

THE PERCEIVED STAFF DEVELOPMENT NEEDS OF PART-TIME OCCUPATIONAL-
TECHNICAL INSTRUCTORS IN THE VIRGINIA COMMUNITY COLLEGE SYSTEM

by

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Chapter 1

INTRODUCTION

All institutions of higher education should be making an attempt to insure better educational opportunities for all students. One step in insuring these opportunities would be to help the faculty identify their general and specific pedagogical needs by administering a staff development needs assessment. This may enable each instructor to plan an individualized program of professional development.

Institutions are often concerned with the professional development needs of their full-time faculty, but appear to show little concern for the needs of their part-time faculty. Robert Grymes, Provost at J. Sargeant Reynolds Community College in Virginia, may have pinpointed the problem when he stated, "In light of the large number of adjunct instructors being utilized, there appears to be surprisingly few attempts to provide training for them. A rather extensive research effort has failed to discover a single in-depth, on-going, in-service training program for adjunct faculty members" (Grymes, 1978, p. 9). Since many of these individuals come from industry or business, they probably have little pedagogical training. Bender and Breuder reported, "One objection advanced against the hiring of (part-time) faculty is that these people, outstanding though they may be in their own fields, are not trained teachers" (Bender and Breuder, 1973, p. 30). Despite the argument that many part-time faculty members are not trained teachers, they still are

playing an important role in community college education today. Daigneault contended that "the part-timer represents a competency that could not be fulfilled by resident members of the department . . . "and". . . with suitable procedure for selection, pre-service and in-service preparation, and supervision, the part-timer could offer the institution a resource that could not be duplicated except at a prohibitive cost" (Daigneault, 1963, pp. 38-39). Charles Monroe in his book, Profile of the Community College, stated his belief that part-time instructors offer a source of good teaching talent for community colleges. Also, he emphasized that an abundance of knowledge and work experience could overshadow academic credentials. He further stated, "That lay teachers, drawn from the outside, are excellent provided that these persons have skill in communicating and the ability to organize" (Monroe, 1972, p. 137). Daigneault and Monroe seem to agree that the part-time teacher can be valuable to the community college.

Increased Use of Part-Time Faculty

Part-time faculty members are being utilized in increasing numbers in community colleges in all areas of the country as an attempt is being made to offer new and enlarged educational opportunities to meet increased community demands and expectations. Data are available which indicate the increased utilization of part-time faculty. It was reported in 1972 that approximately 40 percent of the 1970-71 public community-junior college faculties were hired

on a part-time basis (Community, Junior, and Technical College Directory, 1972, p. 78). In the 1976-77 academic year this percentage had increased to 55.8 percent (Community, Junior, and Technical College Directory, 1977, pp. 80-83). By the Fall Quarter of 1978, 57 percent of the teachers hired by the public community-junior colleges in the United States were hired as part-time teachers (Community, Junior, and Technical College Directory, 1979, p. 64).

A report on the 1976 Fall Quarter in the Virginia Community College System showed that 13 of the 23 community colleges were employing more part-time faculty than full-time faculty, and only in two colleges did the part-time instructors number less than 50 percent of the full-time faculty (Community, Junior, and Technical College Directory, 1977, pp. 80-83). In the Fall Quarter of 1977, there were 2018 full-time instructors and 2682 part-time instructors teaching in Virginia Community Colleges. The part-time instructors constituted 57 percent of all instructors hired by the system for that quarter (Community, Junior, and Technical College Directory, 1978, pp. 54-55). One year later, in the Fall Quarter of 1978, this percentage had increased to approximately 60 percent with 2838 part-time instructors and 2157 full-time instructors (Community, Junior, and Technical College Directory, 1979, p. 53).

Background of the Study

The community college philosophy needs to include a commitment to change. The needs of a community change almost from

day to day. In order for the community college to meet these changing needs, they will have to vary their services to meet an increasing number of students. This variety of services may consist of a number of specialized classes which require specialized people to teach them. Many of these specialized people could be individuals who are engaged in some kind of business or industry full time and teaching specialized classes part time at night, in the early morning, or late afternoon. The background of these specialized people may be great assets in their education role, but community college administrators must realize these individuals have other needs to be met to insure they reach their full potential as educators.

In 1973 the results of a Wisconsin survey showed the effectiveness of part-time instructors, but at the same time brought out their needs for pedagogical training. The survey showed that approximately forty percent of the part-time instructors were lacking in pedagogical training and needed updating on technology and educational methods. Listed as the greatest needs of the part-time faculty were:

1. Teaching technique - Techniques for managing the classroom situation to provide for more student enrollment, motivation, and learning;
2. Planning and organizing instructional material;
3. Teaching performance and evaluation;
4. Using instructional devices and audio-visual aids; and

5. Evaluation of students (Improved Instructional Capabilities of Part-Time Vocational Education Call-Staff: Final Report, 1974, p. 9).

Weintraub reported that the hiring of part-time instructors is adversely affecting the quality of instruction in community colleges (Weintraub, 1974, p. 31). Bender and Breuder stated, "Very little is being done to assist part-time faculty to improve their instruction or to have a better understanding of the people they serve" (Bender and Breuder, 1973, p. 35). Since so little is being done for part-time faculty, Bender and Hammons concluded that, "The beginning of the term is often a case of the blind leading the blind" (Bender and Hammons, 1972, p. 21).

There is controversy concerning the value of part-time faculty to the institutions where they teach. Their background and experience appear to be both an asset and a liability. Daigneault stated, "Part-time faculty members are not as academically advanced as members of the resident faculty" (Daigneault, 1963, pp. 33-78). Kuhns said, "Teachers drawn from outside the regular full-time teaching staff may have had no professional education courses and may, therefore, lack knowledge about successful teaching techniques" (Kuhns, 1971, p. 11). Grymes stated, "Some observers have concluded that to contract individuals who lack teaching training is to invite mediocrity" (Grymes, 1977, p. 25). Overturf and Price said, "Faculty with education degrees appear to enjoy slightly higher ratings as a whole than faculty without education

degrees" (Overturf and Price, 1966, p. 10). It appears that the educational background does affect the teaching abilities of part-time individuals.

The studies on teaching experience show that part-time instructors possess less teaching experience than full-time teachers. Lombardi stated, "Studies of previous teaching experience show that part-time instructors have less teaching experience than full-time instructors" (Lombardi, 1975, p. 31). Lombardi further stated, "The assumption, stated or not, is that the more graduate work faculty have, the better qualified they are. So too but to a lesser extent, the more teaching experience, the better qualified" (Lombardi, 1975, p. 28).

One reason stated earlier for hiring part-time faculty was the expertise they could give in their fields. Nelson stated, "Experience has shown that the quality of instruction (in occupational related courses) depends upon the occupational competence of the teachers" (Nelson, 1973, p. 7). Johnson gave this opinion:

It is through successful work experience that a person learns the skill, technical knowledge, and mores of the occupation he will be teaching. It provides the basis of instructional content. But work experience gives more than subject matter; it gives a teacher the insight into the occupational environment for which he is training his students and assist him in relating the occupational requirements to his instruction (Johnson, 1974, p. 14).

The greatest single resource in a college has to be the staff. Greater emphasis is being put on staff development as colleges

realize that staff development can help teachers reach their potential as educators. DeHart (1977) contended that if the quality of education is to become and remain high, there must be some systematic way of continuously developing the staff.

Almost all community colleges have some type of in-service faculty development program. This may range from a simple orientation, such as a part-time faculty member might receive, to a sophisticated, complex, and expensive model which appears to be given most often only to the full-time faculty. In fact, few part-time faculty members are involved in any type of academic activity outside of teaching. They are not included in faculty and departmental meetings, do not participate on curriculum development committees, and do not take part in orientation programs or in-service training (Cooke and Hurlburt, 1976, p. 16).

