructor's formal training in education.

Overall Quality of the Course--an SIR dimension measuring student perceptions of overall course quality including valuations of exams, textbooks, instruction, and other deliverables.

Quality of instruction--An SIR item [39] measuring the instructor's presentation independent of the student's overall perception about the course.

Reading Assignments--An SIR factor that measures student evaluations of textbooks and supplemental reading assignments.

Teaching Experience--The number of years of experience in a postsecondary environment. One year of teaching experience is defined as three to four quarters, or two semesters, of full-time instruction in a community college or a college or a university.

Teaching Effectiveness--a construct measuring the achievement of students in a given class resulting from the pedagogical methods of the instructor. Teaching Effectiveness is defined by the SIR scale Faculty/Student Interaction. Broader scales associated with effective teaching include Overall Quality of the Course, Course Difficulty, and Lectures. Faculty/Student Interaction demonstrated the highest content validity with peer evaluations and teacher portfolios (Centra, 1992).

Technical Programs--curriculum programs that prepare students for entry-level employment (NCDCC, 1991).

Tests and Examinations--A factor derived from the SIR instrument to evaluate the fairness of the instructor's grading and the instructor's assignments. This factor rates the applicability of exam questions to overall course content (Centra, 1973).

Unduplicated Headcount--the total number of students enrolled in all courses during the academic year counting each student only once (NCDCC, 1991).

Vocational Programs--curriculum programs that emphasize trade and craftsman skills. Vocational students take a minimum of 64 quarter credit hours of academic preparation before receiving a diploma (NCDCC, 1991).

Work Experience--The number of years work experience in a discipline-related field. This item is measured on the FDQ instrument. It determines the instructor's involvement and background as a discipline-related practitioner.

Overview of the Study

Chapter 1 includes an introduction to the problem of part-time instructor effectiveness, the significance of the problem, the stated hypotheses, limitations of the study, a definition of terms, and an overview of the study.

Chapter 2 summarizes significant research on part-time faculty employment in the community college. Research on student ratings of instruction and student achievement is also discussed.

Chapter 3 discusses the population and sample of the study along with the reliability and validity of the SIR Instrument. The methodology used to evaluate part-time instructor effectiveness is also discussed.

Chapter 4 presents the operative hypotheses along with an accompanying statistical analysis of each question. A brief interpretation of each hypothesis is presented.

Chapter 5 provides a summary of the study's relevant findings. Conclusions are presented along with recommendations for further research.

CHAPTER 2

Review of the Literature

Introduction

This chapter summarizes the literature on part-time faculty employment in the community college. The relationship between student ratings of instruction and student achievement is also discussed.

Part-Time Faculty

The dependence of community colleges upon part-time faculty has generated considerable debate over the merits of part-time faculty effectiveness. Specifically, advocates of part-time faculty (Abel, 1976; Cottingham, 1981; McGuire, 1992) have stressed the benefits of a talented population of instructors offering staffing advantages to community college administrators. Conversely, others (Bender & Hammons, 1972; Bender & Breuder, 1973; Friedlander, 1980; Patschke, 1989; Galbraith & Shedd, 1990; Goldberg, 1990; Stokley, 1990) have argued that many problems are associated with part-time faculty. These problems include the lack of adequate supervision, staff development, office space, clerical assistance, and other critical support functions.

Others (Eliason, 1980; Parsons, 1980; Conrad & Hammond, 1982; Bonhem, 1982; Rabalais & Perritt, 1983; Maguire, 1983-1984; Cain, 1989; Kinnaman, 1990; Galbraith & Shedd, 1990; McGuire, 1992; Richardson, 1992) have argued that part-time faculty were

essential to the community college system; therefore, better effort should be made to integrate part-time faculty into the college environment.

Historically, part-time faculty have been an integral component of the community college instructional staff. Cohen and Brawer (1982) stated, "They were willing to teach at odd times and locations. . . . Their compensation per class was between one-third and two-thirds as much as the institution would have to pay a full-timer" (p. 70). Since, their employment was temporary, they did not represent the long-term fiscal burden associated with full-time faculty (Samuel, 1991).

Many part-time faculty were employed in discipline-related occupations, their involvement in the community college classroom prepared students for immediate employment in similar industries. In many communities, part-time instructors were also the employers of community college graduates. The classroom provided a unique opportunity for the trainee to meet the industry practitioner. Part-time faculty possessed the expertise and skills necessary to train students in employable technologies. This interaction with part-time faculty created beneficial relationships for community college students and local employers (Cottingham, 1981).

Although attractive to administrators, part-time faculty have been the subject of a growing body of negative literature (Spinetta, 1990; Samuel, 1991; Carson and Demming, 1990; Kinnaman, 1990). Critics of the community college claimed that part-time faculty were less effective than their full-time counterpart (Samuel, 1991).

In a recent study of instructional development needs, Galbraith & Shedd (1990) stated that over 53% of part-time community college faculty had no training in adult

education, 63% had no formal teacher training of any type. Further, 53% of all part-time faculty had less than five years teaching experience in higher education.

Spinetta (1990) summarized the findings of several studies on part-time staffing, by stating, "The high percentage of part-time faculty is considered potentially the most serious concern underlying the quality of instruction" (p. 44). According to Bonham (1982), temporary faculty can not be inserted into the community college like "workers on a production line" (p. 10). Rather, part-time faculty should be integrated into the academic environment of the college.

Historically, critics have claimed that part-time faculty were treated differently than full-time faculty. Because part-time faculty were employed for the short-run, administrators have not provided adequate staff development opportunities and clerical support. Part-time faculty were unlikely to have office space, or hold regular office hours. Further, they have little contact with students except during formal class time (Friedlander, 1980).

More recently, the issue of excessive part-time faculty employment was addressed by the Southern Association of Colleges and Schools (SACS) in the 1992 Criteria for Accreditation. Without specifying quotas, SACS emphasized the need for an adequate balance between full-time and part-time faculty:

The number of full-time faculty members must be adequate to provide effective teaching, advising, and scholarly or creative activity, as well as appropriate to participate in curriculum development, policy making, and institutional planning and governance.

the number of part-time faculty members must be properly controlled (1992, p. 40).

According to SACS, part-time faculty must meet the same hiring standards as full-time faculty.

Since the inception of the community college, part-time faculty have been integral to the instructional process. Critics noted that part-time faculty were less likely to have the same degrees held by their full-time counterparts, they were not included in curriculum decisions and they were less likely to be evaluated by students or administrators (Friedlander, 1980).

Other early studies were more complimentary toward part-time faculty employment in the community college. Bender and Breuder (1973) found that part-time faculty qualifications compared favorably with the qualifications of full-time faculty. Additionally, most part-time faculty had impressive work experience in a related teaching discipline. Other proponents addressed the merits of part-time instructors and the many advantages they offered community college administrators such as their knowledge of the subject and their contact with industry (Abel, 1976; Cottingham, 1981).

In the late 1970s new attention was directed toward the community college as the number of part-time instructors exceeded the number of full-time instructors. Critics questioned the prudence of large ratios of part-time faculty (Bender & Hammons, 1972; Friedlander, 1980). The necessity of staff development for part-time faculty gained support among community college administrators (Harris, 1980).

Notably, Moe (1975) found that many staff development activities were directed toward the orientation of part-time faculty to college policy and not toward helping them become more effective in the classroom. Addressing the same problem, Parsons (1980) recommended a five-phase model for part-time faculty development which included recruitment, orientation, communication, support services and evaluation.

These early critics of part-time faculty have also questioned the adequacy of part-time faculty remuneration. Several studies emphasized the exploitation of part-time faculty by noting the disparity of their compensation compared to full-time faculty. Historically, part-time faculty have been paid significantly less than full-time faculty. Parsons (1980) noted the disparity of part-time faculty pay and the economic incentives they offered cost-conscious administrators.

Other evidence of inequality was reported in many community college personnel offices. In a related study Bender and Breuder (1973) evaluated the personnel function of part-time faculty recruitment. They found that few institutions had appropriate procedures for the recruitment, selection, orientation, training and supervision of part-time faculty.

In a landmark study of part-time community college faculty, Friedlander (1980) reported many disparities between full-time and part-time faculty in a national survey of community college instructors. Specifically, Friedlander summarized the findings of research conducted by the Center for the Study of Community Colleges. Analyzing the values, attitudes and behaviors of part-time faculty in the community college, Friedlander found that part-time faculty were generally less qualified than their full-time counterpart in

the categories of teaching experience and academic preparation. Further, part-time instructors read fewer scholarly journals, and required less work from their students. As stated by Friedlander:

The findings . . . demonstrate that the part-timers differed from full-timers on most of the measures related to instructional practices. Specifically, when compared to their full-time counterparts, part-time instructors were found to have less teaching experience, to have taught fewer years at their current institution, and to hold lower academic credentials. The adjunct instructor also differed from the full-timer in that he had less choice in the selection of materials to be used in his course, assigned fewer pages to read, used less instructional media, recommended or required students to attend fewer out-of-class activities, and placed less emphasis on written assignments in determining student grades. In addition, part-timers were less aware of campus activities and events, were less likely to have access to or to use instructional support services, were less likely to have out-of-class contacts with student, colleagues, or administrators, and were likely to have less determinations in such matters as departmental affairs, course content, curriculum development and textbook selection (1980, p. 34).

The debate over part-time faculty effectiveness continued during the 1980s. Eliason (1980) argued favorably for the use of part-time faculty based upon the large number of part-time students in the community college and the flexibility required in staffing adult education programs. "The adult who turns to the two-year college for skills and/or credentials needs instant service--community colleges must be ready to provide

work skills to match the changing requirements of the job market. A static faculty cannot provide this" (p. 9). Other proponents of part-time faculty (Greenwood, 1980; Decker, 1980; Desantis, 1980; Albert, 1980) argued for their inclusion in staff development activities along with full-time faculty.

Although the literature doesn't differentiate between FTE-funded and performance funded colleges, recent studies have increased the debate over part-time instructor effectiveness. According to Spinetta (1990), administrative policies must be changed to include provisions for better compensation, access to instructional facilities, offices and office hours, student advisement, input into curriculum development and program coordination. "They should have access to all the services and equipment normally available to all full-time faculty" (p. 43).

Spinetta advocated a change in classification from part-time faculty to associate faculty. The maturing community college system has noticed a growing number of part-time faculty with many years of teaching experience, but little administrative support according to Spinetta (1990). Associate faculty participate in the total instructional initiative of the community college.

In a study of part-time faculty effectiveness, Pierce (1986) found that full-time and part-time faculty were perceived to be equally effective. Pierce evaluated teaching effectiveness for six variables including: instructor status, academic degrees held, age, sex, class size and length of experience. The survey instrument was the Instructional Development and Effectiveness Assessment (IDEA) developed by Kansas State University. The population included the faculty of Fayetteville Technical Institute.

Pierce states, "administrators can feel confident that staffing through part-time faculty offers the students the same instructional quality they might expect from their full-time faculty" (1986, p. 138). Due to the small population, the generalizability of this study is questionable. According to Pierce, "The major methodological problem in this study was that the sample was not sufficiently large enough for factorial statistical analysis of data" (p. 135). Realizing this limitation, Pierce concluded that teacher behavior may be a more important variable in predicting teacher effectiveness.

Law (1988) addressed part-time faculty effectiveness in six Ohio community colleges. In a study administered to 4,247 students using the Student Instructional Rating, Law found that students rate both groups equally in the dimensions of Course Organization and Planning, Faculty/Student Interaction, Communication, Knowledge of the Subject, and Enthusiasm of the Instructor. Part-time faculty were perceived as less effective than their full-time counterpart in only one dimension, Tests and Examinations. Further, related variables such as discipline-related work experience, and institutional involvement yielded no significant difference in teaching effectiveness (Law, 1988).

Although Law's findings suggest equality in perceived teaching effectiveness between part-time and full-time faculty, the sample included 124 part-time instructors and the 132 full-time instructors from six community colleges in Ohio. Five part-time faculty and five full-time faculty were selected from each discipline. The sample was limited by the small number of participating institutions which subjugates the reliability of the study.

In another study of part-time faculty, Jackson (1989) evaluated the relationship of selected economic and demographic variables in Illinois Community Colleges with

part-time faculty employment trends. Although 42% of community college instruction was delivered by part-time faculty, Jackson found few relationships between the use of part-time faculty and economic or demographic variables.

In a related study, Patschke (1989) evaluated the employment practices of part-time faculty. Specifically 250 community colleges were randomly selected from a population of 950 community colleges throughout the nation. Surveys were administered to 250 college presidents and to 250 part-time faculty. Patschke found that part-time faculty were indeed treated poorly. The study supported the contention that part-time faculty did not receive adequate staff development and supervisory support. Patschke recommended 39 specific employment practices to improve the treatment of part-time faculty.

In a similar study, Stokley (1990) evaluated professional development activities for part-time faculty in 16 of South Carolina's technical colleges. Of the participating schools, 46% of the faculty were part-time and they delivered 47% of the total instruction. The study examined such factors as professional development and instructional support. These findings corroborated the views of Patschke (1989) suggesting that part-time faculty were not treated fairly with regard to their full-time counterpart. Specifically, Stokley found that professional development activities for part-time faculty were virtually nonexistent.

Goldberg (1990) supported the findings of Stokley in a study evaluating the selection and support of part-time faculty in Illinois community colleges. Goldberg examined college policies to enable faculty to fulfill the mission of the college. These

policies included hiring, evaluation, orientation and instructional support. Goldberg found that part-time faculty comprised 60% of the teaching staff and they delivered 33% of credit hour instruction in Illinois community colleges. Of the part-time faculty surveyed, 81% indicated deficiencies in instructional support at their college. Further, Goldberg found deficiencies in hiring procedures and evidence of poor recruitment practices.

North Carolina Community Colleges

Part-time faculty employment in state funded colleges has been affected by changes in enrollment. According to a recent report by the North Carolina Department of Community Colleges (1993), aggregate enrollment increased 22% and the unduplicated headcount increased by 18% from 1987 to 1991. During the same period, the number of full-time faculty increased 12% and part-time faculty increased 18%.

This increase in enrollment resulted in greater workloads for community college faculty during the 1987-1991 period. Student advising, committee assignments, curriculum planning and institutional involvement represented some of the non-instructional responsibilities of full-time faculty. Since part-time faculty employment grew more than full-time faculty employment, the non-instructional workload of full-time faculty increased disproportionately during the period (NCDCC, 1993).

Comparing student growth to faculty growth is complicated by disparities in accounting and reporting procedures. Specifically, during the four-year period of the NCDCC study, several community colleges implemented college transfer programs

resulting in erratic growth patterns in technical and vocational curriculum programs. Regardless, the lag in faculty growth throughout the state relative to student enrollment is indicative of greater full-time faculty workloads (NCDCC, 1993).

The qualifications of NCDCC faculty improved from 1987 to 1991 with noted changes in degree holdings. According to the North Carolina Department of Community College (1993) study, the training of community college full-time faculty showed substantial increases between 1987 and 1991. However, the qualifications of part-time faculty were noticeably less than the qualifications of full-time faculty (NCDCC, 1993). These findings corroborated the growing dependence of North Carolina community colleges on a lesser qualified group of part-time faculty in the system.