An investigation of the literature demonstrates that there is little doubt as to the importance of staff development in the community college system. However, first there must be an assessment of specific needs on the part-time staff so that an appropriate staff development program can be planned. Hammons and Wallace (1976) spoke of the importance of an assessment of needs:

Despite these substantial efforts over the last eight years in determining the specific requirement for staff development, a major need for assessment still exists. New needs are continually emerging as community colleges change to meet the demands of their community (e.g., the current emphasis on community service and the need of older Americans (Hammonds and Wallace, 1976, pp. 2-3).

Grymes agreed with Hammond and Wallace when he said, "Before any training program for part-time faculty is developed a thorough needs assessment should be conducted" (Grymes, 1978, p. 9).

Part-time faculty enable the institutions to be more flexible and also make it economically possible for them to offer a greater variety of courses in different locations at different times. Kuhns suggested many institutions would find it difficult to "offer the wealth and variety of programs currently available were it not for the dedicated instruction provided by hundreds of part-time faculty members" (Kuhns, 1971, p. 466). But to offer these courses is not enough. They should be taught by instructors who are capable and efficient teachers. Harris and Parsons further supported this when they said, "Students who enroll in courses taught by adjunct faculty have the right to expect instruction of equal quality with that provided by regular faculty" (Harris and Parsons, 1976, p. 46). Dr. John Gallagher concluded, "Part-time faculty are probably not very different from full-time faculty members in many respects. Many of the potential advantages of faculty development to both the individual and the institution apply equally to both. They develop as teachers in much the same way as most full-time faculty members do: through modeling, trial and error, and unstructured learning from colleagues" (Gallagher, 1978, p. 4).

Statement of the Problem

Community colleges are utilizing great numbers of part-time

instructors. These individuals have needs which are not being met by existing staff development programs. The specific needs of these individuals should be discovered and categorized so that staff development programs can be designed to meet them in the most efficient and effective way. By assessing the staff development needs and then structuring a staff development program to meet these needs, institutions can enhance their chances of having capable and efficient part-time faculty members.

Purpose of the Study

The purpose of the study was to ascertain the perceived staff development needs of part-time occupational-technical instructors in the Virginia Community College System. Specifically, the study answered the following questions:

1. What are the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System?

2. Is there a significant relationship between the perceived staff development needs of part-time occupational-technical faculty and the following five independent variables?

- a. Education levels of part-time occupational-technical faculty.

- b. Number of clock hours of teacher-training courses of the part-time occupational-technical faculty.

c. Years of teaching experience of part-time occupational-technical faculty.

d. Years of subject-related work experience of the part-time occupational-technical faculty member.

e. Age of the part-time occupational-technical faculty member.

3. Does the part-time occupational-technical faculty feel that staff development is important?

4. Would the part-time occupational-technical faculty member participate in a staff development program if one were offered and under what circumstances?

Definition of Terms

1. Staff Development - For the purpose of this study, staff development is defined as formal and informal in-service training programs which are designed for the purpose of improving the skills and competencies of the instructional staff in the occupational-technical area.

2. Virginia Community College - "Institution of higher education of instruction generally extended not more than two years beyond the high school level, which shall include, but not limited to, courses in occupational and technical fields, the liberal arts and sciences, general education, continuing adult education, pre-college and pre-technical preparatory programs, special training programs to meet the economic needs of the region in which the

college is located, and other services to meet the cultural and educational needs of the region" (VCCS Policy Manual, 1976, p. 1).

3. Instructors - Those individuals who have responsibility for classroom and laboratory instruction.

4. Part-Time Instructors, Part-Time Faculty, and Adjunct Faculty (used synonymously) - Those individuals who are employed in classroom teaching for less than twelve credit hours each academic quarter (VCCS Policy Manual, 1976, pp. 3-16). Administrators in the Virginia Community College Systems (Deans, Division Chairmen, etc.) are not considered part-time faculty for the purpose of this study.

5. Needs - Specific knowledge, skill or attitude which the individual does not have but could obtain through learning experience (Hammons, Wallace, and Watts, 1978, p. 26).

6. Occupational-Technical Programs - Those programs designed to meet the increasing demand for technicians, semi-professional workers, and skilled craftsmen for employment in industry, government, the professions, and business (VCCS Policy Manual, 1976, p. 2A-2).

7. Review Panel - Two specialists in the area of part-time occupational-technical instructors selected from within the Virginia Community College System to review the questionnaire for clarity, consistency, and comprehensiveness.

Limitations

The generalization of findings presented in this research study are subject to the following limitations:

1. The study was limited to part-time occupational-technical instructors and any generalization to other areas or to full-time faculty should be done with caution.

2. This study was limited to the Virginia Community College System and any generalization to other systems should be done with caution.

Summary

There is a large quantity of information in the literature concerning staff development. This study did not attempt to look into the many programs of staff development but, instead, looked into assessing perceived staff development needs of part-time faculty in the occupational-technical division of community colleges in Virginia. The literature points out the need for constant assessment of these needs and from the literature one can see how little has been done in assessing needs of part-time faculty in the community college system. This fact in itself may be a strong enough point to warrant such a study. By determining the areas of weaknesses of the part-time occupational-technical faculty, a more efficient staff development plan could be developed and implemented.

Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

"Part-time faculty constitute a dedicated, but often overlooked group of community college faculty members making an important contribution to an institution's program" (Cooke and Hurlburt, 1976, p. 15). Although it is believed that part-time faculty members play an important role in community college education, they tend to remain set apart from the full-time personnel of the college. Often they appear to be thought of as "lower class college citizens." They have no real job security, usually do not have due process hearings when they are dismissed, normally receive less than half the pay of full-time instructors, and do not get fringe benefits (Lombardi, 1974, p. 4). It seems apparent that part-time faculty do not receive the same considerations as do full-time faculty. Rather than treating them differently, each institution could gain by helping them with their professional growth which could be started by ascertaining their professional needs.

Part-time instructors in community colleges are being utilized in increasing numbers throughout the United States, however, relatively few studies are being conducted concerning these individuals. This is especially true regarding staff development for part-time faculty. The studies which can be found are mainly descriptive

in nature or are biographical accounts. There appears to be a great void in studies dealing with the pedagogical needs of part-time faculty and how these needs can be met through a staff development program. This was alluded to by Grymes when he said:

In light of the large number of part-time instructors being utilized throughout the United States, surprising few studies have been conducted to actually determine whether they enhance or vitiate an instructional program. Much of the literature concerned with part-time faculty members consist mainly of descriptive and anecdotal accounts. There are precious few studies which offer much of substance on the subject (Grymes, 1978, p. 19).

In reviewing the literature, it was necessary to cover three broad areas which dealt with the research topic. First, the background and characteristics of part-time community college faculties were examined. Their weak points as well as their strong points were investigated. Second, the literature was examined to investigate staff development programs and how these programs could meet the development needs of part-time faculty. Third, the literature review explored the needs assessments of part-time faculty in community colleges. An investigation was made to determine how needs assessments are defined, perceived, and structured.

Characteristics of Part-Time Faculty in Community Colleges

The best way to begin a description of part-time community college faculty may be to repeat a statement made by Wurster, who described the part-time instructor as the "mystery member of the community junior college teaching profession" (Wurster, 1970, pp.

19-20). As more and more studies are being done, the "mystery" may be eliminated, especially with the number of descriptive articles about part-time faculty which are being published today. With each new publication, more is being learned about part-time faculty, but compared to the knowledge of the characteristics of the full-time faculty member, little is still known. Individuals such as Gowan and Daigneault (1961), Bender and Breuder (1973), Kuhns (1971), and Anderson (1975), discussed attitudes and opinions of individuals who worked with part-time faculty. These authors, along with Biernstein (1975), and Englebart (1961), spoke of the advantages and disadvantages these individuals give to community colleges. Lombardi did an extensive study on part-time instructors which gave "an overview of the part-time faculty situation in modern times" (Lombardi, 1975, p. 1). The article contained information such as definition, how many were employed, what they taught, how many hours they taught, their qualifications, and how much pay they received (Lombardi, 1975, p. 1).

Data Related to Demographic Characteristics and Staff Development Needs

No information could be found dealing directly with the relationship of staff development needs and the five selected independent variables. However, the literature search did reveal the close relationship between staff development needs and effective teaching and, in turn, the relationship between effective teaching and the five selected independent variables (Hall, 1970; Novak, 1974; Rammers and

Elliott, 1949; Nelson, 1973; Kuhns, 1971).

The effectiveness of part-time faculty has long been debated. There have been several doctoral dissertations concerning this discussion. Cooke (1973) discussed the characteristics of these individuals, giving some background to the topic of effectiveness, while Kennedy (1966) discussed how to recruit effective part-time instructors. Sutton (1962) considered how to retain the effective part-time instructor. Heinberg (1967) discussed their supervision. Their perceived effectiveness was examined by Caister (1961). Grymes (1977) did a study on how students' ratings of part-time and full-time faculty effectiveness were affected by the teacher's pedagogical training and work experience.

Hall (1970) had this to say about instructor effectiveness: "The degree to which an instructor will be effective both in and out of the classroom, in his relationship with his students depends to a large extent on his formal education, the quality of in-service training which he receives, and the type of personal, professional, and occupational experience which he brings to the college" (Hall, 1970, p. 2).

Other writers have written about the relationship of effective teaching and staff development needs. Novak (1974) reported that participants in in-service training, designed to meet staff development needs, participated in order to become more effective teachers. The National Advisory Council on Educational Professional Development stated strongly that if a

social institution such as the community college is to respond to ever changing needs of society, its staff must constantly be retrained through in-service education in order to have more effective teachers to meet these changing needs (Blake, 1972). O'Banion (1972) said that the success or failure of the community college in 1980 rests on the same basis as it did in the 1970's, the quality of its teaching staff and that the quality of the teaching staff is dependent at least in part on the staff development program. O'Banion stated in another article, "Staff renewal is a program consciously undertaken and carefully planned to help all members of the college community realize their potential so they can in turn help students realize theirs" (O'Banion, 1974, p. 15).

Teaching Experience

One instructor characteristic which has been investigated and with which this study was concerned was an instructor's experience as a teacher. In a doctoral dissertation study concerning full-time faculty, McCarbery, utilizing The Purdue Rating Scale for Instruction, found no significant difference in how teachers were rated by students which could be attributed to years of teaching experience (McCarbery, 1970). Remmers and Elliott disagreed when they discovered that teachers with less than five years of teaching experience were rated consistently lower than those with more than five years of teaching experience (Remmers and Elliott, 1949). Hall in his dissertation dealing with the

effectiveness of community college teachers had this to say about teaching effectiveness and years of experience: "There is a difference in the teaching effectiveness of community junior college instructors with varying years of teaching experience" (Hall, 1970, p. 87).

Related Work Experience

One of the important reasons given for hiring part-time faculty is because they are thought to have more practical knowledge and experience due to the fact that so many are engaged full time in a related occupation. Much has been said regarding whether this experience would help make these individuals more effective instructors. Not all the studies agree with the idea that work experience makes the individual more effective as a teacher. Johnson, in a doctoral dissertation, had this to say about the subject when he contended, "It was tentatively concluded that differences in student achievement was the result of other variables than work experience" (Johnson, 1974, p. 7). Those who agreed with his results in their studies were Swartz (1974), Jones (1967), and Gaines (1955).

Many have disagreed with the above findings. Nelson contended, "Experience has shown that the quality of instruction (in occupationally related courses) depends upon the occupational competence of the teachers" (Nelson, 1973, p. 7). He backs up this contention by giving the results of a study which showed a direct relationship between occupational competency of vocational

educators and their teaching ability (Nelson, 1973). A majority of vocational and occupational teachers agree with the idea that work experience contributes to teacher effectiveness (Brooks, 1972). Grymes' study supported this contention when he reported in his conclusion: "The recency of the related work experience of instructors was a significant factor in 'Fulfillment of Student Needs' and 'Overall Rating of the Instructor'" (Grymes, 1977, p. 124).

Age

A search of the literature revealed no study which looked into the relationship of effective teaching and the age of the part-time instructor. However, one study was found which dealt with the ages of full-time instructors and their effectiveness. Hall found in his study that instructors who were sixty years of age and older had the lowest teaching effectiveness scores, while those individuals between thirty and thirty-nine had the highest teaching effectiveness scores (Hall, 1970, p. 71).

Occupational Background

In their study, Harris and Parsons found that part-time faculty were recruited from business and industry and from educational institutions by advertising and quite often by word-of-mouth referrals (Harris and Parsons, 1975). Other individuals whose findings agree with these two are Bender and Breuder (1973), Ivey (1960), and Kennedy (1966).

Kuhns found a broad cross section of occupations was brought to the classroom by part-time instructors:

. . . Construction management engineers, radio advertising salesmen, social worker, superintendent of boys training school, staff artist, naval astronomer, physicist, research chemist, insurance analyst, supervisor of instrumental music, operation analyst, aero-space technologist, ICC attorney-advisor, chief statistician, applied mathematician, research scientist, merchandise manager, internal revenue specialist, economists, chemical research chief (Kuhns, 1971, p. 8).

Why They Teach

There are many reasons why part-time faculty members are willing to work for institutions even though they are not employed full time by the institution. Some are teaching for financial reasons, some for personal satisfaction, some hope it will lead to full-time employment, some for experience, and others because it helps them become familiar with and understand new methods and ideas (Kuhns, 1971).

Many of the part-time faculty teach because they want to do so. Scully reported that an Educational Testing Service survey found eighty percent of the part-time faculty preferred the part-time status (Scully, 1975).

Academic Preparation

Studies have been done concerning the academic preparation of part-time faculty. The findings indicate that they are less prepared academically than full-time faculty. Fewer part-time

faculty members have advanced degrees and considerably fewer of them possess doctorates (Piland and Ogilvie, 1969). However, Wattenbarger (1963), Phair (1969), and Birnbaum (1966) found that most part-time faculty had completed work for at least one degree. Cooke (1973) found that 34.9 percent of the part-time faculty in North Carolina had a baccalaureate degree and that 17 percent had a master's degree.

Selection of Part-Time Faculty

Gowen and Daigneault in a study of the staffing patterns of part-time faculty looked at the junior division of thirty-six urban universities. They discovered two patterns. One showed no planning, only haphazard hiring. Here, there was no realistic orientation program, no in-service program, and student complaints made up the evaluation of these individuals. The second pattern showed that administrators looked at enrollment trends, hired part-time staff members, basing selection on professional criteria, rather than student popularity, and went on the expectation that part-time faculty would make the same contribution as full-time faculty (Gowin and Daigneault, 1961, pp. 3-5). Kennedy found that "part-time instructors were hired because of insufficient enrollment in an academic area, rapid and unexpected enrollment growth, and student overflow from required courses" (Kennedy, 1966, p. 102). Ivey (1960) thought the final selection of part-time faculty should be based on three aspects: academic qualifications, experience, and personal qualities, while Maryland and Illinois administrators

preferred that the part-time teacher hold a master's degree and have teaching experience (Kennedy, 1966). In Michigan, Messerschmidt found that the administrators, in the hiring of teachers, would accept work experience in lieu of formal teaching experience. At the same time, the researcher found that hiring practices became more flexible as the first class meeting approached (Messerschmidt, 1967).