Achievement and Instructor Ratings

Teaching effectiveness is not easily assessed (Pierce, 1986). Historically, student evaluations of instruction have been the primary tool for summative evaluations. Formative evaluations have employed peer review and other techniques to assess teacher effectiveness. Theoretically, student achievement is the an indicator of teaching effectiveness, but achievement is difficult to measure. Grades are the most measurable indicators of achievement, but many factors such as grade inflation, cultural bias and instructor differences account for wide disparities in grade distributions.

In a study of instructor ratings and student achievement, Centra (1977) found a significant positive correlation between student grades and SIR dimensions. The study involved 72 sections of courses taught in seven subject areas. All instructors selected for

the study were experienced teachers. An examination committee determined the content of the final exam for each course.

The items that correlated with student achievement scores were global ratings of teachers, lectures and global ratings of the course. Ratings of course difficulty and reading assignments had the lowest correlations with achievement. Centra concludes;

Global student ratings of teacher effectiveness or course value may be more valid estimates of student academic achievement because they are not tied to specific instructional style. . . . If one assumes that ratings should bear at least a moderate relationship with student learning before they are used in this way, then the global ratings are more defensible than the ratings of specific practices. . . . Although global ratings and achievement were, in general, highly correlated for most of the courses in this study, the exceptions underscore the need to supplement the ratings with additional criteria of teaching performance (1977, p. 23).

In a similar study, Peter Cohen (1981) evaluated the association between student achievement and student ratings of instructors. Given an overall correlation of $+0.43$, Cohen's work focuses much attention on the role of student input into faculty evaluations. Evaluating specific dimensions of teaching effectiveness, Cohen found noticeable relationships between teaching skill and student achievement.

It is not surprising that Skill ratings, which measure teacher's instructional competence, correspond well with student achievement. We would expect that the more skilled instructors facilitate greater learning in their students than instructors who are less adept. . . . Students of instructors who have everything

going according to schedule, use class time well, explain course requirements, and in general have the class well organized tend to learn more than students of instructors who are not well organized" (1981, pp. 301-302).

In a later study, Feldman (1989) evaluated the association between student achievement and instructor ratings and found a +.57 and a +.56 correlation for Instructor Preparation and Course Organization, respectively. Lesser correlations were found for Meeting Course Objectives and perceived student outcomes. Although Feldman's study used the same data set as Cohen, Feldman broadened the number of dimensions included in the teacher effectiveness model. Feldman found that instructor clarity and "understandableness" were more important predictors of student achievement than the broader skill dimension of the Cohen study (p. 623, 1989). As stated by Feldman:

Both Cohen's analysis and the present one found a good-sized association between achievement by students and their perception of their own learning and academic benefits of the course, a less than moderate correlation between student achievement and instructor's fairness and impartiality in evaluating students, and no association between student achievement and the difficulty or workload of the course (1989, p. 623).

In an earlier study, Arreola (1983) argued that student ratings of instructors should be free of teacher personality bias. Arreola administered the Student Instructional Rating (SIR) to 252 students enrolled in two sections of a general biology course. Student achievement was determined by student grades on four comprehensive exams and a final exam. Student achievement was analyzed with five SIR dimensions. Significant

correlations were found between the perceived amount learned and student interest, course requirements and course organization at the .05 level of significance. No correlations were found between student aptitude and ratings of instructors.

Specifically, there is a significant relationship between student achievement (as measured by course grade) and student ratings of course organization, course difficulty, and student interest (p, 223).

Interestingly, Arreola found that students were able to distinguish between instructor personality traits and other factors associated with effective teaching.

In a related study, Centra (1992) found that specific dimensions and items on the SIR correlated with teaching effectiveness. Organization and Planning, Faculty/Student Interaction and Overall Quality of Instruction (item) demonstrated the highest correlation with summative ratings. These scales and items correlated with similar dimensions in the teacher portfolio.

The SIR global items that assessed the Overall Quality of Instruction [#39], and the Overall Value of the Course [#38], along with the Organization and Planning scale are most useful in summative evaluations because they tend to correlate best with student learning. All of the items and scales are potentially useful for instructional improvement (Centra, 1992, p. 16).

Arnett, Arnold & Cochran (1989) found that students' grade expectations were significantly related to student evaluations of teacher effectiveness. In a study conducted by the College of Business and Industry at Mississippi State University, several class attributes were evaluated for their impact on faculty evaluations. These variables

included class size, teaching assistants, the sponsoring department and perceptions of course difficulty. None of these variables were significantly related to teaching effectiveness. However, grade expectation was related to teacher evaluations. When the student's grade expectation was higher than the student's overall grade point average, the teacher was rated highly. If students anticipated a grade below their reported class average, the teacher was rated lower. Grade expectancy demonstrated the highest correlation with mean instructional ratings.

Several conclusions may be drawn from the literature on student evaluations of instruction and teacher effectiveness. First, grades, an imperfect measure of student achievement, are useful in determining teacher effectiveness. Secondly, grade expectancy is correlated with student ratings of instruction and should be controlled in student evaluations of instruction. Thirdly, more recent studies argue that specific dimensions on student rating instruments were correlated more highly with student achievement (as measured by criteria of grades, peer review, and administrator review) than composite indicators of overall teaching effectiveness (Centra, 1992). Faculty/Student Interaction scale, Organization and Planning scale, and Overall Quality of Instruction item were the most useful SIR items/scales because they demonstrated the best correlation with student achievement. "The SIR Faculty/Student Interaction scale, with its emphasis on concern for students. . . would be expected to correlate with these teaching skills evaluated in the [teacher's] portfolio, as indeed it did" (Centra, p. 14, 1992).

CHAPTER 3

Methods and Procedures

Introduction

Historically, the quantifiable attributes of part-time community college faculty have been compared to full-time faculty (Friedlander, 1979). However, little emphasis has been placed on the evaluation of instructional effectiveness (Law, 1988). This study evaluated the perceived effectiveness of part-time faculty in FTE-based community colleges. The teaching effectiveness of part-time faculty was compared to the effectiveness of full-time faculty.

Research Design

The descriptive nature of this study involves the analysis of part-time and full-time instructor effectiveness in the community college. According to Ary, Jacobs and Razavieh (1985), "Descriptive research studies are designed to obtain information concerning the current status of phenomena. . . .The aim is to describe "what exists" with respect to variables or conditions in a situation" (p. 322). Descriptive studies use comparison and contrast to satisfy inquiries of the researcher.

This study addressed the issue of instructor effectiveness in the community college. The objectives of the study are: (1) to describe selected attributes of part-time faculty in North Carolina Community Colleges, (2) to compare selected attributes of part-time faculty and full-time faculty, (3) to identify predictive variables of teaching effectiveness

for part-time community college faculty, and (4) to determine if differences exist between the predictive attributes of teaching effectiveness for full-time and part-time faculty.

Unlike many previous studies that evaluated the academic credentials and other quantifiable attributes of instructors, this study is based on student perceptions of instructor effectiveness.

Population

The target population for this study is comprised of the faculty in the 58 North Carolina Community Colleges (Appendix A). During the 1992 academic year, NCDCC colleges employed 4,618 part-time faculty or 54.7% of the total curriculum faculty and 3,825 full-time faculty or 45.3% of the total curriculum faculty (Nagy, 1993a).

All community colleges in the system were funded according to their reported enrollment. One student taking 16 hours of course work for four academic quarters (704 student membership hours) is equal to one annual full-time equivalent (FTE). Approximately twenty-one FTEs must be generated to earn one instructional unit, a full-time teacher.

The State Board of Community Colleges is responsible for allocating funds to colleges within the system. State funds are used for current operating expenses, equipment, library holdings, the purchase of land and construction projects. Salaries represent a substantial line item of the current operating expense budget.

FTEs are the sole performance criteria for the disbursement of funds from the NCDCC. Faculty employment is underwritten by FTE generation (NCDCC, 1991).

The actual dollar amount paid to each institution by the state for each FTE earned is determined by the amount of money appropriated by the General Assembly for this purpose. FTE funds are to be used for current operating expenses such as instructional salaries, supplies and travel, administration, clerical and fiscal support, counselors, librarians, financial aid, placement and other personnel performing services for students. An average of 90-92 percent of these funds are used for salaries (NCDCC, 1991, p. III, 1).

Since the ability to hire faculty is contingent upon funding, personnel decisions are affected by the recruitment and maintenance of FTEs.

The ecological validity of this study includes all community colleges in the North Carolina system. Generalizations may also be applied to other state funded community college systems where enrollment is a primary component in state funding formulas.

Selection of the Sample

According to Borg and Gall (1989), "the method of selecting the sample is critical to the whole research process. The sample should be selected by some process that permits us to assume that the sample is representative of the population" (p. 215).

The faculty in this study were selected from 24 of the 58 community colleges in the North Carolina community college system (Kinney, 1992). A list of community colleges and chief academic officers was obtained from the North Carolina Association of Community College Instructional Administrators (1990-1991). A comprehensive list of full-time and part-time faculty for all 58 institutions was provided by the North Carolina

Department of Community Colleges (Nagy, 1993b). Within each college, four part-time instructors were randomly selected for participation in the study. Each part-time instructor was matched with a randomly selected full-time instructor from the same division. Faculty teaching more than one class administered the SIR Instrument to their largest class.

The Instruments

The Student Instructional Rating (SIR) Instrument and the Faculty Demographic Questionnaire (FDQ) Instrument were used for data collection. The SIR, developed by John Centra (1973), is composed of 39 items. Students were asked to respond to specific questions on a five-point Likert scale (Appendix B). The instrument has been widely used for evaluating instructional effectiveness in both community colleges and four-year colleges (Educational Testing Service, 1992).

Student Instructional Rating Instrument

The SIR Instrument was developed in 1970 after officers of the Associated Student Government Association of Northeastern University petitioned the Educational Testing Service to develop an instrument for rating courses and instruction. Original factor studies on the SIR found five factors in the evaluation of instruction. These factors include: Instructor-Student Interaction, Examinations, Course Organization, Student Interests and Course Challenge. In further studies it was found that student achievement

covarried with clear explanations of course material and instructor organization (Centra, 1972, 1992).

Although students can not objectively evaluate the instructor's academic qualifications, students can provide reliable data on many aspects of teaching effectiveness. For example, students provide accurate feedback on whether the instructor presented the course material clearly, explicitly stated the course objectives and whether the instructor stimulated the student's interest in the course. However, students are not capable of providing reliable information on the instructor's qualifications, the appropriateness of course objectives or the intrinsic merits of the course (Centra, 1992).

SIR Reliability

The reliability of an instrument measures the consistency of the data collected. A high reliability coefficient represents a stable score on the instrument being evaluated. In a study of 28 randomly selected classes with randomly selected students the Spearman-Brown reliability coefficient was above .70 for all items except 1, 9, 21, and 24. The relatively high reliability coefficients for classes with 20 or more students suggests little variance in responses among students in a given class or little variance between instructors of the study (Centra, 1973). Similarly, the test-retest reliability of the SIR was measured in a study of 296 instructors who administered the SIR at mid-semester and again at the end of the semester to the same group of students. By correlating the mean responses for each item at mid-term and at the end of the term, Centra found the

test-retest reliability coefficients to be "moderately high with a majority of items near or above .70" (Centra, 1973, p. 12).

SIR Validity

Validity of an instrument indicates the extent to which an instrument measures what it is intended to measure (Ary, Jacobs, Razavieh, 1985). "The validity question is concerned with the extent to which an instrument measures what one thinks it is measuring" (p. 213). According to Centra (1976),

One way of better understanding what student ratings of instruction mean is to relate them to other variables. The assumption is that the ratings generally reflect student judgment about what the teacher does in the course and how the course as well as the teacher have affected the students responding (p. 17).

Construct validity of the SIR was evaluated by Centra (1976). The relationship between student ratings of instructors using the SIR and achievement were examined. In the study 44 experienced teachers were evaluated in 72 courses. The final exam in each course was constructed by a panel of faculty to measure achievement based on the criteria of stated course objectives. As explained by Centra (1976),

Although conclusions. . . must be drawn cautiously because of the small number of classes for most courses, the pattern of correlations indicates that the examinations scores were significantly related to several of the SIR variables. Ratings of overall teaching effectiveness and the value of the course to students, in spite of consisting of only a single item each (and hence a less reliable measure), were both fairly well correlated with achievement: 12 out of 24 product-moment and partial correlations

were .58 or above. Ratings of course objectives and organization, and of the quality of lectures, were also fairly well correlated with achievement: 14 out of the 24 correlations were .47 or above. Ratings of the teacher-student relationship, of the course examinations, and of student effort were not strongly correlated with achievement: the median correlation was about .30. The weakest or most inconsistent correlations with achievement were for ratings of reading assignments and for course difficulty and workload (p. 8-9).

The Centra study emphasized the correlation of SIR dimensions and achievement. In another study (Centra & Creech, 1976) the possible biases of student ratings were evaluated including the relationship between expected grades and instructor evaluation scores. The population included over 100 postsecondary institutions which generated responses from 16,000 classes representing 300,000 students. From this population a sample of 10,000 classes was selected to evaluate teacher effectiveness and another random sample of 15,000 students was chosen for the evaluation of student characteristics. Although modest correlations existed (+.20) between the mean expected grade for each class and the mean rating of teacher effectiveness, the relationship was not very strong. The correlation between the mean expected grade for each class and the mean rating of value of the course was +.31. Centra and Creech state,

A major concern, however, is that grades might influence ratings and, as discussed earlier, that students will reward easy grading teachers with higher ratings. It is difficult to determine the extent to which the .19 to .31 correlations reflect easy grading practices or support the validity of the ratings. Certainly there does not

seem to be overriding evidence that students rate an instructor favorably or unfavorably because of the grades they receive or anticipate receiving, although there may be occasions when that does occur (1976, pp. 26-27).

Many criteria have been used to establish the content validity of student ratings of instruction including student grades, peer evaluations and administrator evaluations. In a study involving community college faculty, Centra evaluated the association between SIR scores and instructor evaluations by peers and administrators. Contract renewal for 97 faculty was predicated by student ratings of instruction, peer ratings, and administrator ratings. The college used instructor portfolios as part of the faculty evaluation process. Two peers and a dean rated each instructor on a six-point scale in 13 teaching categories. The categories included commitment to teaching, goals orientation, integrated perception, positive action, reward orientation, objectivity, active listening, rapport, empathy, individualized perception, teaching strategies, knowledge and innovation.

Two dimensions and three scale scores of the SIR measured the correlative relationship with peer and administrator ratings. The two items were overall value of the course and the overall quality of instruction. The three SIR scales were Organization and Planning, Faculty/Student Interaction, and Communication. Other SIR factors, excluded from this study, have demonstrated good reliability with class size of 15 or more students (Centra, 1973).

The sample included 97 faculty from four divisions within the college. One or more classes were evaluated for each faculty member. The average number of students in each class was 52 with a range from 14 to 153.

Specific SIR items and dimensions correlated with peer evaluations and dean evaluations of teachers. The dimensions of Organization and Planning, Faculty/Student Interaction and the Overall Quality of Instruction item demonstrated the highest correlation with deans and peer evaluations. Other items that rated the value of the course to the student also demonstrated a lesser correlation with the peer and administrator groups. There was also agreement between the SIR Organization and Planning and the peer and administrative group assessment of the teacher motivation skills.