Part-Time Faculty Orientation

A search of the literature revealed the knowledge which part-time faculty members gain from their fields of work. Eurich (1963) found that part-time instructors in vocational and technical fields are more up to date on developments in their fields and may be more qualified than full-time faculty. However, this does not guarantee teaching competency as discovered by individuals in a government agency (U. S. Department of Health, Education, and Welfare, Office of Education, 1955). The part-time faculty members need to know about the policies and procedures as well as the institutional philosophy of the institutions, but they seldom receive any information or instruction in these areas. Gowin and Daigneault (1961) reported that only 18 of 36 institutions studied offered any type of introductory activities for part-time faculty members. Kennedy (1967) found that only

six of the thirty administrators in junior colleges in Maryland and Illinois required part-time faculty to attend organized group activities. Gowin and Daigneault (1961) found that about the only orientation part-time faculty members received were short discussions with college administrators about the various routines.

Teaching Environment

The environment in which the part-time teacher performs leaves a great deal to be desired. They are considered to be inferior by full-time faculty members ("Better Utilization of College Teaching Resources - A Summary Report," 1959). They are hired on a temporary basis and may not be paid at all if class enrollment is insufficient. Many times they do not have the availability of personnel in support areas, support services such as student services, a library, or audio visual department, and others. They normally receive less compensation than full-time faculty teaching the same courses. More often than not they feel isolated from the other members of the college (Kuhns, 1971). They work in a situation where there is normally a long lapse between classes and student interest must be constantly renewed. They do not get to know students very well and often lack teaching experience (U. S. Department of Health, Education, and Welfare, Office of Education, 1955). Hoffman (1980) may have summed it up when he said:

Whether they are viewed as resource persons performing a community service or as individuals who are simply willing to teach at times and in locations which are undesirable to full-time faculty, part-time instructors are vital to the educational mission of the two-year college. The weight of the literature indicates that, while there may be disagreement over the relative merits of extensive use of part-time instructors, general consensus exist to indicate that personnel practices involving these individuals leave much to be desired (Hoffman, 1980, p. 13).

Advantages and Disadvantages of Utilizing Part-Time Faculty

"Flexibility is undoubtedly a major asset accrued from the utilization of part-time instructors" (Grymes, 1977, p. 3). Bullough also looked at the advantages of hiring part-time faculty. He contended that by having part-time faculty available administrators have a select group in the institution from which to draw when hiring full-time faculty. Before the individual is hired full time, the administrator is able to evaluate first-hand the part-time instructor's teaching competency (Bullough, 1958). Some individuals believe that a more stimulating classroom environment may be established because of the part-time instructor's experience outside the field of education (Kennedy, 1967).

Gowin and Daigneault (1961) talked of disadvantages of hiring part-time faculty. They mentioned such points as unavailability to students as well as to the general college community and lack of institutional orientation. In a study on post-secondary technical instructors in Ohio's community

college and university branches, Andreyka found a number of disadvantages. First, he pointed out that the part-time instructor will seldom undertake any activity that require any lengthy outside preparation. He also found they do not usually use audio-visual media, do not want to take part in curriculum development and planning, and seldom individualize their instruction (Andreyka, 1971). Kuhns (1963) found that part-time instructors were unable to identify with the institution because of the small amount of time spent on campus. They did not usually meet institutional dead-lines; they did not have realistic levels of instruction; and they often lacked proper teaching techniques. Some professional educators "wonder if part-time instructors are aware of the institution's mission, its philosophy, and its uniqueness of its student body" (Grymes, 1979, p. 15).

Messerschmidt's study which sums up the advantages and disadvantages of utilizing part-time faculty brought out both positive and negative points.

The eight negative influences are:

1 . . . divide their allegiance between their primary employer and the community college. 2 . . . unable to have sufficient contact with the community college which led to communication difficulties. 3 . . . did not always maintain the proper sequence of material being presented; thereby, frequently disrupting the course programming. 4 . . . seldom contributed to the on-going program of: curriculum matters, course construction, student advisement, and procedural tasks. 5 . . . expectations of students in vocational-technical education were frequently too high, and the part-time instructor's personality characteristics were not sufficiently flexible. 6 . . . generally lacked understanding of teaching/learning situations: they exhibited poor teaching techniques; lacked the ability to communicate with students; failed to prepare adequate lesson plans; and, part-time instructors did not understand grading procedures. 7 . . . required closer supervision than regular staff members. They frequently cancelled classes to fit personal needs, dismissed classes early, and based all grades on the results of one examination. 8 . . . not conscious of many social taboos associated with the teaching profession; for example, they might appear in class with an odor of liquor on their breath (Messerschmidt, 1974, pp. 97-98).

The seven items included in the positive influences are:

1 . . . a highly industrial-oriented approach to the classroom. 2 . . . up-dated the technical information of full-time staff members. 3 . . . created realistic job situations for the class. 4 . . . proficiency in narrow areas which cannot easily be obtained with full-time staff members. 5 . . . opportunity to broaden its course offerings which could not be accomplished with only full-time staff members. 6 . . . familiarized students with the language of the industrial world, and the social status of industrial corporations. 7 . . . provided the community college with specialized skills; however, the colleges were not obligated to retain their services when enrollments were small (Messerschmidt, 1974, pp. 97-98).

Staff Development

The literature reveals a great deal about the topic of staff development. Hass has given us a definition which has stood the test of time when he said, "Broadly conceived in-service education included all activities engaged in by the professional personnel during their service and designed to contribute to improvement on the job" (Hass, 1957, p. 13). A second definition was given by Tarr: "Those activities for and/or financially sponsored by the school system to involve its employed professional teaching staff members for the purposes of increasing and implementing the school system's program" (Tarr, 1969, pp. 19-20). James O. Hammons, in a report to the National Conference on Personnel Development for Post Secondary Vocational and Technical Education Programs of Less than a Baccalaureate Degree said, "Most recently, staff development has been conceptualized as being both personal development (improvement of people -- their attitudes about themselves, their jobs, their personal lives), and professional development (improvement of job related skills, knowledge, and attitudes)" (Hammons, 1976, pp. 159-160).

There are few who would question the need for a continuing development of vocational education teachers. The American Vocational Association Journal contained an article written by the editor-in-chief and he stated that "professional development is a never ending task for all who are engaged in vocational,

technical and practical arts education" Burkett, 1971, p. 9). The National Advisory Council on Education Professions Development agreed with Berrkett two years later (Rieke, 1973). Ely (1973) agreed with the Council's idea on professional development when he contended that most authors on the subject of in-service education regard staff development as an accepted fact. The American public also had an opinion regarding in-service education. In a poll taken concerning how the quality of education could be improved, 29% of those surveyed indicated that to "provide opportunities for teachers to keep up to date regarding new methods" (Gallup, 1976, p. 190) was the best way for improvement.

Terry O'Banion also expressed great concern over staff development. In his opinion, great interest has arisen concerning staff development for community colleges since 1973. In 1977, leading administrators in the forty-eight colleges of the League of Innovation in the Community Colleges were surveyed and the major priority, in their opinion, was staff development. O'Banion further believes that now that more than half of all community college faculty members are in the part-time category, more emphasis is being placed on the development of these individuals (O'Banion, 1977, pp. viii-ix).

New demands will be placed on vocational and technical education by such forces as urbanization, industrialization, increased leisure time, greater numbers and increased skills of the labor force, as well as scientific and technological advances.

Teachers will be expected to not only maintain their current knowledge of technology, but to stay abreast of new innovations (Bloom, 1976). Jackson also spoke of the need for in-service training when he presented two points of view which he referred to as "defect" and "growth" perspectives. "Defect" refers to the idea that the teacher's methods have something wrong with them and that these methods need correcting through in-service training. "Growth" refers to the idea that teaching is a complicated and complex activity which requires constant updating of knowledge and methods and in-service training will give the teacher an opportunity to become better in his profession (Jackson, 1971).

If one of the outgrowths of faculty development is to improve the quality of education, whether instructional or otherwise, then faculty development makes as much sense for part-time faculty as it does for full-time faculty. Dr. John Gallagher, Coordinator of Faculty Development at Saint Martins College in Olympia, Washington, believes that part-time faculty members may be more willing than full-time faculty members to take part in a faculty development program. Because many of the part-time faculty members feel they are isolated from the professional and intellectual life of the college, he believes that:

They are likely to see a faculty development program as a vehicle to reduce that isolation. Such a program puts people in contact with one another and provides ideas to people with few other such sources. Adjunct faculty are also less likely than full-time faculty to

see themselves as "finished products." They often are more willing to admit to the need for instructional improvement in their own cases, and, perhaps because they do consider themselves part-time, are less likely to feel threatened by a faculty development program (Gallagher, 1977, p. 5).

Continuous education for vocational teachers is of utmost importance. The void between where a teacher needs to be in order to be effective and where one is immediately after completing his teacher education degree requires some staff development work (Rubin, 1971). As Geigle put it: "Whether one states that in-service education is necessary because pre-service teacher education was inadequate, or something is wrong with the practices teachers are currently using, or that 'teachers never stop becoming teachers,' there appears to be the notion that teacher education is a lifetime commitment; i.e., continuous involvement" (Geigle, 1977, pp. 20-21). It appears to be an accepted fact that the task of continuous training for teachers, especially those in vocational areas, is great and demonstrates the need for a well-planned program of in-service education.

Staff Development Needs Assessment

However, before planning an in-service education program the needs of the part-time teachers have to be determined in order to insure that the staff development activities engaged in are consistent with the needs of the teachers. For any organized staff development program to be effective, explicit identifi-

cation of the needs of part-time teachers is essential. This idea was agreed to by Luke when he indicated that teachers should have control over the way needs assessment instruments are designed in order to make sure that the findings reflect the teachers' ideas of in-service needs (Luke, 1976). Parks and Hull contended that needs assessments should be comprehensive and ongoing with the data collected at the local level through a formal survey process which would insure that the needs assessment reflect local needs (Parks and Hall, 1976).

There are various individuals who are thought to have the responsibility of dealing with needs assessments and the planning of a staff development program. Thornton (1966) determined it is the responsibility of the administrator to develop plans for experiences which will add to the teachers' expertise. Other individuals believe the responsibility should be assigned to the central office to determine what the staff development needs are at all colleges in the district (LeCroy, 1973). Another opinion concerning the responsibility for needs assessment is that only the faculty member can tell what his training needs are (Lefforge, 1971). Wetzler (1970) contended that no single person should determine staff training decisions, but that a faculty review committee should be responsible. Kastner (1973) expressed the idea that individuals in the college representing a variety of areas should be involved in the development of in-service guidelines.

However, a survey of thirteen public community colleges in the state of Washington showed that sixty percent of the faculty and fifty percent of the administrators did not want in-service programs being developed and administered by a faculty committee (Croy, 1973). Garrison (1967) felt that the dean of instruction should be basically responsible for the administration of the in-service program. He further stated that this individual, with the help of division chairmen, should select a committee made up of faculty members who would determine the in-service program according to the needs and interest of the faculty.

The assessment of staff development needs has brought comments and ideas from many knowledgeable individuals. O'Banion (1972) called for cooperation from all involved, but believed that one person must be responsible. Thornton (1966) stated that in-service programs should be planned locally to meet local needs. Yarrington (1973) also spoke for cooperation among all involved when discussing what staff development is, how it is planned, who is responsible, and who should pay for it. Rupert Evans (1970) went even further when he called for a five-year plan for an individual professional development program which would be individualized.

There appears to be a general agreement in the literature that community colleges are different from other educational institutions and must identify and solve their own problems. O'Banion (1972) said in reference to staff development that

community colleges should examine their own specific needs and then develop their own in-service program to meet these needs.

Luke (1976) appeared to be saying the needs should be plainly stated when he expressed the idea that teachers should have control over how needs assessment instruments are designed so that the finding will reflect in-service needs as perceived by teachers.

Needs Assessment Instruments

Needs assessment instruments for full-time faculty have been developed over the years, but the literature search revealed only one which was designed specifically for part-time instructors. Robert Lhota's handbook, developed with the assistance of the Council of North Central Community Junior Colleges, contains a needs assessment instrument which has five levels of responses possible and contains forty-one questions dealing specifically with part-time faculty and staff (Lhota, 1976, pp. 67-69). Some additional ideas were obtained from a booklet written by Rosemary T. Miller, Professional Development Officer for Burlington County College in Pemberton, New Jersey, which included some representative sample questionnaires written by a number of different people in various colleges throughout the country (Miller, 1977). Geigle (1977) also discussed needs assessment when his thesis at the University of Minnesota contained a needs assessment instrument for full-time faculty and staff. Geigle used as a basis for his instrument development a study which was done at Ohio State University. James O. Hammons and Terry H. Smith Wallace produced a Staff Develop-

ment Needs Assessment which they used to assess needs for full-time faculty in community colleges in the Northeastern United States (Hammons and Wallace, 1976). Hammons, Wallace, and Watts (1978) discussed in a staff development handbook developed for community colleges such items as instruction and management related topics, the unique role of community colleges, and general skills and information.

Staff Development Mediums

Smith (1966) spoke about some of the mediums of staff development mentioning such ways as traditional school-centered meetings, professional magazines and periodicals, extension courses, conferences, and the professional library. Borgealt (1969) gave instructors a chance to rate the various mediums as to their effectiveness. Classroom visitations and conferences were rated first and second respectively, followed by individual conferences with specialists, readings, and state workshops.

Staff Development Programs

A number of individuals have investigated the various areas of concern when considering staff development programs. Applegate (1967) found that the staff development program could best help when designed to meet needs in the areas of using new materials and techniques, and working with test administration and interpretation. Wesner (1966) discovered that the school personnel felt the areas needing the most work were curriculum planning and classroom procedures. Shafer's (1970) research

concluded that a staff development program should have as its primary goal to improve the quality of the instructional program. Anderson (1969) reported on a major national survey of community college administrators sponsored by the American Association of Community and Junior Colleges which showed that the areas these administrators felt were most important were the philosophy, goals, and history of the college. Moe (1977) discussed some of the mediums of staff development for part-time faculty. Orientation was the most popular medium being used by 68% of the 114 colleges surveyed. Division meetings were listed as second with 45% of the colleges participating in this staff development program. Full-time instructor's liaison was next with 42%, while workshops were utilized by 28% of the colleges surveyed. Others were newsletters, seminars, the professional development library, video tape, evaluation of instruction, and instructional development funds (Moe, 1977, p. 36).

The specific goals which the colleges were attempting to reach with these programs were:

1. To acquaint part-time instructors with the philosophy and goals of the community college.
2. To orient part-time instructors to the resources and services available.
3. To provide information regarding the college which would improve teaching.

4. To inform part-time instructors of the policies and procedures necessary for the instructional process.
5. To provide a series of classroom learning experiences that would assist in the various aspects of learning.
6. To provide programs for part-time instructors to develop alternative teaching skills.
7. To offer personal growth experiences.
8. To develop methods of evaluating the impact of staff development on those participating (Moe, 1977, pp. 36-37).