The SIR Faculty/Student Interaction scale, with its emphasis on concern for students. . . . would be expected to correlate with these teaching skills evaluated in the [teacher] portfolios, as indeed it did. In sum, the SIR student evaluations correlated reasonably well and on similar teaching dimensions evaluated by deans and peers (Centra 1992, p. 14, 16).

Faculty Demographic Questionnaire

A second instrument used in this research is the Faculty Demographic Questionnaire (FDQ) (Appendix B). Developed by the researcher, it was used to collect demographic data from the full-time and part-time instructors.

Previous studies evaluating the attributes of part-time instructors emphasized quantifiable inputs such as years of teaching experience, formal training, participation in institutional planning, curriculum development and policy making (Friedlander, 1980). Other studies indicated that part-time faculty were treated poorly compared to full-time

faculty. As a group, part-time faculty received little staff development, clerical help or access to facilities. Part-time faculty have not been evaluated as frequently as full-time faculty nor have they been given the opportunity to influence course content or the criteria for course evaluations. Items on the FDQ are predicated on these issues.

Data Collection

Following approval from the Institutional Review Board at East Tennessee State University, chief academic officers of the twenty-four community colleges received a letter requesting permission to use selected faculty from their colleges in the study (Appendix C). A cover letter explained the purpose of the study and identified four pairs of randomly selected instructors to participate in the study. Eight evaluation packets were mailed to each participating institution. The evaluation packets included a cover letter, 20 SIR Instruments, one FDQ Instrument, an Informed Consent notice and a postage-paid return envelope. The chief academic officer distributed the evaluation packets to each randomly selected instructor on the paired list. After the instrument surveys were completed by students, the sealed evaluation packets were returned to the researcher by separate mail.

Each participant was assured of complete anonymity. Fifteen days after the initial mailing, a follow-up telephone call was made to instructors who had not returned the surveys. If no response were generated within two weeks following the distribution of the evaluation packet, a follow-up visit or telephone call determined the instructor's

reluctance to participate in the study. Initial contact and all subsequent correspondence was conducted within one month of the distribution of evaluation packets.

Data Analysis

Descriptive and inferential statistical procedures provide methods for making large amounts of data meaningful. Descriptive procedures summarize data about the phenomenon being studied. Generalizations are limited to the group being studied. Alternatively, inferential analysis provides a method of making conclusions about the nature of a population by studying a representative sample from the population. Inferential analysis provides a means of generalizing from a representative group to a population (Ary, Jacobs and Razavieh, 1985).

Methods of analysis included the t -test and the Pearson Product Moment Correlation Coefficient. The t -test was used to determine differences between specific attributes of teaching effectiveness for full-time and part-time instructors for Hypotheses 1 through 14, 16, 17, and 19 through 23. Assumptions concerning the appropriateness of the t -test are stated by Borg and Gall,

The t -test makes three assumptions about the scores obtained in causal-comparative research. The first assumption is that scores from an interval or ratio scale of measurement. The second is that scores in the populations under study are normally distributed. The third is that score variances for the populations under study are equal (1989, p. 548).

The data collected for these hypotheses meet the three criteria for the t -test.

The Pearson Product Moment Correlation Coefficient was used for hypotheses 15, 18 and 24. Two scales were regressed on teaching effectiveness and a test for significance of relationship was performed. "Correlation coefficients are best used to measure the degree of relationship between two variables" Borg and Gall, 1989, p. 576).

Multivariate correlational methods were used to analyze the relationship between attributes of teaching effectiveness. It has been established that teaching effectiveness is affected by more than one factor. Both techniques of multiple correlation and multiple linear regression will be employed to evaluate teacher effectiveness. Subsequently, the regression coefficients for each predictor variable between full-time and part-time faculty was evaluated to determine the strengths of the relationship. Finally, corresponding predictors for full-time and part-time faculty were tested for statistical differences. This analysis evaluated attributes of effectiveness between the two groups (Appendix D). This procedure determined if the attributes of teacher effectiveness were the same for full-time and part-time instructors. (Equation 1 and Equation 2).

$$Y_{(FT)} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 \dots \quad (1)$$

$$Y_{(PT)} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 \dots \quad (2)$$

Attributes of teacher effectiveness, x_i were identified in the FDQ Instrument (Appendix B).

Hypotheses one, two, and six test SIR factor scales. Hypotheses three through five and seven through 11 test SIR items. Hypotheses 12 through 23 test FDQ items. Hypothesis 24 regresses FDQ items against the SIR scale, Faculty/Student Interaction.

SIR Factor Analysis

Factor analysis is a statistical procedure that allows the researcher to combine multiple items that demonstrate high correlation with other factors. Specifically, Borg and Gall (1985) state,

Factor analysis is helpful to the researcher because it provides an empirical basis for reducing the many variables to a few factors by combining variables that are moderately or highly correlated with each other. Each set of variables that is combined form a factor, which is a mathematical expression of the common element that cuts across the combined variables (p. 620).

Constructs of instructor effectiveness are identified in previous research of the survey instrument (Centra, 1992). According to Centra (1973) a study of 9,700 students from 437 classes in five colleges found factors in the SIR to be highly correlated.

Dimensions on the SIR are: Teacher-Student Relationship, Course Objectives and Organization, Lectures, Reading Assignments, Course Difficulty and Workload, and Examinations. The first factor, Teacher-Student Relationship, measures the student's willingness to ask questions or offer their opinion in class. It also reflects the instructor's openness to other view-points and the availability of the instructor. According to Centra (1973), "The first dimension thus seems to describe the degree to which a teacher is open minded, challenging and makes students feel that he or she is concerned about their learning" (p. 16).

The second factor, Course Objectives and Organization, measures the degree which courses objectives were stated, and if those course objectives were met. Well organized teachers meeting stated objectives scored highly on these items.

The third factor, Lectures, measures the effectiveness of instructor verbal presentations. "Secondary loadings on this factor included the instructor's use of class time, course scope, and the overall value of class discussion" (Centra, 1973, p. 17).

The fourth factor, Reading Assignments, loaded high on two items: textbook ratings and supplementary readings. According to Centra, "text and supplementary readings were seen by students as critical to what they got out of a course" (Centra, 1973, p. 17).

The fifth factor is Course Difficulty and Workload. This factor included items which measured the level of difficulty, the pace of the course and the amount of work required by the course. Fast-paced courses with heavy work loads are viewed as the most difficult.

The last factor, Tests and Examinations, included items relating to course examinations. Student ratings of examinations and the relevancy of examinations to stated course objectives loaded .5 and .47 respectively.

Because the factors were highly interrelated, Centra suggests that a single factor may underlie the student ratings of their instructors. "Students who rate instructors high in one area will also tend to rate them high in others" (1973, p. 18). However, Centra argues that each factor is separately identifiable and each describes a different aspects of instruction.

Summary

Research methodology and statistical procedures were presented in this chapter. The instruments used in this study are the SIR developed by John Centra and the FDQ developed by the researcher. Factors associated with the SIR were identified.

A sample of twenty-four community colleges within the North Carolina community college system was selected to evaluate the effectiveness of part-time faculty with that of full-time faculty. Four pairs of part-time and full-time faculty were randomly selected from each college in the sample.

Data analysis will use descriptive and inferential statistical techniques. The results of the analysis are presented in Chapter 4.

CHAPTER 4

Presentation of the Data and Analysis of Findings

Introduction

The purpose of this study was to: determine the attributes of part-time community college faculty, to evaluate the teaching effectiveness of part-time faculty and to determine part-time faculty involvement in non-instructional tasks. Teaching effectiveness was assessed using the SIR Instrument. The FDQ Instrument was used to collect instructor information.

Twenty-four community colleges were randomly selected from 58 institutions in North Carolina to participate in this study. Within each college four full-time and four part-time instructors were randomly selected. Of these 192 faculty, 67% returned completed surveys. The findings are presented in this chapter.

To determine the influence of grade expectation on ratings of instructor effectiveness, the expected grade was regressed against teaching effectiveness. Although the Pearson product Moment Coefficient ($r = .184$, $r^2 = .026$) was significant at the .05 alpha level, the impact of such bias was minimal. This relationship corroborates Centra's (1992) findings of a weak positive relationship between expected grade and teaching effectiveness. "Certainly there does not seem to be overriding evidence that students rate an instructor favorably or unfavorably because of the grades they receive or anticipate receiving, although there may be occasions when that does occur" (p. 26-27). Therefore, grade expectation was not controlled in this study.

The difference in mean expected grade for full-time (2.08) and part-time (2.15) faculty was not significant ($t = -.54$, $p = .58$) at the .05 alpha level. Both distributions had a skewness coefficient less than one using Pearson's Index of Skewness (full-time faculty = .139, part-time faculty = .174). Neither distribution was significantly skewed. The median for both distributions was approximately equal to the letter grade of B.

Faculty Attributes

A review of the literature noted the disparity of full-time and part-time instructor qualifications and the subsequent implications for teaching effectiveness. To assess instructional effectiveness in North Carolina community colleges, participants in this study included a cross section of curriculum faculty from vocational, technical and general education programs as illustrated in Table 1. Non-curriculum faculty were not included in this study.

Table 1

Faculty by Curriculum Area

| Curriculum Area | Full-Time | | Part-Time | | Total | |
|-------------------|-----------|------|-----------|------|-------|------|
| | N | % | N | % | N | % |
| Vocational | 13 | 19.7 | 14 | 21.2 | 27 | 20.8 |
| Technical | 28 | 42.4 | 25 | 39.1 | 53 | 40.8 |
| General Education | 25 | 37.9 | 24 | 37.5 | 49 | 37.7 |

The mean years teaching experience for full-time and part-time faculty was 13.74 and 10.75 respectively. While 98.5% of the full-time faculty had regularly scheduled office hours, only 43.8% of the part-time faculty reported regularly scheduled office hours. Over three-fourths of both groups had access to clerical assistance. Full-time faculty reported slightly higher levels of clerical support (80.3%) than part-time faculty (76.6%).

As expected, full-time instructors reported more hours preparation per class. Full-time instructors averaged 6.36 hours per week of preparation time for each class while part-time instructors averaged 4.06 hours per week. Both groups reported favorable access to campus computing facilities with 90.9% of full-time instructors indicating that they had access to adequate computing facilities and 84.4% of part-time instructors indicating the same.

Curriculum development, institutional planning, and policy making generated the greatest gap between full-time and part-time faculty involvement in non-instructional tasks. Only 25% of part-time faculty indicated they had input in institutional planning. Conversely, 74.2% of full-time faculty were involved in institutional planning. Of the part-time faculty responding, 31.3% were involved in curriculum development while 84.8% of the full-time faculty participated in curriculum development. Both groups had limited involvement in policy making. Fifty-three percent of the full-time faculty participated in policy decisions while 15.6% of the part-time faculty participated in policy decisions.

Part-time faculty had less formal teacher training than full-time faculty. Twenty-nine percent of full-time faculty reported no formal teacher training compared to

37.5% of part-time faculty. Full-time faculty reported more formal training in education through graduate course work or earned degrees in education. Results are summarized in Table 2.

Table 2

Faculty Credentials: Formal Training in Education

| Training in Education | Full-time | | Part-time | | Total | |
|------------------------------|-----------|------|-----------|------|-------|------|
| | N | % | N | % | N | % |
| No formal teacher training | 19 | 28.8 | 24 | 37.5 | 43 | 33.3 |
| One or more graduate courses | 21 | 31.8 | 17 | 26.6 | 38 | 29.5 |
| A degree in education | 26 | 39.4 | 22 | 34.4 | 48 | 37.2 |

In this sample, 37.5% of part-time faculty had no formal teacher training. Although many part-time faculty indicated a desire to teach full-time in the community college. Of the 61 part-time faculty responding to this item, 46.9% indicated that they would accept a full-time teaching position if one became available. Forty-eight percent of the part-time faculty were professional educators, 19% were employed in the private sector, 17.2% were self employed, 7.8% represented the public sector, and 4.7% were currently unemployed.

The median age of full-time faculty was 40 to 49 years while the median age for part-time faculty was 50 to 59 years. Both groups reported large clusters in the 40 to 50 year category and the 50 to 59 year category. These findings confirm other demographic studies that indicate the community college faculty is growing older (Andrews & Marzano, 1990-1991; NCDCC, 1993). Age frequencies are summarized in Table 3.

Male teachers outnumbered female teachers in both groups: 54.5% of all full-time teachers and 54.7% of the part-time teachers were men. Full-time faculty held 20 more master's degrees in their teaching field than part-time faculty. Further, full-time faculty held more credentials in the 18 graduate semester hour category. Part-time faculty held more credentials in the two-year and four-year degree category as well as work experience in field. Part-time faculty justified a greater number of teaching positions with work experience while full-time faculty justified their positions with post-graduate education. Faculty credentials by degree and work experience are summarized in Table 3.

Table 3

Faculty Characteristics: Age and Credentials

| Age Frequencies | | | | | |
|-------------------|-------|-------|-------|-------|-----|
| Age Group | 20-29 | 30-39 | 40-49 | 50-59 | 60+ |
| Full-time Faculty | 1 | 11 | 33 | 19 | 2 |
| Part-time Faculty | 7 | 11 | 18 | 21 | 7 |

| Credentials | | | | | |
|-------------------|--------|--------|----------|----------------------------|-----------------|
| Classification | 2-Year | 4-Year | Master's | 18 Graduate Semester Hours | Work Experience |
| Full-time Faculty | 9 | 31 | 46 | 24 | 39 |
| Part-time Faculty | 12 | 33 | 26 | 18 | 45 |
| Total | 21 | 64 | 72 | 42 | 84 |

Note: Degrees earned in an unrelated discipline are not reported.

Factor Analysis

Although Centra's (1973) scales for the SIR have been used in subsequent research, factor analysis was performed (N = 1780) in this study. Using a Varimax rotation, a four factor solution was generated for the North Carolina community college teaching effectiveness model (See Table 4). A Promax solution is presented in Appendix E for comparison with Centra's (1973) factor solution. Since the Varimax solution generated more discrete measures of teacher effectiveness, it was used in this analysis. The factors are: Faculty/Student Interaction, Overall Quality of the Course, Course Difficulty and Lectures. Unlike Centra's model, a total of 18 items loaded high on the first factor. Subsequent analysis, using more discriminating criteria, failed to generate definitive subscales. Like the Centra model, items loaded high on Course Difficulty. Interestingly, no items loaded high on Course Organization and Planning. Nine items loaded on a new scale, Overall Quality of the Course. Factor 1 included all of the items in Centra's Faculty/Student Interaction scale and the Course Organization and Planning scale. Therefore, Factor 1 in this study was referenced as Faculty/Student Interaction and it provided the criteria by which teaching effectiveness was measured in this study unless specified otherwise. This scale provided the best measure of instructor involvement in the course. Further, this scale demonstrated the highest content validity with other constructs of teaching effectiveness (Centra, 1992). Factor loading coefficients are presented in Table 4.