Behm, Lybarger, Toole, and Wilbur (1977) classified the various forms of development for part-time faculty:

1. The Benign Neglect Model for Faculty Development - About all the individual will get in this will be the title of the class, the time, and the location.
2. The Workshop Model - This model includes meetings, workshops and periodic offerings of classes. The emphasis here would be on the various instructional methods, the different kinds of materials, the course content, related items and any other topics of interest to the personnel.
3. Faculty Resource Model - This model centers around a resource paper in which is included emergency information, knowledge of community relations, administrative roles and functions, personnel procedures, student rights, and tasks related to instruction.
4. The Communication Model - Here the emphasis is on having

a full-time lead instructor who would exchange ideas and materials with the part-time faculty member.

5. The Complex Model - This model embraces all the positive points of the other four models (Behm and others, 1977, pp. 3-4).

Some colleges are reporting success in using these models. For instance, San Diego State University feels it successfully uses the first model. Maricopa County Community College District in Arizona has been employing the Workshop Model of staff development. Delta College District in Michigan and El Camino College District in California have been utilizing the Faculty Resource Model. Dallas Community College in Texas engages the Communication Model. A great number of colleges are utilizing the Complex Model (Behm and others, 1977).

D. G. Berbert (1971) wrote of a one-week sensitivity-type seminar conducted in Kansas City which is designed to give more awareness on the part of white faculty members toward minority groups, considering their attitudes as well as social and economic problems. Bender and Hammons (1972) and Schultz (1973) discussed orientation as a staff development medium. Barthlow (1973) spoke of the workshop as a part of a staff development program as did Wilson (1973).

The role of the graduate school in staff development was discussed by Atwell and Sullins (1973), Chronister (1970), Miller (1974), O'Banion (1973), and Singer (1968).

Various types of staff development programs, some with a single and simple method and others with complex and complicated models, were discussed by Coleman (1968), Kilpatrick (1967), and Schafer (1970). These individuals felt that both the single model and the complex model had advantages which could benefit part-time instructors.

Incentives for Participation

Motivating part-time faculty members to participate in a staff development program is of prime importance. Weichenthal, Means, and Kozoll (1977) wrote a professional development handbook for community college part-time faculty members and they included in it a section on a needs assessment questionnaire which mentioned some motivational factors. They included:

1. Being released from some routine work responsibility
2. Receiving higher salary
3. Receiving special recognition
4. Being more directly involved in policy and decision making
5. Receiving extra pay for special assignments
6. Having nearby opportunity for professional development
7. Becoming more satisfied with my job
8. Increasing my personal/professional competence

9. Using office hours for professional developmental activities (Weichenthal, Means, and Kozell, 1977, p. 10).

Summary

A review of the related literature concerning the staff development needs of part-time occupational-technical faculty in community colleges demonstrated that these individuals are being utilized in large numbers, but little research and relatively few studies are being conducted on them. Information received from the literature search was mainly descriptive in nature. However, a fairly complete picture of the part-time faculty member could be painted from this information.

The part-time teacher gives flexibility to the college. More classes, different types of classes, and various schedules can be offered because of these individuals. Their effectiveness may depend on such things as their age, teaching experience, work-related experience, and educational background. They teach part time because they want to, in order to get a full-time teaching job, for financial reasons, or simply for personal satisfaction.

Their qualifications may vary. Some will have advanced degrees, while more will have a bachelor's degree or less. Some will have a great deal of experience, while others will have little experience. Most will have work-related experience. Their background and willingness to teach part time may be an advantage or a disadvantage.

The literature reveals how little is done toward giving in-service training to these individuals. Most of the part-time faculty members who get any type of staff development program will receive only orientation. A few others may get more. The scarcity of in-service training has caused a great deal of concern for the "experts" who write about the programs or the lack of them. These "experts" believe that for the educational institutions to get the most good out of part-time faculty, they must offer them training programs to help them reach their potential.

The literature search produced only one needs instrument which was designed strictly for part-time faculty. Others were mentioned which assessed full-time faculty. Some individuals concerned with part-time faculty gave ideas on what should be contained in a staff development needs assessment. Some writers felt that administrators should be responsible for dealing with needs assessments and the planning of a staff development program. Some individuals contended that assessment and staff development should be controlled at the central office level, while others believed that faculty members best know their needs. A number of writers believed that all levels should be included in the planning.

A number of staff development mediums were mentioned in the literature with orientation being the most used medium. Other mediums were traditional school-centered meetings, periodicals, conferences, and extension courses. Various forms of staff

development were also considered. These varied from simply giving a key, room number, and roll to the instructor to complex models involving many forms. All were designed to help the part-time faculty member reach his potential. Some appeared to be successful, while others were not.

Chapter 3

METHODOLOGY

Introduction

The Virginia Community College System has shown a steady increase in the use of part-time faculty in its brief history. A search of the literature reveals that these individuals have staff development needs which are not being met with any type of staff development program. Assessing the specific needs of these individuals is one step in the planning of a staff development program. The part-time faculty member has become increasingly important to the community college in Virginia as the colleges attempt to offer many different courses and programs. Since these individuals appear important to the various institutions, it appears that each institution should plan a program that will help the faculty members develop their potential as educators.

Purpose of the Study

This investigation was carried out to ascertain perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System. Also investigated was a determination of the selected independent variables which showed a significant relationship with these perceived needs. The part-time occupational-technical instructor's attitude toward staff

development and the conditions under which they would participate were also examined.

Research Questions

Specifically, the study dealt with part-time occupational-technical faculty who taught in the Virginia Community College System in the Fall Quarter of 1979. The study answered the following questions:

1. What are the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System?

2. Is there a significant relationship between the perceived staff development needs of part-time occupational-technical faculty and the following five independent variables?

- a. Educational levels of part-time occupational-technical faculty.

- b. Number of clock hours of teacher-training courses of part-time occupational-technical faculty.

- c. Years of teaching experience of part-time occupational-technical faculty.

- d. Years of work-related experience of the part-time occupational-technical faculty member.

- e. Age of the part-time occupational-technical faculty member.

3. Does the part-time occupational-technical faculty feel that staff development is important?

4. Would the part-time occupational-technical faculty member participate in a staff development program if one were offered and under what circumstances?

Population and Survey Procedures

This study was conducted in the Virginia Community College System during the 1979-80 academic year. The population of the study was part-time occupational-technical faculty employed in the Virginia Community College System in the Fall Quarter of 1979. These individuals must have taught for at least one complete quarter.

The instrument packets containing biographical information and a questionnaire were mailed to 308 part-time occupational-technical teachers in the Virginia Community College System. The population for the study consisted of the 1547 part-time occupational-technical teachers in the Virginia Community College System (information obtained by the researcher contacting each individual college regarding the number of part-time occupational-technical teachers employed for Fall Quarter, 1979). A random number table was used to select the 308 teachers from the 1547 part-time occupational-technical teachers in the Virginia Community College System. These 308 teachers were mailed questionnaires. A follow-up was conducted two weeks after the original mailing.

Instrumentation

The questionnaire method was employed in this research. The original instrument was developed by the investigator after searching the literature to obtain a collection of potential items. Weichenthal, Means, and Kozall (1977) listed three major categories of information which a needs assessment should cover. These three areas were knowledge of setting, knowledge of organizational or educational needs, and knowledge of preferences for types of professional development. Topics related to instruction and management, the unique role of community colleges, and general skills and information were included in a staff development handbook developed for community colleges by Hammons, Wallace, and Watts (1978). Others who touched on these same types of topics were Lhota (1977), Miller (1977), and Crim (1975). Using the limited research available on part-time faculty needs assessments, the following items were included in the questionnaire:

(Code shows what items were mentioned by which authors.)

1. Weichenthal, Means, and Kozall (1977)
2. Hammons, Wallace, and Watts (1978)
3. Lhota (1977)
4. Miller (1977)
5. Crim (1975)

1. Writing learning objectives - 2, 3, 4
2. Writing test items which match learning objectives - 2, 4
3. Developing course outlines - 2, 4
4. Determining instructional needs of students - 4, 5
5. Writing a lesson plan - 4, 5
6. Planning a unit of instruction - 3, 5
7. Developing teacher-made instructional materials - 3, 4
8. Introducing the lesson - 3
9. Lecturing techniques - 2, 3, 4
10. Presenting individualized instructions - 3, 4, 5
11. Giving group instructions - 3, 4
12. Motivating students through unique techniques - 3, 4, 5
13. Organizing a laboratory experience - 2, 3
14. Carrying out a laboratory experience - 2, 3
15. Organizing and assisting students in carrying out projects - 4
16. Presenting a manipulative skill - 4, 5
17. Using an oral questioning session - 4, 5
18. Using illustrations in lessons - 3, 4
19. Identifying individual differences - 3, 4, 5
20. Using the blackboard - 4
21. Using audio-visual aids - 1, 2, 3, 4, 5
22. Teaching job seeking skills - 2, 3, 5
23. Understanding community college philosophy - 3, 4
24. Establishing grading procedures - 4, 5

25. Providing information on educational and career opportunities - 1, 5
26. Evaluating the effectiveness of different instructional techniques - 1, 3, 4
27. Assigning work outside class - 3, 4
28. Understanding human relations between teacher and student - 3, 4
29. Understanding policy and knowing procedures of the college such as course withdrawals, incomplete grades, etc. - 2, 4
30. Understanding of subject matter - 2, 3, 4
31. Being aware of safety regulations - 4, 5
32. Recognizing and dealing with handicapped students - 1,3,4,5
33. Determining student grades or performance levels in a course - 1, 2, 5
34. Understanding the work of the counseling center - 1, 2, 3
35. Understanding your own personal and social values - 1, 3
36. Determining satisfactory levels of learning - 1, 3, 5

In order to ascertain levels of need, each part-time occupational-technical faculty member was asked to circle the response which best described his/her level of staff development needs. A Likert-type scale, a type of summated rating scale, was used with the following range of potential responses:

1. None
2. Low
3. Moderate

4. Strong
5. Very Strong

Kerlinger stated "of the three types of scales, the summated rating scale seems to be the most useful in behavioral research. It is easier to develop, and as indicated above, yields about the same results as the more laboriously constructed equal-appearing interval scale" (Kerlinger, 1973, p. 499).

The instrument with the five levels of response available was used as the primary data collecting device. The instrument was developed for part-time occupational-technical faculty (See Appendix A).

The instrument was reviewed by a review panel consisting of two specialists in the area of part-time faculty and staff, two directors of continuing education experienced with utilization of part-time faculty, and four experienced part-time faculty members (See Appendix B). The review panel, along with the writer's committee gave suggestions that were used to determine comprehensiveness, clarity, and consistency of the instrument. The review panel was asked to also check for representativeness of the instrument in order to determine its validity. Kerlinger (1973) entitled this type of validation as content validity. The questionnaire was field tested using twenty part-time occupational-technical teachers, not selected in the sample, to determine if any problems existed when completing the questionnaire. Using the above input, the final

edition of the instrument was developed. Only minor changes were recommended. In Part I, one recommendation was to change one of the independent variables from the subject area in which the part-time faculty member was teaching to the number of clock hours of teacher training of this individual. A fourth possible response was added to question seven so that the part-time instructor could respond that he did not want to participate in a staff development program. In Part II, items 18, 25, and 27 were reworded to add clarity to the dependent variables.

The instrument was organized into two sections to obtain the desired information. The sections were:

Section I - General Information - The general information data were collected by asking the instructors to respond to questions concerning biographical information needed to answer the research questions of this study. This part of the questionnaire also included information pertaining to the selected independent variables. The variables were picked after a search of the literature revealed those which appeared to possibly affect staff development needs. The independent variables used were:

1. Educational level of the part-time occupational-technical faculty member
2. Number of clock hours of teacher-training courses of part-time occupational-technical faculty
3. Years of teaching experience of part-time occupational-technical faculty members

4. Years of subject related work experience of the part-time occupational-technical faculty member

5. Age of the part-time occupational-technical faculty member

Section II - The Questionnaire - Section two consisted of the questions which were used to ascertain the perceived staff development needs of the part-time occupational-technical faculty member. The questionnaire was organized so as to derive information on the instructor's knowledge of his educational setting, classroom management ability, his general teaching skills, and his knowledge of the subject matter.

Analyses of Data

The data were analyzed to categorize the perceived staff development needs as shown by respondents. The data were reported by cross tabulating the level of perceived needs for each of the thirty-six items for the total sample. Absolute frequencies and percentage frequencies along with the chi square tests of significance were used to analyze the data.

Chi square statistical tests were utilized to ascertain whether there was a significant relationship among the unique dependent variables representing the staff development needs of the selected independent variables. Roscoe supports the usage of the chi square by stating, "Chi square tests of significance are by far the most valuable of the nonparametric procedures available to the behavioral scientist" (Roscoe, 1969, p. 203). McNemar (1969), Siegel

(1956), and Kerlinger (1973), agree with the idea that chi square tests of significance are the best type of analysis for nominal data.

The expected frequencies in each cell must not be too small when using chi square. Researchers such as Guilford (1965), Hadley (1969), and Langley (1971), believe the expected frequency should be at least five in each cell. Siegel (1956) thinks that each cell should have an expected frequency of at least one and no more than twenty percent of the cells would have an expected frequency of less than five. Roscoe (1969) determined that at least eighty percent of the cells should have an expected frequency of five or more. In the present study, the minimum required expected frequency of five in at least eighty percent of the cells was selected. This expected frequency should be met without making the sample so large as to be cumbersome to manage.

The study used the .05 level for all chi square tests of significance. Kerlinger supports this by saying, "The .05 level was originally chosen -- and persisted with researchers -- because it is considered a reasonably good gamble. It is neither too high or too low for most social scientific research" (Kerlinger, 1973, p. 170).

Summary

The purpose of the research was to determine the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System. Each faculty member's

level of need was explored. Five independent variables were selected after a review of the literature indicated which ones were likely to affect the staff development needs of the individual.

The independent variables selected were the educational level of the faculty member, number of clock hours of teacher-training of the part-time occupational-technical faculty, teaching experience, years of work-related experience, and age. Relationships between the selected independent variables and staff development needs were explored. Additionally, it was determined the faculty member's reaction to in-service staff development and under what conditions the individual would participate in such a program. Four research questions were used to fulfill the purpose of the study.

The population consisted of 1,547 part-time occupational-technical teachers in the Virginia Community College System in the fall of 1979. A sample of 308 was selected at random from this population. The questionnaire method was employed to obtain the data. The questionnaire was validated by a panel of experts and was field-tested prior to being mailed.

The analyses used were those recommended by other researchers and were used as a basis for the design of the study. These analytical techniques included absolute frequencies, percentage frequencies, and chi square test of significance. The minimum required expected frequency was at least five in eighty percent or more of the cells when making comparisons in the chi square analysis. The .05 level of significance was used.

Chapter 4

DATA RESULTS AND ANALYSES

Introduction

The results of the study are presented in this chapter. Included in the presentation are the analyses of the survey responses along with a presentation and analyses of each of the research questions.

Survey Response Rate

Questionnaires were mailed to the 308 individuals comprising the sample. A follow-up was conducted two weeks later on those not responding to the first mailing. A total of 196 or 63.6 percent of the 308 questionnaires were returned and coded for computer analyses. These 196 respondents constituted 12.7 percent of the total population. Eight of the respondents did not complete the entire questionnaire. The eight who did not complete the questionnaire left a total of 25 questions unanswered. The omitted variables were coded as missing values and because of this, the number of responses in the tables will vary throughout the study.