Table 4

Factor Loading for the Student Instructional Rating: Varimax Solution

| Item No. | Item | Factor Loading |
|---|---|-----------------------|
| Factor I: Teaching Effectiveness | | |
| 8 | The instructor seemed genuinely concerned with students' progress and was actively helpful. | 0.71 |
| 20 | In my opinion, the instructor has accomplished his or her objectives for the course. | 0.70 |
| 14 | The instructor summarized or emphasized major points in lectures or discussion. | 0.68 |
| 19 | The instructor was open to other viewpoints. | 0.68 |
| 11 | In this class I felt free to ask questions or express my opinions. | 0.67 |
| 12 | The instructor was well prepared for each class. | 0.67 |
| 4 | The instructor was readily available for consultation with students. | 0.66 |
| 5 | The instructor seemed to know when students didn't understand the material. | 0.65 |
| 10 | The instructor raised challenging questions or problems for discussion. | 0.65 |
| 1 | The instructor's objectives for the course have been made clear. | 0.64 |
| 13 | The instructor told students how they would be evaluated in the course. | 0.64 |
| 3 | The instructor used class time well. | 0.63 |
| 2 | There was considerable agreement between the announced objectives of the course and what was actually taught. | 0.6 |
| 9 | The instructor made helpful comments on papers or exams. | 0.59 |
| 17 | Examinations reflected the important aspects of the course. | 0.57 |
| 7 | The instructor encouraged students to think for themselves. | 0.57 |
| 15 | My interest in the subject area has been stimulated by this course. | 0.55 |
| 39 | How would you rate the quality of instruction in this course? | 0.52 |
| 18 | I have been putting a good deal of effort into this course. | 0.38 |

Factor II: Overall Quality of the Course

| | | |
|----|---|------|
| 33 | Overall, I would rate the supplementary readings. | 0.77 |
| 32 | Overall, I would rate the textbook(s). | 0.73 |
| 37 | Overall, I would rate the laboratories. | 0.60 |
| 34 | Overall, I would rate the quality of the exams. | 0.60 |
| 38 | Overall, I would rate the value of the course to me. | 0.59 |
| 35 | I would rate the general quality of the lectures. | 0.57 |
| 36 | I would rate the value of the class discussion. | 0.52 |
| 39 | How would you rate the quality of instruction in this course? | 0.46 |
| 15 | My interest in the subject area has been stimulated by this course. | 0.35 |

Factor III: Course Difficulty

| | | |
|----|--|-------|
| 21 | For my preparation and ability, the level of difficulty of this course was: | 0.77 |
| 23 | For me, the pace at which the instructor covered the material during the term was: | 0.72 |
| 22 | The work load for this course in relation to other courses of equal credit was: | 0.69 |
| 28 | What grade do you expect to receive in this course? | 0.30 |
| 18 | I have been putting a good deal of effort into this class. | -0.33 |

Factor IV: Lectures

| | | |
|----|---|-------|
| 24 | To what extent did the instructor use examples or illustrations to help clarify the material? | 0.33 |
| 35 | I would rate the general quality of the lectures. | 0.32 |
| 16 | The scope of the course has been too limited; not enough material has been covered. | -0.67 |
| 36 | The lectures were too repetitive of what was in the textbook(s). | -0.74 |

Part-Time Faculty and Full-Time Faculty Teaching Effectiveness

As explained in Chapter 2, part-time faculty have been criticized as being less qualified than full-time faculty. For purposes of comparison, teaching effectiveness

scores for both full-time and part-time faculty were calculated using SIR factors that demonstrated the highest criterion related validity (Centra, 1992).

Hypothesis 1: There is no difference between the perceived teaching effectiveness of part-time and full-time community college faculty. Full-time faculty (N=66) generated a mean teaching effectiveness coefficient of 3.39 (SD = .19). Part-time faculty (N=64) had a mean effectiveness coefficient of 3.36 (SD = .24). The difference between the two group means generated a calculated t of .79 ($p = .429$). Therefore, Hypothesis 1, was not rejected. A summary of hypotheses is presented in Table 5. All tests were evaluated at the .05 alpha level.

Table 5

Summary of Hypotheses Testing

| No. | Stated Hypotheses | Test Stat. | p |
|-----|---|------------|----------|
| 1 | There is no difference between the perceived teaching effectiveness of part-time and full-time community college faculty. | $t=.79$ | $p=.429$ |
| 2 | There is no difference in the Overall Quality of the Course between part-time and full-time community college faculty. | $t=2.57$ | $p=.011$ |
| 3 | There is no difference in the Class Discussion of part-time faculty and full-time faculty. | $t=1.71$ | $p=.090$ |
| 4 | There is no difference in the Lectures of part-time and full-time faculty. | $t=3.07$ | $p=.003$ |

| | | | |
|----|--|------------------------|----------|
| 5 | There is no difference in the Reading Assignments of part-time and full-time faculty. | $t=2.30$ | $p=.023$ |
| 6 | There is no difference in the perceived Course Difficulty of part-time and full-time faculty. | $t=.49$ | $p=.626$ |
| 7 | There is no difference in the Examinations of part-time and full-time faculty. | $t=1.89$ | $p=.061$ |
| 8 | There is no difference in the Value of the Course between part-time and full-time faculty. | $t= -.59$ | $p=.559$ |
| 9 | There is no difference in the Quality of Instruction of part-time and full-time faculty. | $t=1.07$ | $p=.289$ |
| 10 | There is no difference in the Laboratory Exercises of part-time and full-time faculty. | $t=.25$ | $p=.799$ |
| 11 | There is no difference in the Textbooks in classes taught by part-time and full-time faculty. | $t=2.70$ | $p=.008$ |
| 12 | Part-time instructors with other primary occupations are perceived to be more effective than part-time instructors without other primary occupations. | $t=1.38$ | $p=.085$ |
| 13 | Part-time instructors with discipline-related work experience are perceived to be more effective by their students than part-time in instructors without discipline-related work experience. | $t=.97$ | $p=.168$ |
| 14 | Part-time instructors with professional teaching preparation are perceived as more effective than part-time instructors without professional teaching preparation. | See Note | |
| 15 | Part-time instructor effectiveness is positively related to the number of years teaching experience. | $R=.237$ $R^2=.056$ | $p>.05$ |

| | | | |
|----|---|------------------------|----------|
| 16 | Part-time instructors with regularly scheduled office hours are perceived as more effective than part-time instructors without regularly scheduled office hours. | $t=1.41$ | $p=.083$ |
| 17 | Part-time instructors with clerical assistance are perceived to be more effective than part-time instructors without clerical assistance. | $t= -.43$ | $p=.334$ |
| 18 | Part-time instructor effectiveness is positively related to the number of hours preparation for the class. | $R=.239$ $R^2=.057$ | $p>.05$ |
| 19 | Part-time instructors who participate in policy making are perceived as more effective than part-time instructors who do not participate in policy making. | $t=.38$ | $p=.353$ |
| 20 | Part-time instructors who participate in curriculum development are perceived as more effective than part-time instructors who do not participate in curriculum development. | $t= -.63$ | $p=.267$ |
| 21 | Part-time instructors who participate in institutional planning are perceived as more effective than part-time instructors who do not participate in institutional planning. | $t=.43$ | $p=.336$ |
| 22 | Part-time instructors who have input in course content are more effective than part-time instructors who do not have input into course content. | $t=.87$ | $p=.194$ |
| 23 | Part-time instructors who have input in determining the criteria for student evaluations are more effective than part-time instructors who do not have input into determining criteria for student evaluations. | $t=2.12$ | $p=.019$ |

| | | |
|--|----------------------|---------|
| <p>24 Attributes of effective part-time instruction including: teaching preparation, clerical assistance, access to computing facilities, non-instructional hours on campus, keeping regularly scheduled office hours and teaching experience, are no different for full-time and part-time instructors.</p> | $R=.38$ $R^2=.15$ | $p>.05$ |
|--|----------------------|---------|

Note: No observations reported for part-time faculty without professional preparation.

Hypothesis 2: There is no difference in Overall Quality of the Course between part-time and full-time faculty. A t -test for independent samples was used to evaluate the Quality of the Course between part-time and full-time faculty. The mean score for full-time faculty ($N=66$) was 3.74 ($SD = .335$) while the mean score for part-time faculty was 3.55 ($SD = .493$). The calculated t was 2.57 ($p = .011$). The difference between the calculated means was significant. Full-time faculty scored higher than part-time faculty on Quality of the Course. Therefore, Hypothesis 2, was rejected.

Hypothesis 3: There is no difference in Class Discussion of part-time faculty and full-time faculty. Using a t test for independent samples, full-time faculty ($N = 66$) had a mean effectiveness score of 4.13 ($SD = .36$) while part-time faculty ($N = 64$) had a mean of 3.96 ($SD = .727$). The difference between the two group means generated a calculated t of 1.71 ($p = .09$). Therefore, Hypothesis 3 was retained. Class discussion was perceived to be the same for both groups.

Hypothesis 4: There is no difference in the Lectures of part-time and full-time faculty. A t test for independent samples was used to evaluate the Lectures of full-time and part-time faculty. Full-time faculty ($N= 66$) had a mean Lecture score of 4.19 ($SD = .356$). Part-time faculty ($N = 64$) had a mean Lecture score of 3.81 ($SD = .958$).

The calculated value of t was 3.07 ($p = .003$). The difference in the two group means was statistically significant at the .05 alpha level. Therefore, full-time faculty were perceived to give better lectures. Hypothesis 4 was rejected.

Hypothesis 5: There is no difference in the Reading Assignments of part-time and full-time faculty. Full-time faculty ($N = 66$) had a mean Reading score of 3.09 ($SD = .731$). Part-time faculty ($N = 64$) had a mean Reading score of 2.74 ($SD = 1.01$). The difference between the two group means generated a calculated t of 2.30 ($p = .023$). Full-time faculty scored higher than part-time faculty on Reading Assignments. Hypothesis 5 was rejected.

Hypothesis 6: There is no difference in the perceived Course Difficulty of part-time and full-time faculty. A t test for independent samples was used to determine the difference in Course Difficulty of full-time and part-time faculty. Full-time faculty ($N = 66$) had a mean Course Difficulty score of 3.82 ($SD = .327$). Part-time faculty ($N = 64$) had a mean Course Difficulty score of 3.79 ($SD = .327$). The calculated value of t was .49 ($p = .626$). The difference in the two group means was not statistically significant at the .05 alpha level. The course difficulty level for full-time faculty was not greater than the difficulty level for part-time faculty. Therefore, Hypothesis 6, was retained. Courses taught by full-time faculty were not perceived to be more difficult than courses taught by part-time faculty.

Hypothesis 7: There is no difference in the Examinations of part-time and full-time faculty. Full-time faculty were perceived as giving more difficult and thorough examinations than part-time faculty. Full-time faculty ($N = 66$) generated a mean effectiveness score on examinations of 3.81 ($SD = .588$). Part-time faculty ($N =$

64) generated a mean effectiveness score of 3.53 (SD = 1.05). The calculated value of t was 1.89 ($p = .061$). Because the difference in the two groups was not statistically significant, students perceived the Examinations of both groups to be equal. Therefore, Hypothesis 7 was retained.

Hypothesis 8: There is no difference in the Value of the Course between part-time and full-time faculty. The value of the course, Item [38], was perceived as equal for both full-time and part-time faculty. Full-time faculty (N = 66) had a mean score of 4.21 (SD = .408). Part-time faculty (N = 64) had a mean score of 4.25 (SD = .431). The calculated value of t was -.59 ($p = .559$). The difference in the two group means was not statistically significant. Therefore, the Value of the Course was perceived to be the same for both full-time and part-time faculty. Hypothesis 8 was retained.

Hypothesis 9: There is no difference in the Quality of Instruction between part-time and full-time faculty. Although part-time faculty were rated lower on Lectures, Reading Assignments, Course Difficulty, and Overall Quality of the Course, they were rated equally on SIR item [39], Quality of Instruction. Full-time faculty (N = 66) had a mean Quality of Instruction score of 4.32 (SD = .384). Part-time faculty (N = 64) generated a mean Quality of Instruction score of 4.24 (SD = .502). The calculated value of t was 1.07 ($p = .289$). Therefore, Hypothesis 9 was retained.

Hypothesis 10: There is no difference in the Laboratory Exercises of part-time and full-time faculty. Part-time faculty were rated equally with full-time faculty on Laboratory Exercises. Full-time faculty (N = 66) had a mean Laboratory Exercises score of 2.35 (SD = 1.41). Part-time faculty (N = 64) generated a mean Laboratory

Exercises score of 2.28 (SD = 1.37). The calculated value of t was .25 ($p = .799$).

Therefore, Hypothesis 10 was retained.

Hypothesis 11: There is no difference in the Textbooks in classes taught by part-time and full-time faculty. The mean Textbook scores for full-time faculty (N = 66) was 3.89 (SD = .534). The mean Textbook scores for part-time faculty (N = 64) was 3.51 (SD = .979). The calculated value of t was 2.70 ($p = .008$). The difference in the two groups was statistically significant. Students of full-time faculty rated Textbooks higher than students of part-time faculty. Therefore, Hypothesis 11 was rejected.

Attributes of Effective Part-Time Faculty

Full-time faculty and part-time faculty were compared in the previous section for perceived differences in teaching effectiveness using a variety of scales from the SIR Instrument. The following hypotheses seek to identify attributes of effective instruction among the part-time faculty population. Specifically, which attributes of part-time faculty are associated with effective instruction?

Hypothesis 12: Part-time instructors with other primary occupations are perceived to be more effective than part-time instructors without other primary occupations. Part-time instructors with other primary occupations were no more effective than part-time instructors without other primary occupations. Part-time instructors (N = 31) with other primary occupations had a mean effectiveness score of 3.42 (SD = .226). Part-time instructors (N = 12) without other primary occupations generated a mean of 3.32 (SD = .257). The calculated value of t was 1.38 ($p = .085$).

The difference was not statistically significant at the .05 alpha level. Therefore, Hypothesis 12, was retained.

Hypothesis 13: Part-time instructors with discipline-related work experience are perceived to be more effective by their students than part-time instructors without discipline-related work experience. Discipline-related work experience was not related to teaching effectiveness. Part-time faculty (N = 45) with discipline-related work experience had a mean teaching effectiveness score of 3.35 (SD = .243). Part-time faculty (N = 19) without discipline-related work experience had a mean teaching effectiveness score of 3.41 (SD = .226). The calculated value of t was .97 ($p = .168$). The difference in the two groups was not statistically significant. Therefore, hypothesis 13 was retained.

Hypothesis 14: Part-time instructors with professional teaching preparation are perceived as more effective than part-time instructors without professional teaching preparation. Only one part-time instructor in the sample reported no professional teaching preparation. Therefore, the independent sample did not have a variance. Of the 63 part-time faculty who did report professional teaching preparation, the mean teaching effectiveness score was 3.36.

Hypothesis 15: Part-time instructor effectiveness is positively related to the number of years teaching experience. Although part-time teacher effectiveness was positively related to the number of years teaching experience, the measure of association was not significant ($r = .24$, $r^2 = .06$). The number of years teaching experience among part-time faculty was not significantly correlated with teacher effectiveness.

The null hypothesis ($R_{\text{population}} = 0$) was retained. The probability that r of .24 would have occurred by chance if the null hypothesis were true is less than .05. Therefore, the correlation between teaching effectiveness and years teaching experience is not significant. Hypothesis 15 was rejected.

Hypothesis 16: Part-time instructors with regularly scheduled office hours are perceived as more effective than part-time instructors without regularly scheduled office hours. Part-time instructors ($N = 28$) with regularly scheduled office hours had a mean teaching effectiveness score of 3.42 ($SD = .20$). Part-time faculty ($N = 35$) without regularly scheduled office hours generated a mean teaching effectiveness score of 3.34 ($SD = .249$). A t test for independent samples was used to evaluate the difference in teaching effectiveness. The calculated value of t was 1.41 ($p = .083$). The difference in the two groups was not statistically significant at the .05 alpha level. Therefore, teaching effectiveness for part-time faculty with regularly scheduled office hours was perceived to be the same as that for part-time faculty without regularly scheduled office hours. Hypothesis 16, which stated that regularly scheduled office hours were positively related to teaching effectiveness, was rejected.

Hypothesis 17: Part-time instructors with clerical assistance are perceived to be more effective than part-time instructors without clerical assistance. Using a t test for independent samples, part-time faculty ($N = 49$) with clerical assistance generated a mean effectiveness score of 3.36 ($SD = .238$). Part-time faculty ($N = 14$) without clerical assistance generated a mean of 3.40 ($SD = .208$). The calculated value of t was $-.43$ ($p = .334$). The difference in the two groups was not statistically significant--part-time faculty with clerical assistance were perceived to be equally

effective as part-time faculty without clerical assistance. Therefore, Hypothesis 17 was rejected.

Hypothesis 18: Part-time instructor effectiveness is positively related to the number of hours preparation for the class. Part-time faculty effectiveness was related to the number of hours preparation for the class ($r = .24$, $r^2 = .058$) but the correlation was not significant ($F = 3.79$, $1, 62$, $p > .05$). Therefore, the number of hours preparation per class was not a significant predictor of teaching effectiveness. Hours preparation and teaching effectiveness were not related. Further, the number of hours preparation time was not a significant predictor in the regression model. Hypothesis 16 was rejected.

Hypothesis 19: Part-time instructors who participate in policy making are perceived as more effective than part-time instructors who do not participate in policy making. Part-time faculty ($N = 10$) who participated in policy making generated a mean teaching effectiveness score of 3.39 ($SD = .213$). Part-time faculty ($N = 54$) without input into policy making generated a mean teaching effectiveness score of 3.36 ($SD = .244$). The calculated value of t was .38 ($p = .353$). The difference in the two groups, .031, was not statistically significant at the .05 alpha level. Participation in policy making is not a covariate with teaching effectiveness for part-time faculty. Hypothesis 19 was rejected.

Hypothesis 20: Part-time instructors who participate in curriculum development are perceived as more effective than part-time instructors who do not participate in curriculum development. Part-time faculty ($N = 20$) who participated in curriculum development had a mean teaching effectiveness score of 3.34 ($SD = .222$). Part-time faculty ($N = 44$) who did not participate in curriculum development had a mean teaching

effectiveness score of 3.38 (SD = .246). The calculated value of t was .63 ($p = .267$). Participation in curriculum development was not a covariate with teaching effectiveness. The difference in the two group means was not statistically significant at the .05 alpha level. Hypothesis 20 was rejected.

Hypothesis 21: Part-time instructors who participate in institutional planning are perceived as more effective than part-time instructors who do not participate in institutional planning. Part-time faculty (N = 16) involved in institutional planning had a mean effectiveness score of 3.39 (SD = .205). Part-time faculty (N = 48) not involved in institutional planning had a mean teaching effectiveness score of 3.36 (SD = .250). The calculated value of t was .43 ($p = .336$). Involvement in Institutional Planning was not significantly related to teaching effectiveness at the .05 alpha level. Therefore, Hypothesis 21 was rejected.

Hypothesis 22: Part-time instructors who have input in course content are more effective than part-time instructors who do not have input into course content. Part-time faculty (N = 48) involved in determining course content had a mean teaching effectiveness score of 3.38 (SD = .199). Part-time faculty (N = 16) not involved in determining course content had a mean teaching effectiveness score of 3.32 (SD = .332). The calculated value of t was .87 ($p = .194$). Providing input in course content was not a significant covariate with teaching effectiveness. The difference in the two group means was not statistically significant at the .05 alpha level. Therefore, Hypothesis 22 was rejected.

Hypothesis 23: Part-time instructors who have input in determining the criteria for student evaluations are more effective than part-time instructors who do not have

input into determining criteria for student evaluations. Part-time faculty (N = 40) involved in determining the criteria for student evaluations had a mean effectiveness score of 3.41 (SD = .217). Part-time faculty not involved in determining the criteria for student evaluations (N = 23) had a mean teaching effectiveness score of 3.28 (SD = .26). The calculated value of t was 2.12 ($p = 0.19$). The difference in the two group means was statistically significant--part-time faculty with input in determining the criteria for student evaluations were perceived to be more effective than part-time faculty without input in determining the criteria for student evaluations. Therefore, Hypothesis 23 was retained.

Hypothesis 24: Attributes of effective part-time instruction including: teaching preparation, clerical assistance, access to computing facilities, non-instructional hours on campus, keeping regularly scheduled office hours, and teaching experience, are no different for full-time and part-time instructors. A correlation matrix (N = 130) is presented in Table 6.

Table 6

Teaching Effectiveness Correlation Matrix: Full-Time and Part-Time Faculty

**Years Teaching Experience (YTE), Non-Instructional Hours on Campus (NIHC),
Office Hours (OH), Clerical Assistance (CA), Access to Computing Facilities (ACF),
Teaching Preparation (TP), Teaching Effectiveness (TE).**

| | YTE | NIHC | OH | CA | ACF | TP | TE |
|------|------|------|-------|------|------|------|------|
| YTE | 1.00 | | | | | | |
| NIHC | .18 | 1.00 | | | | | |
| OH | -.05 | -.54 | 1.00 | | | | |
| CA | -.12 | .02 | .02 | 1.00 | | | |
| ACF | -.12 | -.12 | .11 | .06 | 1.00 | | |
| TP | .40 | .12 | -.11 | -.05 | -.85 | 1.00 | |
| TE | .07 | .12 | -.091 | .06 | -.19 | 0.03 | 1.00 |

Note: * Significant at the .05 level, ** Significant at the .01 level. (N=130)

Teaching Effectiveness = f(YTE, NIHC, OH, CA, ACF, TP, TE)

The correlation for both groups (N=130) between Teaching Effectiveness and the combined predictor variables ($R = .23$, $R^2 = .05$) was not significant ($F = .99$, 7, 122, $p > .05$). Correlation data is summarized in Table 7.

Table 7

Independent Variables: Teaching Effectiveness Model

| Variable | b | Beta | t | Sig t |
|-----------------------------------|-------|-------|-------|-------|
| Teaching Preparation | -0.00 | -0.17 | -0.18 | 0.85 |
| Clerical Assistance | 0.04 | 0.08 | 0.91 | 0.37 |
| Computing Facilities | -0.11 | -0.17 | -1.97 | 0.05 |
| Non-Instructional Hours on Campus | 0.00 | 0.10 | 0.80 | 0.42 |
| Office Hours | -0.02 | -0.05 | -0.45 | 0.65 |
| Years Teaching Experience | 0.00 | 0.05 | 0.55 | 0.59 |

Teaching Effectiveness Model

Many variables are associated with teaching effectiveness including years teaching experience, non-instructional hours spent on campus, regularly scheduled office hours, access to clerical assistance, access to computing facilities and formal teacher preparation. Multiple regression was used in this study to determine if teaching effectiveness was affected by employment status. Teaching effectiveness was regressed

according to the model described in equations (1) and (2). Appendix D contains a complete listing of the model.

$$Y_{\text{Full-Time}} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 \quad (1)$$

$$Y_{\text{Part-Time}} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 \quad (2)$$

Full-Time Faculty Model

The full-time faculty model included independent variables of clerical assistance, teaching preparation, access to computing facilities, years teaching experience, office hours, and non-instructional hours on campus. Multiple covariates in the full-time faculty model ($N = 66$) yielded a positive correlation ($R = .34$, $R^2 = .12$) but the relationship was not significant ($F = 1.32$, $6, 59$, $p > .05$).

Part-Time Faculty Model

The part-time faculty regression model generated results similar to the full-time faculty model. Using the same independent variables for full-time faculty, the part-time regression model yielded a weak correlation between the independent variables and teaching effectiveness ($R = .39$, $R^2 = .15$). The relationship between the independent variables and teaching effectiveness was not significant ($F = 1.65$, $6, 57$, $p > .05$).

Slope Analysis

To test for a difference between the coefficients of the full-time and part-time regression models, an employment status vector was established where 1 represented full-time faculty and -1 represented part-time faculty. This categorical variable, employment status, was multiplied by each of the covariates to produce a product vector. Each of the product variable regression coefficients were analyzed in a multiple regression equation ($R = .31$, $R^2 = .10$) for significance ($F = 1.6$, 8, 121, $p > .05$). A summary of the slope analysis is presented in Table 8.

Table 8

Slope Coefficients for Full-time and Part-Time Teaching Effectiveness Model

| Variable | b | Beta | t | Sig. t |
|-----------------------------------|-------|-------|-------|--------|
| Years Teaching | -0.01 | 0.00 | -3.07 | 0.00 |
| Non-Instructional Hours on Campus | 0.00 | 0.11 | 0.70 | 0.49 |
| Access to Clerical Assistance | -0.06 | -0.35 | -1.58 | 0.12 |
| Formal Teaching Preparation | 0.03 | 0.29 | 1.22 | 0.22 |
| Access to Computing | 0.05 | 0.28 | 1.08 | 0.28 |
| Regularly Scheduled Office Hours | 0.03 | 0.17 | 0.62 | 0.54 |

Since the t value for Years Teaching Experience was -3.07 ($p < .05$), the slopes for at least one regression coefficient were significantly different; therefore, it was not necessary to test the intercept--the difference between treatments. According to Pedhazur, "A test of the difference between intercepts is performed only after it has been established that the b 's do not differ significantly from each other. Testing the difference between intercepts amounts to testing the difference between the treatment effects of the categorical variable" (1982, p. 446). Because the slopes were different it cannot be concluded that the only difference between the two regression models is due to the intercept.

The multiple regression models suggest that most of the dependent variables associated with teaching effectiveness are not significant predictors of teaching effectiveness. The F value for covariation between independent variables and teaching effectiveness was not significant in either model. Further, only one of the dependent variables, years teaching experience, generated a significant t value.

CHAPTER 5

Summary, Conclusions, and Recommendations

Introduction

Part-time community college faculty have been the target of a growing body of criticism (Friedlander, 1980, Samuel, 1991, Spinetta 1990, AAUP, 1992). The American Association of University Professors, The Carnegie Foundation, and many individual scholars have criticized the community college for the exploitation of part-time faculty (McGuire, 1992). Proponents argue that part-time faculty represent an economical staffing alternative to full-time faculty. They also claim that part-time faculty bring relevant job skills from industry to the classroom. The literature doesn't differentiate between the employment of part-time faculty at FTE-funded colleges or performance-based community colleges.

While this debate has traditionally focused on part-time faculty qualifications, few critics have evaluated the teaching effectiveness of part-time faculty (Pierce, 1986). Staffing demands, resulting from fluctuations in enrollment have been frequently managed through the employment of part-time faculty. According to many critics, this practice has compromised the quality of instruction in the community college.

Responding to the charges of inequality between full-time and part-time instructor effectiveness, this study evaluated the outcomes of part-time faculty from 24 community colleges in North Carolina. Eight faculty, four full-time and four part-time, from each college were randomly selected to participate in this study. Participants were

asked to complete the Faculty Demographic Questionnaire (FDQ) while administering the Student Instructional Rating (SIR) to their students.

The purpose of this study was to evaluate the criticism levied at part-time faculty and determine if these criticisms were associated with ineffective teaching. Attributes of effective part-time instruction in the community college were identified. The study also compared the attributes of effective teaching for both part-time and full-time faculty.

The following hypotheses were tested at the .05 alpha level of significance.

Hypotheses one through 11 are stated in the null. Hypotheses 12 through 24 are directional because previous research suggested an expected outcome.

Hypothesis 1: There is no difference between the perceived Teaching Effectiveness of part-time and full-time community college faculty.

Hypothesis 2: There is no difference in the Overall Quality of the Course between part-time and full-time faculty.

Hypothesis 3: There is no difference in the Class Discussion of part-time and full-time faculty.

Hypothesis 4: There is no difference in the Lectures of part-time and full-time faculty.

Hypothesis 5: There is no difference in the Reading Assignments of part-time and full-time faculty.

Hypothesis 6: There is no difference in the perceived Course Difficulty of part-time and full-time faculty.

Hypothesis 7: There is no difference in the Examinations of part-time and full-time faculty.

Hypothesis 8: There is no difference in the Value of the Course between part-time and full-time faculty.

Hypothesis 9: There is no difference in the Quality of Instruction between part-time and full-time faculty.

Hypothesis 10: There is no difference in the Laboratory Exercises of part-time and full-time faculty.

Hypothesis 11: There is no difference in the Textbooks in classes taught by part-time and full-time faculty.

Hypothesis 12: Part-time instructors with other primary occupations are perceived to be more effective than part-time instructors without other primary occupations.

Hypothesis 13: Part-time instructors with discipline-related work experience are perceived to be more effective by their students than part-time instructors without discipline-related work experience.

Hypothesis 14: Part-time instructors with professional teaching preparation are perceived as more effective than part-time instructors without professional teaching preparation.

Hypothesis 15: Part-time instructor effectiveness is positively related to the number of years teaching experience.

Hypothesis 16: Part-time instructors with regularly scheduled office hours are perceived as more effective than part-time instructors without regularly scheduled office hours.

Hypothesis 17: Part-time instructors with clerical assistance are perceived to be more effective than part-time instructors without clerical assistance.

Hypothesis 18: Part-time instructor effectiveness is positively related to the number of hours preparation for the class.

Hypothesis 19: Part-time instructors who participate in policy making are perceived as more effective than part-time instructors who do not participate in policy making.

Hypothesis 20: Part-time instructors who participate in curriculum development are perceived as more effective than part-time instructors who do not participate in curriculum development.

Hypothesis 21: Part-time instructors who participate in institutional planning are perceived as more effective than part-time instructors who do not participate in institutional planning.

Hypothesis 22: Part-time instructors who have input in course content are more effective than part-time instructors who do not have input into course content.

Hypothesis 23: Part-time instructors who have input in determining the criteria for student evaluations are more effective than part-time instructors who do not have input into determining criteria for student evaluations.

Hypothesis 24: Attributes of effective part-time instruction including: teaching preparation, clerical assistance, access to computing facilities, non-instructional hours on campus, keeping regularly scheduled office hours and teaching experience, are no different for full-time and part-time instructors.

Descriptive statistics were used to determine the attributes of part-time faculty in North Carolina Community Colleges. A t test was used to evaluate the differences in teaching effectiveness between full-time and part-time faculty. Pearson Product-Moment

correlation and multiple regression were used to assess the covariation between teacher attributes and teaching effectiveness.

Part-Time Faculty Attributes

With 130 faculty responding, part-time faculty in North Carolina Community Colleges did not possess the same qualifications as their full-time counterpart, nor did they score as well as full-time faculty on several SIR dimensions. Notable differences in the qualifications of full-time and part-time faculty were found. Specifically, part-time faculty in North Carolina community colleges had less formal training than full-time faculty. Further, part-time faculty were more likely to justify their teaching positions through work experience than full-time faculty. Full-time faculty were perceived to offer better quality courses, to be better lecturers, to provide more thorough reading assignments and to use better textbooks. Also, part-time instructors who had input in determining the criteria for student evaluations of instruction had a higher teaching effectiveness score than part-time instructors who did not have input into determining the criteria for student evaluations.

Part-Time Instructor Effectiveness

Proponents of part-time faculty argued that part-time instructors were likely to bring state-of-the-art industry experience to the classroom. Contrary to the findings of Abel (1976) and Cottingham (1981), part-time faculty with discipline-related work experience failed to score higher on teaching effectiveness than part-time faculty without discipline-related work experience. Further, part-time faculty with other primary

occupations were perceived equally effective as part-time faculty without other primary occupations. Therefore, the industry practitioner attribute did not prove to be significantly related to teacher effectiveness.

Part-time faculty with many years teaching experience were perceived to be slightly more effective than part-time faculty with little teaching experience ($r = .24$, $r^2 = .06$) although the relationship was not significant ($F = 3.68$, $1, 62$, $p < .05$). These findings fail to corroborate the conclusions of Pierce (1986) suggesting that years teaching experience are positively related to teaching effectiveness.

The findings of this study differed from Law (1988) in several ways. Specifically, Law (1988) found that full-time and part-time faculty were perceived equally on all SIR dimensions except Tests and Examinations. This study found full-time faculty to score significantly higher on factors of Lectures, Reading Assignments, Textbooks and Overall Quality of the Course. It should be noted that Law's modified SIR was not directly comparable to the original instrument used in this study.

Critics of part-time faculty (Friedlander, 1980; Spinetta 1990; Samuel, 1991) argued that part-time faculty were less effective than full-time faculty because part-time faculty did not have office space nor did they keep regularly scheduled office hours. Fifty-five percent of part-time faculty in this study did not keep regularly scheduled office hours, but their measure of teaching effectiveness was not significantly less than part-time faculty who kept regularly scheduled office hours.

The claim that part-time faculty are treated poorly when compared to full-time faculty (Patschke, 1989; Goldberg, 1990; Galbraith & Shedd, 1990) is supported by

disparities in FDQ responses. For example, part-time faculty were less likely to have clerical assistance. Friedlander (1980) and Spinetta (1990) argued that part-time faculty did not have access to clerical assistance, so they were less effective than those who did have access to clerical facilities. Twenty-two percent of part-time faculty reported no access to clerical assistance, but their teaching effectiveness scores were no different than part-time faculty with clerical assistance.

Although teaching effectiveness was positively related to the number of hours preparation for the course ($r = .24$, $r^2 = .06$), the degree of covariation was not significant ($F = 3.78$, $p > .05$).

Critics (Friedlander, 1980; Spinetta, 1990; Samuel, 1991) claimed that part-time faculty did not possess attributes of teaching effectiveness including: adequate teaching preparation, clerical assistance, access to computing facilities, office space and office hours in addition to other attributes. A multiple R of .39 indicated these attributes were positively correlated with teaching effectiveness, but the correlation was not significant at the .05 alpha level.

Institutional Commitment

Few part-time faculty were involved in curriculum development, policy making and institutional planning. Sixteen percent of the part-time faculty indicated they were involved in policy making. Contrary to the assertions of Friedlander (1980) teaching effectiveness scores were no higher than the 84% who were not involved in policy making.

Part-time faculty participating in curriculum development (31%) scored lower on teacher effectiveness than part-time faculty who did not participate in curriculum development, although the difference was not statistically significant. Further, part-time faculty involvement in institutional planning was not a covariate with teaching effectiveness. Providing input in course content did not prove to be related to teaching effectiveness. However, part-time faculty who exercised input in determining the criteria for student evaluations of instruction had higher teacher effectiveness scores than those who had no input in teacher evaluation criteria. In summary, only one of five commitment variables proved to be significantly related to teacher effectiveness.

Marginal participation by part-time faculty in curriculum development, policy making, and institutional planning implied that full-time faculty assumed a greater role in these non-instructional tasks. This shift in the administrative burden increases as the ratios of part-time faculty increase. Consequently, community colleges are compromising the integrity of curriculum offerings by hiring high ratios of part-time faculty. Full-time faculty experience the incidence of additional administrative loads due to the reliance on part-time faculty. This shift in workload is contrary to SACS (1992) criteria which calls for a balance between full-time and part-time faculty.

Conclusions

Part-time faculty in North Carolina Community Colleges represented a large portion of the instructional population (Appendix F). Although critics (AAUP, 1992; Spinetta, 1990; Samuel, 1991) have argued that growing numbers of part-time faculty diminish instructional effectiveness, 53% of the instructional force in North Carolina

community colleges was part-time (Nagy, 1993a). Given the findings presented in Chapter 4, the following conclusions can be summarized from the North Carolina experience:

1. Contrary to the claims of AAUP (1992) part-time faculty, although less qualified than full-time faculty, are equally effective using the Faculty/Student Interaction scale. Supporting the assertions of AAUP (1992), part-time faculty were found to be less effective than full-time faculty on the SIR dimensions of Lectures, Reading Assignments, Textbooks, and Overall Quality of the Course. These differences refute the assertions of part-time faculty proponents (Pierce, 1986; Law, 1988) stating that part-time and full-time faculty are equally effective on most dimensions of teaching effectiveness. The issue of instructional inequality articulated by Samuel (1991) continues to be an important issue with the employment of part-time faculty using the criteria of Lectures, Reading Assignments, Textbooks, and Overall Quality of the Course.

2. Many part-time community college faculty would accept a full-time position if it became available. Since few part-time faculty have ties with industry, part-time teaching is becoming a derivative occupation generated by continual demand by community college administrators.

3. Discipline-related work experience was not related to teacher effectiveness for part-time faculty. Part-time faculty without discipline-related work experience were perceived equally effective as part-time faculty with discipline-related work experience. Proponents of part-time faculty (Abel, 1976; Cottingham, 1981) have argued that part-time faculty bring real world experiences to the classroom.

4. Full-time faculty were perceived as being better lecturers, offering more thorough reading assignments, using better textbooks and teaching better courses. These findings supported the claims of Friedlander (1980), Spinetta (1990), Samuel (1991) and others.

5. Part-time faculty were marginally involved in curriculum development, policy making and institutional planning. This lack of participation in non-teaching tasks confirm the claims of Friedlander (1980), Spinetta (1990), Samuel (1991) and AAUP (1992). Although part-time faculty reported involvement in determining course content and involvement in determining the criteria for student evaluations of instructors, only the latter proved to covary with teacher effectiveness. Part-time instructors who were involved in determining the criteria for student evaluations of instruction were perceived to be more effective compared to part-time instructors who indicated no involvement in determining the criteria for student evaluations of instruction.

6. The employment of part-time faculty shifts an implicit administrative burden to full-time faculty that ultimately threatens the integrity of instruction throughout the college.

7. The assertion that part-time faculty are not treated comparably with full-time faculty is supported by this study. Little progress has been made to incorporate part-time faculty into the total college environment. Throughout the long history of this debate part-time faculty have remained "step children" in the community college (Bender & Breuder, 1973, p. 29). Aggressive efforts should be made to integrate part-time faculty into the milieu of college teaching and administration. The contributions of

Spinetta (1990) and Patschke (1989) toward augmented support for part-time faculty are affirmed.

Recommendations

While part-time community college faculty were perceived to be as effective as full-time faculty on Faculty/Student Interaction, they were perceived as less effective on other SIR dimensions. Part-time faculty scored lower on Item [38], the Overall Quality of the Course; and the dimensions including: Lectures, Reading Assignments, and Textbooks. Nevertheless, students perceived the Overall Value of the Course, to be equal for both full-time and part-time instructors.

Items measuring institutional commitment were not associated with teacher effectiveness. Involvement in curriculum development and policy making are important non-instructional duties for both full-time and part-time faculty. However, part-time faculty in this study were marginally involved in these areas of institutional commitment.

Further research is needed to assess the impact the of part-time faculty employment on full-time faculty work loads. Research is also needed on community college initiatives that foster measurable teaching effectiveness. Specifically, Centra's (1992) recommendation of combining student ratings of instruction with teacher portfolios and peer evaluations is noteworthy considering the findings of this study. Further, more attention should be directed toward the instruments of teacher evaluation. In many cases, items on instructor rating instruments are not related to teacher effectiveness. Colleges using instruments developed in-house should evaluate the

validity of such instruments. Further, instructor evaluations should not be based on rating instruments alone (Centra, 1992).

Although part-time faculty were perceived equally effective as full-time faculty on Faculty/Student Interaction, their lower scores on Lectures, Reading Assignments, Textbooks, and Overall Quality of the Course should not be overlooked. Specifically, these factors are important elements of teacher effectiveness.

Successful community colleges must balance faculty work loads between instructional and administrative duties. In addition to teaching, instructors perform a variety of administrative tasks including: curriculum development, institutional planning, policy making, student advising and committee involvement. Part-time instructors rarely participate in these out-of-class activities (Samuel 1991). The growing number of part-time faculty in FTE-based colleges shifts an implicit administrative burden to a proportionally smaller number of full-time faculty. As the ratio of part-time to full-time faculty increases, the workload of full-time faculty also increases, shifting the teacher equilibrium. While colleges benefit from an economical staffing alternative, full-time faculty bear the costs of additional administrative tasks. The costs associated with these shifts in the work load are ultimately passed on to the student.

Although many claim that part-time faculty have been treated poorly, this study found no association between part-time faculty treatment and disparities of SIR scales: Lectures, Reading Assignments, Textbooks, and Overall Quality of the Course. In one specific instance, part-time faculty without clerical assistance were perceived to be more effective than part-time faculty with clerical assistance. Therefore, part-time faculty proponents, using the poor treatment defense, simply shroud the issue.

In summary, fundamental differences exist in the perception of part-time and full-time faculty effectiveness that should not be overlooked. The employment of part-time faculty has become a fiscal, rather than academic, issue--an addiction to the community college.

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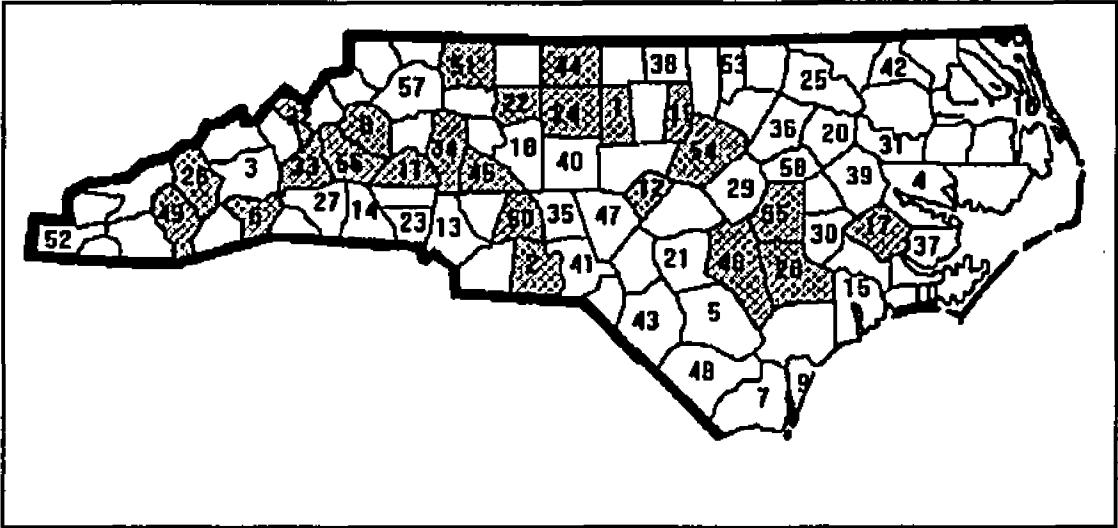
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APPENDICES

Appendix A
North Carolina Community Colleges

North Carolina Community Colleges
by
County

(Counties Shaded included in the sample)



North Carolina Community Colleges
 (Shaded Numbers Represent Colleges Included in the Sample)

| No. | College | Address | City | Zip Code | County |
|-----|--|-----------------------|----------------|----------|-------------|
| 1 | Alamance Community College | P.O. Box 8000 | Graham | 27253 | Alamance |
| 2 | Anson Community College | P.O. Box 126 | Polkton | 28135 | Anson |
| 3 | Asheville-Buncombe Tech. Community College | 340 Victoria Rd. | Asheville | 28801 | Buncombe |
| 4 | Beaufort County Community College | P.O. Box 1069 | Washington | 27889 | Beaufort |
| 5 | Bladen Community College | P.O. Box 266 | Dublin | 28332 | Bladen |
| 6 | Blue Ridge Community College | | Flat Rock | 28731 | Henderson |
| 7 | Brunswick Community College | P.O. Box 30 | Supply | 28462 | Brunswick |
| 8 | Caldwell Community College and Technical Institute | 100 Hickory Blvd. | Hudson | 28638 | Caldwell |
| 9 | Cape Fear Community College | 411 N. Front St. | Wilmington | 28401 | New Hanover |
| 10 | Carteret Community College | 3505 Arendell St. | Morehead City | 28557 | Carteret |
| 11 | Catawba Valley Community College | Route 3, P.O. Box 283 | Hickory | 28602 | Catawba |
| 12 | Central Carolina Community College | 1105 Kelly Drive | Sanford | 27330 | Lee |
| 13 | Central Piedmont Community College | P.O. Box 35009 | Charlotte | 28235 | Mecklenburg |
| 14 | Cleveland Community College | 137 S. Post Rd. | Shelby | 28150 | Cleveland |
| 15 | Coastal Carolina Community College | 444 Western Blvd | Jacksonville | 28546 | Onslow |
| 16 | College of The Albemarle | P.O. Box 2327 | Elizabeth City | 27909 | Pasquotank |

| No. | College | Address | City | Zip Code | County |
|-----|--|--------------------------|---------------|----------|------------|
| 17 | Craven Community College | P.O. Box 885 | New Bern | 28560 | Craven |
| 18 | Davidson County Community College | P.O. Box 1287 | Lexington | 27292 | Davidson |
| 19 | Durham Technical Community College | P.O. Drawer 11307 | Durham | 27703 | Durham |
| 20 | Edgecombe Community College | 2009 W. Wilson St. | Tarboro | 27886 | Edgecombe |
| 21 | Fayetteville Technical Community College | P.O. Box 35236 | Fayetteville | 28303 | Cumberland |
| 22 | Forsyth Technical Community College | 2100 Silas Creek Parkway | Winston-Salem | 27103 | Forsyth |
| 23 | Gaston College | 201 Highway 321 South | Dallas | 28034 | Gaston |
| 24 | Guilford Technical Community College | P.O. Box 309 | Jamestown | 27282 | Guilford |
| 25 | Halifax Community College | P.O. Drawer 809 | Weldon | 27890 | Halifax |
| 26 | Haywood Community College | Freedlander Dr. | Clyde | 28721 | Haywood |
| 27 | Isothermal Community College | P.O. Box 804 | Spindale | 28160 | Rutherford |
| 28 | James Sprunt Community College | P.O. Box 398 | Kenansville | 28349 | Duplin |
| 29 | Johnston Community College | P.O. Box 2350 | Smithfield | 27577 | Johnston |
| 30 | Lenoir Community College | P.O. Box 188 | Kinston | 28501 | Lenoir |
| 31 | Martin Community College | Kehukee Park Rd. | Williamston | 27892 | Martin |
| 32 | Mayland Community College | P.O. Box 547 | Spruce Pine | 28777 | Mitchell |
| 33 | McDowell Technical Community College | P.O. Box 547 | Marion | 28752 | McDowell |
| 34 | Mitchell Community College | West Broad St. | Statesville | 28677 | Iredell |

| No. | College | Address | City | Zip Code | County |
|-----|----------------------------------|----------------------|---------------|----------|------------|
| 35 | Montgomery Community College | P.O. Box 787 | Troy | 27371 | Montgomery |
| 36 | Nash Community College | Old Carriage Rd. | P.O. Box 7488 | 27804 | Nash |
| 37 | Pamlico Community College | Highway 306 S. | Grantsboro | 28529 | Pamlico |
| 38 | Piedmont Community College | P.O. Box 1197 | Roxboro | 27573 | Person |
| 39 | Pitt Community College | P.O. Drawer 7007 | Greenville | 27834 | Pitt |
| 40 | Randolph Community College | P.O. Box 1009 | Asheboro | 27204 | Randolph |
| 41 | Richmond Community College | P.O. Box 1189 | Hamlet | 28345 | Richmond |
| 42 | Roanoke-Chowan Community College | Route 2, Box 46-A | Ahoskie | 27910 | Hertford |
| 43 | Robeson Community College | P.O. Box 1420 | Lumberton | 28359 | Robeson |
| 44 | Rockingham Community College | | Wentworth | 27375 | Rockingham |
| 45 | Rowan-Cabarrus Community College | P.O. Box 1595 | Salisbury | 28144 | Rowan |
| 46 | Sampson Community College | P.O. Drawer 318 | Clinton | 28328 | Sampson |
| 47 | Sandhills Community College | 2200 Airport Rd. | Pinehurst | 28374 | Moore |
| 48 | Southeastern Community College | P.O. Box 151 | Whiteville | 28472 | Columbus |
| 49 | Southwestern Community College | 275 Webster Rd. | Sylva | 28779 | Jackson |
| 50 | Stanly Community College | 141 College Dr. | Albemarle | 28001 | Stanley |
| 51 | Surry Community College | P.O. Box 304 | Dobson | 27017 | Surry |
| 52 | Tri-county Community College | 2300 Highway 64 East | Murphy | 28906 | Cherokee |

| No. | College | Address | City | Zip Code | County |
|-----|---------------------------------------|-------------------------------------|------------|----------|--------|
| 53 | Vance-Granville Community College | P.O. Box 917 | Henderson | 27536 | Vance |
| 54 | Wake Technical Community College | 9101 Fayetteville Rd. | Raleigh | 27603 | Wake |
| 55 | Wayne Community College | Caller Box 8002 | Goldsboro | 27533 | Wayne |
| 56 | Western Piedmont Community College | 1001 Burkemont Ave. | Morganton | 28655 | Burke |
| 57 | Wilkes Community College | P.O. Box 120 | Wilkesboro | 28697 | Wilkes |
| 58 | Wilson Technical Community College | P.O. Box 4305 Woodard Station | Wilson | 27893 | Wilson |

Appendix B
FDQ Instrument

Faculty Questionnaire

Directions: Please answer the following questions in the response column.

| Item | Response | Question |
|------|----------|--|
| 1 | | Curriculum area of this course: 1. Vocational 2. Technical 3. General Education / College Transfer |
| 2 | | Number years of formal teaching experience. |
| 3 | | The number of non-instructional hours I spend on campus each week. (i.e. committees, office hours, meetings, etc.) |
| 4 | | I have regular office hours each week. (yes / no) |
| 5 | | I have access to clerical assistance in the preparation of my course materials. (yes / no) |
| 6 | | I spend ___ number of hours in preparation for this class each week. |
| 7 | | I have adequate access to campus computing facilities. (yes / no) |
| 8 | | I am involved in institutional planning at either the department, division or college level. (yes / no) |
| 9 | | I am involved in curriculum development at either the department, division or college level. (yes / no) |
| 10 | | I am involved in policy making at either the department, division or college level. (yes / no) |
| 11 | | The number of years work experience in my primary occupation. |
| 12 | | My professional teaching preparation includes: 1. No formal teacher training 2. One or more graduate courses in teacher education 3. A degree in education. |
| 13 | | My employment status at the college is (full-time / part-time). |
| 14 | | If part-time (#13), my career goal is full-time status as a community college instructor. (yes / no) |
| 15 | | My primary occupation is: 1. Education 2. Business and/or Industry 3. Government (non-school) 4. Self Employed 5. Currently unemployed |
| 16 | | My age is: 1. 20-29 2. 30-39 3. 40-49 4. 50-59 5. 60 + |
| 17 | | Gender (Male / Female) |
| 18 | | I have adequate input in determining the content of courses that I teach. (yes / no) |
| 19 | | I have adequate input in determining the criteria for student evaluations. (yes / no) |
| 20 | | My formal education includes: (Please check all that apply.) <input type="checkbox"/> A two-year degree in my teaching field. <input type="checkbox"/> A bachelor's degree in my teaching field. <input type="checkbox"/> A master's degree in my teaching field. <input type="checkbox"/> At least 18 graduate semester hours of course work in my teaching field. <input type="checkbox"/> I have work experience in my teaching field. |

Thank you. Please add this survey to the student questionnaires in the self-addressed postage paid envelope. Mail promptly.

Appendix C

Sample Letter to Chief Academic Officers

26 Sunset Terrace
Asheville, NC 28801
October 25, 1993

Chef Academic Officer:

As part of my doctoral research at East Tennessee State University, I am investigating the attributes of teaching effectiveness for part-time instructors in North Carolina community colleges. Your college has been randomly selected along with twenty-three other community colleges to participate in this study.

With your permission, I will ask eight instructors from your institution to administer a teaching effectiveness questionnaire to their largest class. Four pairs of instructors have been identified on the attached *Instructor Pairing List*.

Students will be asked to complete the Student Instructional Rating Instrument, and the instructor will be asked to complete the Faculty Demographic Questionnaire. Administration of the instruments should take 10 to 15 minutes of class time. The completed surveys will be mailed to me in a postage paid envelope.

The results of the survey will be completely anonymous. Names of teachers and institutions will not be linked to these findings in any way. Only composite data for the entire sample will be reported in my dissertation. Your college's participation will help identify attributes of part-time instructor effectiveness. A copy of the findings will be mailed to you upon completion of the study.

Please acknowledge your participation in this study by signing and returning the Instructor Pairing List. If you have any questions about the administration of this survey please contact me by telephone at (704) 254-1921, Ext. 240. I look forward to hearing from you.

Sincerely,

Joseph W. Franklin

Appendix D
Teaching Effectiveness Model

Teaching Effectiveness Model

The full-time faculty teaching effectiveness model is described in equation (1) and the part-time model is described in equation (2). Teaching effectiveness was calculated in each case and the resulting slopes of each independent variable were compared for differences.

$$Y_{\text{Full-Time}} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 \quad (1)$$

$$Y_{\text{Part-Time}} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 \quad (2)$$

where: X_1 = Years teaching experience

X_2 = Non-instructional hours on campus

X_3 = Regularly scheduled office hours

X_4 = Access to clerical assistance

X_5 = Access to computing facilities

X_6 = Formal teacher preparation

Appendix E
Factor Solution

**Promax Solution
North Carolina Observations**

| Item No. | Item | Factor Loading |
|---|---|----------------|
| Factor I: Teaching Effectiveness | | |
| 8 | The instructor seemed genuinely concerned with students' progress and was actively helpful. | 0.75 |
| 20 | In my opinion, the instructor has accomplished his or her objectives for the course. | 0.71 |
| 14 | The instructor summarized or emphasized major points in lectures or discussion. | 0.69 |
| 19 | The instructor was open to other viewpoints. | 0.73 |
| 11 | In this class I felt free to ask questions or express my opinions. | 0.71 |
| 12 | The instructor was well prepared for each class. | 0.64 |
| 4 | The instructor was readily available for consultation with students. | 0.65 |
| 5 | The instructor seemed to know when students didn't understand the material. | 0.70 |
| 10 | The instructor raised challenging questions or problems for discussion. | 0.65 |
| 1 | The instructor's objectives for the course have been made clear. | 0.60 |
| 13 | The instructor told students how they would be evaluated in the course. | 0.60 |
| 3 | The instructor used class time well. | 0.58 |
| 2 | There was considerable agreement between the announced objectives of the course and what was actually taught. | 0.56 |
| 9 | The instructor made helpful comments on papers or exams. | 0.65 |
| 17 | Examinations reflected the important aspects of the course. | 0.61 |
| 7 | The instructor encouraged students to think for themselves. | 0.57 |
| 15 | My interest in the subject area has been stimulated by this course. | 0.66 |

| | | |
|---|--|------|
| Factor II: Overall Quality of the Course | | |
| 33 | Overall, I would rate the supplementary readings. | 0.61 |
| 32 | Overall, I would rate the textbook(s). | 0.53 |
| 37 | Overall, I would rate the laboratories. | 0.64 |
| 34 | Overall, I would rate the quality of the exams. | 0.74 |
| 38 | Overall, I would rate the value of the course to me. | 0.76 |
| 35 | I would rate the general quality of the lectures. | 0.81 |
| 36 | I would rate the value of the class discussion. | 0.78 |
| 39 | How would you rate the quality of instruction in this course? | 0.74 |
| Factor III: Course Difficulty | | |
| 21 | For my preparation and ability, the level of difficulty of this course was: | 0.79 |
| 23 | For me, the pace at which the instructor covered the material during the term was: | 0.69 |
| 22 | The work load for this course in relation to other courses of equal credit was: | 0.72 |
| Factor IV: Course Demographics | | |
| 29 | What is your approximate grade point average? | 0.63 |
| 28 | What grade do you expect to receive in this course? | 0.59 |
| 26 | Is this course a major requirement or an elective? | 0.58 |
| 31 | Your gender? | 0.38 |
| 30 | What is your class level? | 0.30 |

Appendix F

Full-Time and Part-Time Faculty Comparison by Institution

| Full-Time / Part-Time Faculty Comparison by Institution | | | | | | | |
|--|----------------------|-----------|-----------|-------|-----------|-----------|-------|
| Location / Name | | 1988 | | | 1989 | | |
| County | Institution | Full Time | Part Time | Ratio | Full Time | Part Time | Ratio |
| Alamance | Alamance CC | 68 | 48 | 41.4% | 69 | 60 | 46.5% |
| Anson | Anson CC | 22 | 47 | 68.1% | 21 | 43 | 67.2% |
| Buncombe | Ashev-B Tech CC | 80 | 104 | 56.5% | 80 | 106 | 57.0% |
| Beaufort | Beaufort County CC | 41 | 53 | 56.4% | 41 | 54 | 56.8% |
| Bladen | Bladen CC | 17 | 17 | 50.0% | 18 | 27 | 60.0% |
| Henderson | Blue Ridge CC | 40 | 51 | 56.0% | 40 | 48 | 54.5% |
| Brunswick | Brunswick CC | 19 | 44 | 69.8% | 18 | 41 | 69.5% |
| Caldwell | Caldwell CC & TI | 55 | 132 | 70.6% | 59 | 119 | 66.9% |
| N. Hanover | Cape Fear CC | 60 | 54 | 47.4% | 60 | 65 | 52.0% |
| Carteret | Carteret CC | 38 | 48 | 55.8% | 42 | 50 | 54.3% |
| Catawba | Catawba Valley CC | 63 | 67 | 51.5% | 70 | 91 | 56.5% |
| Lee | Central Carolina CC | 68 | 49 | 41.9% | 71 | 78 | 52.3% |
| Mecklenburg | Central Piedmont CC | 232 | 560 | 70.7% | 231 | 502 | 68.5% |
| Cleveland | Cleveland CC | 42 | 37 | 46.8% | 40 | 48 | 54.5% |
| Onslow | Coastal Carolina CC | 104 | 58 | 35.8% | 99 | 70 | 41.4% |
| Pasquotank | College of Albemarle | 47 | 55 | 53.9% | 48 | 69 | 59.0% |
| Craven | Craven CC | 47 | 177 | 79.0% | 49 | 102 | 67.5% |
| Davidson | Davidson County CC | 60 | 71 | 54.2% | 59 | 76 | 56.3% |
| Durham | Durham TCC | 81 | 117 | 59.1% | 88 | 98 | 52.7% |
| Edgecombe | Edgecombe CC | 38 | 54 | 58.7% | 41 | 47 | 53.4% |
| Cumberland | Fayetteville TCC | 169 | 97 | 36.5% | 165 | 111 | 40.2% |
| Forsyth | Forsyth TCC | 101 | 113 | 52.8% | 104 | 15 | 12.6% |
| Gaston | Gaston College | 85 | 104 | 55.0% | 93 | 68 | 42.2% |
| Guilford | Guilford TCC | 140 | 163 | 53.8% | 145 | 241 | 62.4% |
| Halifax | Halifax CC | 40 | 26 | 39.4% | 38 | 31 | 44.9% |
| Haywood | Haywood CC | 59 | 106 | 64.2% | 58 | 50 | 46.3% |
| Rutherford | Isothermal CC | 48 | 41 | 46.1% | 50 | 33 | 39.8% |
| Dublin | James Sprunt CC | 31 | 38 | 55.1% | 37 | 33 | 47.1% |
| Johnston | Johnston CC | 81 | 26 | 24.3% | 86 | 23 | 21.1% |
| Lenoir | Lenoir CC | 71 | 122 | 63.2% | 81 | 60 | 42.6% |
| Martin | Martin CC | 26 | 23 | 46.9% | 22 | 17 | 43.6% |

| Location / Name | | 1988 | | | 1989 | | |
|-----------------|---------------------|-----------|-----------|-------|-----------|-----------|-------|
| County | Institution | Full-Time | Part-time | Ratio | Full-Time | Part-time | Ratio |
| Mitchell | Mayland CC | 27 | 22 | 44.9% | 26 | 36 | 58.1% |
| McDowell | McDowell TCC | 21 | 9 | 30.0% | 22 | 9 | 29.0% |
| Iredell | Mitchell CC | 41 | 38 | 48.1% | 46 | 34 | 42.5% |
| Montgomery | Montgomery CC | 26 | 25 | 49.0% | 25 | 24 | 49.0% |
| Nash | Nash CC | 32 | 95 | 74.8% | 37 | 29 | 43.9% |
| Pamlico | Pamlico CC | 7 | 3 | 30.0% | 7 | 4 | 36.4% |
| Person | Piedmont CC | 35 | 17 | 32.7% | 38 | 11 | 22.4% |
| Pitt | Pitt CC | 81 | 106 | 56.7% | 87 | 64 | 42.4% |
| Randolph | Randolph CC | 42 | 40 | 48.8% | 44 | 45 | 50.6% |
| Richmond | Richmond CC | 31 | 49 | 61.3% | 30 | 40 | 57.1% |
| Hertford | Roanoke-Chowan CC | 21 | 19 | 47.5% | 20 | 32 | 61.5% |
| Robeson | Robeson CC | 41 | 42 | 50.6% | 47 | 68 | 59.1% |
| Rockingham | Rockingham CC | 43 | 26 | 37.7% | 45 | 32 | 41.6% |
| Rowan | Rowan-Cabarrus CC | 45 | 134 | 74.9% | 55 | 124 | 69.3% |
| Sampson | Sampson CC | 33 | 22 | 40.0% | 35 | 23 | 39.7% |
| Moore | Sandhills CC | 83 | 21 | 20.2% | 87 | 21 | 19.4% |
| Columbus | Southeastern CC | 48 | 37 | 43.5% | 48 | 24 | 33.3% |
| Jackson | Southwestern CC | 48 | 51 | 51.5% | 45 | 86 | 65.6% |
| Stanly | Stanly CC | 33 | 80 | 70.8% | 32 | 77 | 70.6% |
| Surry | Surry CC | 60 | 39 | 39.4% | 60 | 42 | 41.2% |
| Cherokee | Tri-County CC | 18 | 30 | 62.5% | 20 | 29 | 59.2% |
| Vance | Vance-Granville CC | 48 | 78 | 61.9% | 64 | 70 | 52.2% |
| Wake | Wake TCC | 123 | 171 | 58.2% | 128 | 185 | 59.1% |
| Wayne | Wayne CC | 81 | 39 | 32.5% | 83 | 32 | 27.8% |
| Burke | Western Piedmont CC | 56 | 76 | 57.6% | 59 | 77 | 56.6% |
| Silkes | Wilkes CC | 56 | 46 | 45.1% | 58 | 52 | 47.3% |
| Wilson | Wilson TCC | 36 | 51 | 58.6% | 37 | 50 | 57.5% |
| | | | | | | | |
| | Total | 3289 | 4068 | 0.52 | 3408 | 3796 | 0.50 |
| | Average | 57 | 70 | 0.52 | 59 | 65 | |
| | Min | 7 | 3 | | 7 | 4 | |
| | Max | 232 | 560 | | 231 | 502 | |

| Full-Time / Part-Time Faculty Comparison by Institution | | | | | | | |
|--|----------------------|-----------|-----------|-------|-----------|-----------|-------|
| Location / Name | | 1990 | | | 1991 | | |
| County | Institution | Full Time | Part Time | Ratio | Full Time | Part Time | Ratio |
| Alamance | Alamance CC | 71 | 70 | 49.6% | 77 | 156 | 67.0% |
| Anson | Anson CC | 21 | 40 | 65.6% | 22 | 37 | 62.7% |
| Buncombe | Ashev-B Tech CC | 83 | 124 | 59.9% | 83 | 153 | 64.8% |
| Beaufort | Beaufort County CC | 39 | 44 | 53.0% | 40 | 56 | 58.3% |
| Bladen | Bladen CC | 19 | 30 | 61.2% | 20 | 24 | 54.5% |
| Henderson | Blue Ridge CC | 40 | 60 | 60.0% | 42 | 71 | 62.8% |
| Brunswick | Brunswick CC | 18 | 50 | 73.5% | 18 | 56 | 75.7% |
| Caldwell | Caldwell CC & TI | 60 | 130 | 68.4% | 63 | 149 | 70.3% |
| N. Hanover | Cape Fear CC | 67 | 72 | 51.8% | 67 | 63 | 48.5% |
| Carteret | Carteret CC | 41 | 46 | 52.9% | 40 | 54 | 57.4% |
| Catawba | Catawba Valley CC | 73 | 99 | 57.6% | 83 | 107 | 56.3% |
| Lee | Central Carolina CC | 75 | 75 | 50.0% | 94 | 68 | 42.0% |
| Mecklenburg | Central Piedmont CC | 228 | 354 | 60.8% | 228 | 503 | 68.8% |
| Cleveland | Cleveland CC | 39 | 52 | 57.1% | 42 | 52 | 55.3% |
| Onslow | Coastal Carolina CC | 100 | 64 | 39.0% | 100 | 86 | 46.2% |
| Pasquotank | College of Albemarle | 44 | 63 | 58.9% | 47 | 69 | 59.5% |
| Craven | Craven CC | 53 | 125 | 70.2% | 52 | 113 | 68.5% |
| Davidson | Davidson County CC | 60 | 64 | 51.6% | 64 | 72 | 52.9% |
| Durham | Durham TCC | 92 | 166 | 64.3% | 95 | 148 | 60.9% |
| Edgecombe | Edgecombe CC | 45 | 52 | 53.6% | 53 | 45 | 45.9% |
| Cumberland | Fayetteville TCC | 170 | 108 | 38.8% | 172 | 119 | 40.9% |
| Forsyth | Forsyth TCC | 119 | 101 | 45.9% | 118 | 120 | 50.4% |
| Gaston | Gaston College | 95 | 64 | 40.3% | 101 | 91 | 47.4% |
| Guilford | Guilford TCC | 159 | 263 | 62.3% | 152 | 242 | 61.4% |
| Halifax | Halifax CC | 44 | 37 | 45.7% | 44 | 42 | 48.8% |
| Haywood | Haywood CC | 60 | 67 | 52.8% | 59 | 85 | 59.0% |
| Rutherford | Isothermal CC | 49 | 33 | 40.2% | 52 | 40 | 43.5% |
| Dublin | James Sprunt CC | 35 | 40 | 53.3% | 40.00 | 61.00 | 60.4% |
| Johnston | Johnston CC | 90 | 15 | 14.3% | 96 | 27 | 22.0% |
| Lenoir | Lenoir CC | 77 | 119 | 60.7% | 76 | 110 | 59.1% |
| Martin | Martin CC | 23 | 15 | 39.5% | 22 | 22 | 50.0% |

| Location / Name | | 1990 | | | 1991 | | |
|-----------------|---------------------|-----------|-----------|-------|-----------|-----------|-------|
| County | Institution | Full-time | Part-time | Ratio | Full-time | Part-time | Ratio |
| Mitchell | Mayland CC | 28 | 31 | 52.5% | 26 | 37 | 58.7% |
| McDowell | McDowell TCC | 26 | 14 | 35.0% | 26 | 15 | 36.6% |
| Iredell | Mitchell CC | 46 | 31 | 40.3% | 45 | 40 | 47.1% |
| Montgomery | Montgomery CC | 25 | 30 | 54.5% | 26 | 26 | 50.0% |
| Nash | Nash CC | 39 | 41 | 51.3% | 42 | 50 | 54.3% |
| Pamlico | Pamlico CC | 8 | 4 | 33.3% | 8 | 5 | 38.5% |
| Person | Piedmont CC | 41 | 14 | 25.5% | 41 | 13 | 24.1% |
| Pitt | Pitt CC | 94 | 56 | 37.3% | 104 | 120 | 53.6% |
| Randolph | Randolph CC | 43 | 76 | 63.9% | 45 | 65 | 59.1% |
| Richmond | Richmond CC | 28 | 44 | 61.1% | 28 | 49 | 63.6% |
| Hertford | Roanoke-Chowan CC | 22 | 33 | 60.0% | 23 | 34 | 59.6% |
| Robeson | Robeson CC | 43 | 64 | 59.8% | 47 | 55 | 53.9% |
| Rockingham | Rockingham CC | 50 | 27 | 35.1% | 51 | 35 | 40.7% |
| Rowan | Rowan-Cabarrus CC | 59 | 122 | 67.4% | 60 | 126 | 67.7% |
| Sampson | Sampson CC | 33 | 20 | 37.7% | 35 | 25 | 41.7% |
| Moore | Sandhills CC | 96 | 17 | 15.0% | 99 | 21 | 17.5% |
| Columbus | Southeastern CC | 49 | 36 | 42.4% | 49 | 37 | 43.0% |
| Jackson | Southwestern CC | 40 | 36 | 47.4% | 40 | 50 | 55.6% |
| Stanly | Stanly CC | 35 | 65 | 65.0% | 36 | 66 | 64.7% |
| Surry | Surry CC | 63 | 48 | 43.2% | 69 | 54 | 43.9% |
| Cherokee | Tri-County CC | 21 | 27 | 56.3% | 20 | 29 | 59.2% |
| Vance | Vance-Granville CC | 64 | 49 | 43.4% | 63 | 108 | 63.2% |
| Wake | Wake TCC | 144 | 168 | 53.8% | 160 | 176 | 52.4% |
| Wayne | Wayne CC | 82 | 36 | 30.5% | 83 | 42 | 33.6% |
| Burke | Western Piedmont CC | 60 | 81 | 57.4% | 59 | 97 | 62.2% |
| Silkes | Wilkes CC | 60 | 55 | 47.8% | 58 | 47 | 44.8% |
| Wilson | Wilson TCC | 36 | 41 | 53.2% | 38 | 39 | 50.6% |
| | | | | | | | |
| | Total | 3,524 | 3,908 | 0.50 | 3,643 | 4,502 | 0.53 |
| | Average | 61 | 67 | | 63 | 78 | |
| | Min | 8 | 4 | | 8 | 5 | |
| | Max | 228 | 354 | | 228 | 503 | |

| Full-Time / Part-Time Faculty Comparison by Institution | | | | |
|--|----------------------|-----------|-----------|-------|
| Location / Name | | 1992 | | |
| County | Institution | Full Time | Part Time | Ratio |
| Alamance | Alamance CC | 79 | 127 | 61.7% |
| Anson | Anson CC | 24 | 27 | 52.9% |
| Buncombe | Ashev-B Tech CC | 92 | 133 | 59.1% |
| Beaufort | Beaufort County CC | 42 | 49 | 53.8% |
| Bladen | Bladen CC | 22 | 16 | 42.1% |
| Henderson | Blue Ridge CC | 44 | 70 | 61.4% |
| Brunswick | Brunswick CC | 18 | 59 | 76.6% |
| Caldwell | Caldwell CC & TI | 64 | 149 | 70.0% |
| N. Hanover | Cape Fear CC | 67 | 85 | 55.9% |
| Carteret | Carteret CC | 38 | 67 | 63.8% |
| Catawba | Catawba Valley CC | 90 | 117 | 56.5% |
| Lee | Central Carolina CC | 104 | 72 | 40.9% |
| Mecklenburg | Central Piedmont CC | 242 | 538 | 69.0% |
| Cleveland | Cleveland CC | 43 | 48 | 52.7% |
| Onslow | Coastal Carolina CC | 98 | 88 | 47.3% |
| Pasquotank | College of Albemarle | 52 | 90 | 63.4% |
| Craven | Craven CC | 59 | 100 | 62.9% |
| Davidson | Davidson County CC | 69 | 59 | 46.1% |
| Durham | Durham TCC | 97 | 144 | 59.8% |
| Edgecombe | Edgecombe CC | 60 | 37 | 38.1% |
| Cumberland | Fayetteville TCC | 171 | 147 | 89.4% |
| Forsyth | Forsyth TCC | 128 | 125 | 49.4% |
| Gaston | Gaston College | 102 | 107 | 51.2% |
| Guilford | Guilford TCC | 159 | 240 | 60.2% |
| Halifax | Halifax CC | 52 | 56 | 51.9% |
| Haywood | Haywood CC | 62 | 93 | 60.0% |
| Rutherford | Isothermal CC | 53 | 41 | 43.6% |
| Dublin | James Sprunt CC | 44 | 33 | 42.9% |
| Johnston | Johnston CC | 105 | 18 | 14.6% |
| Lenoir | Lenoir CC | 76 | 101 | 57.1% |
| Martin | Martin CC | 22 | 25 | 53.2% |

| Location / Name | | 1992 | | |
|-----------------|---------------------|-----------|-----------|-------|
| County | Institution | Full-Time | Part-time | Ratio |
| Mitchell | Mayland CC | 27 | 60 | 69.0% |
| McDowell | McDowell TCC | 27 | 17 | 38.6% |
| Iredell | Mitchell CC | 45 | 35 | 43.8% |
| Montgomery | Montgomery CC | 26 | 30 | 53.6% |
| Nash | Nash CC | 44 | 52 | 54.2% |
| Pamlico | Pamlico CC | 10 | 5 | 33.3% |
| Person | Piedmont CC | 44 | 14 | 24.1% |
| Pitt | Pitt CC | 108 | 101 | 48.3% |
| Randolph | Randolph CC | 45 | 75 | 62.5% |
| Richmond | Richmond CC | 29 | 61 | 67.8% |
| Hertford | Roanoke-Chowan CC | 21 | 35 | 62.5% |
| Robeson | Robeson CC | 45 | 73 | 61.9% |
| Rockingham | Rockingham CC | 52 | 44 | 45.8% |
| Rowan | Rowan-Cabarrus CC | 64 | 151 | 70.2% |
| Sampson | Sampson CC | 39 | 22 | 36.1% |
| Moore | Sandhills CC | 102 | 21 | 17.1% |
| Columbus | Southeastern CC | 48 | 49 | 50.5% |
| Jackson | Southwestern CC | 39 | 66 | 62.9% |
| Stanly | Stanly CC | 42 | 53 | 55.8% |
| Surry | Surry CC | 73 | 53 | 42.1% |
| Cherokee | Tri-County CC | 22 | 32 | 59.3% |
| Vance | Vance-Granville CC | 74 | 59 | 44.4% |
| Wake | Wake TCC | 178 | 220 | 55.3% |
| Wayne | Wayne CC | 84 | 53 | 38.7% |
| Burke | Western Piedmont CC | 60 | 95 | 61.3% |
| Silkes | Wilkes CC | 60 | 49 | 45.0% |
| Wilson | Wilson TCC | 39 | 32 | 45.1% |
| | | | | |
| | Total | 3,825 | 4,618 | 54.7% |
| | Average | 66 | 80 | |
| | Min | 10 | 5 | |
| | Max | 242 | 548 | |

VITA

Joseph W. Franklin

- Personal Data:** **Date of Birth:** June 12, 1951
Place of Birth: Blowing Rock, North Carolina
Marital Status: Married
- Education:** **Mars Hill College, Mars Hill, North Carolina,**
 B.S., Business Administration, 1973
Appalachian State University, Boone, North Carolina,
 M.A., Business and Economics, 1976
Western Carolina University, Cullowhee, North Carolina,
 Ed. S., Educational Administration, 1991
East Tennessee State University, Johnson City, Tennessee,
 Ed. D., Educational Administration, 1994
- Professional Experience:** **Department Chair: Business Computer Programming**
 Asheville-Buncombe Technical Community College 1980
Dean: Business and Hospitality Education Division
 Asheville-Buncombe Technical Community College
 1993-Present
- Honors and Awards:** **Phi Kappa Phi, 1991**
 1991 Teacher of the Year, Asheville-Buncombe Technical
 Community College.
Certified Systems Professional, Institute for the Certification
 Computer Professionals, 1986