Profile of Respondents

A profile of the respondents was obtained from the data and the following discussion is a summary of the profile.

Education

Two percent of the sample reported an educational level of less than a high school diploma. Only one percent reported

having a high school diploma and no additional training. A total of 18.9 percent reported at least two years of college but less than four. A total of 30.6 percent reported having a bachelor's degree but less than a master's degree, while 47.5 percent reported having a master's degree or above. Table 1 shows the number and percentages of the individuals responding to their educational level.

Teacher Training

Table 2 presents the frequency and percentage of the respondents by the number of clock hours of teacher training they reported. More than half of the teachers reported they had received above 200 clock hours of teacher training. It should be noted, however, that almost 20 percent reported 50 hours or less of this training.

Teaching Experience

The frequency and percentage distribution of the respondents by their years of teaching experience is displayed in Table 3. Over half of the teachers reported having more than five years of experience. Only 4.6 percent reported less than one year of experience.

Occupational Experience

Table 4 displays the frequency and percentage distribution of the respondents by their years of occupational experience related to their area of teaching. The researcher was surprised at how evenly split the responses were in each of the four levels as listed

TABLE 1
EDUCATIONAL LEVEL

Educational Level	N	Percent (%)
Less Than High School	4	2.0
High School Diploma	2	1.0
More Than High School but less Than Baccalaureate	37	18.9
Baccalaureate	60	30.6
Masters or Above	93	47.5
Total	196	100.0

TABLE 2
TEACHER TRAINING

Clock Hours	N	Percent (%)
0 - 50	39	19.9
51 - 100	20	10.2
101 - 150	17	8.7
151 - 200	9	4.6
More Than 200	111	56.6
Total	196	100.0

TABLE 3
TEACHING EXPERIENCE

Teaching Experience, Years	N	Percent (%)
Less Than One	9	4.6
One to Five	79	40.3
Six to Ten	62	31.6
Eleven to Fifteen	26	13.3
Sixteen or More	20	10.2
Total	196	100.0

TABLE 4
OCCUPATIONAL EXPERIENCE

Years	N	Percent (%)
One to Five	45	23.0
Six to Ten	53	27.0
Eleven to Fifteen	42	21.4
Sixteen or More	56	28.6
Total	196	100.0

in the questionnaire with close to 25 percent reporting in each level. The levels were (1) one to five, (2) six to ten, (3) eleven to fifteen, and (4) sixteen or more.

Age

Table 5 presents the frequency and distribution of the respondents by age. Over 70 percent of the teachers reported their age as being between 26 and 45. Only 3.1 percent listed their age as 25 or less.

Research Question One

What are the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System?

To resolve this research question, each of the respondents in the sample were asked to rate their staff development needs on the 36 topics which made up the 36 dependent variables.

Writing Learning Objectives

The respondents were evenly split on writing learning objectives with about half of them indicating little or no need (51.5 percent), and the other half indicating moderate to strong need (48.5 percent). Table 6 reports the response to this question.

Writing Test Items to Match Learning Objectives

The frequency and percentage distribution of the respondents

TABLE 5
AGE OF THE INSTRUCTORS

Years of Age	N	Percent (%)
25 or Less	6	3.1
26 - 35	69	35.2
36 - 45	71	36.2
46 - 55	32	16.3
56 or Older	18	9.2
Total	196	100.0

to writing test items to match learning objectives is reflected in Table 6. The instructor response shows that 59.1 percent indicated low or no need, while 40.9 percent felt moderate to very strong need.

Developing Course Outlines

More than 60 percent of the instructors indicated no need or a low need for training in writing course outlines. Only 4.6 percent of the respondents felt a very strong need. Table 6 describes the results of this question.

Determining Instructional Needs of Students

The frequency and percentage of the respondents on the question of determining the instructional needs of students is reported in Table 6 with 53.1 percent indicating moderate to a very strong need for in-service training in this area.

Writing Lesson Plans

Again over half of the instructors (58.6 percent) indicated low or no need for training in the area of writing lesson plans. Only 5.6 percent felt a very strong need. Table 6 displays the results of this question.

Planning a Unit of Instruction

Table 6 presents the frequency and distribution of the respondents for their perceived needs in planning a unit of instruction. Low or no need was indicated by 62.8 percent

of the respondents. A strong or very strong need was indicated by 16.8 percent.

Developing Instructional Materials

More than half of the respondents (51 percent) indicated a moderate to very strong need for staff development in the area of developing teacher-made instructional materials for their classes. Table 6 displays the results of this question.

Introducing a Lesson

There was very little need indicated in the area of introducing a lesson. This can be noted in Table 6 where only 27.1 percent indicated a moderate to very strong need and 72.9 percent indicated low or no need.

Lecture Techniques

Concerning lecture techniques it is not surprising to note that again a high percentage of the respondents indicated no need or low need (61.2 percent), as shown in Table 6. This was not a surprise because of the large number of instructors holding an advance degree (47.4 percent).

Individual Instructions

Because of the high level of education reported in this study, it was anticipated that the level of need here would be low. This proved to be true as 64.3 percent of the respondents

indicated low or no need in this area. Table 6 displays the results of this question.

Group Instruction

The frequency and percentage distribution of the responses to the question concerned with group instructions to a group is given in Table 6. This score was predictable after looking at the responses to the previous two questions. Of those responding 66.3 percent indicated a low need or no need with only 4.6 percent declaring a strong need.

Motivating Students

A fairly high need was indicated by the respondents in the area of motivating students with 67.9 percent indicating at least a moderate need for inservice training. Only 11.7 percent indicated no need at all. Table 6 displays the results of this study.

Setting Up a Laboratory Experiment

Slightly more than half (52.0 percent) indicated moderate to very strong need in the area of setting up a laboratory experiment for students. However, as shown in Table 6, only 8.2 percent indicated a very strong need and 20.4 percent felt they had no need.

Carry Out a Laboratory Experiment

These results were also probably predictable after viewing

the responses on setting up a laboratory experiment. Again 52 percent indicated a moderate to a very strong need in carrying out a laboratory experiment. Those indicating no need constituted 21.9 percent of the respondents. Table 6 illustrates the results of this question.

Assisting Student in Development of Projects

Table 6 presents the frequency and percentage distribution of the respondents when questioned about assisting students in developing projects. The respondents were almost evenly split with 50.5 percent indicating little or no need for training and 49.5 percent believing they had a moderate to a very strong need.

Presenting a Manipulative Skill

Again there is a fairly even split with 52.5 percent indicating little or no need for help in this area and 46.4 percent believing they have a moderate to a very strong need. Table 6 displays the results of this question.

Using an Oral Questioning Session

Only seven individuals or 3.6 percent indicated a very strong need for help in learning how to use an oral questioning session. Exactly 61 percent of the respondents indicated little or no need in this area. Table 6 presents the frequency and percentage distribution of the respondents.

Using Illustrations in a Lesson

Table 6 presents the frequency and percentage distribution of the respondents with their response to this question with 66.3 percent indicating little or no need for inservice training. Only 5.6 percent believed they had a strong need here.

Identifying Individual Differences

The frequency and percentage distribution of the respondents to the question of identifying individual differences is presented in Table 6. The table shows that 52.5 percent determined they had little or no need and only 5.6 percent indicated a strong need.

Making Use of the Blackboard

In using the blackboard 66.3 percent felt they had little or no need for help in this area. Table 6 describes the results of this question.

Using Audio-Visuals

Table 6 presents the frequency and percentage distribution of the respondents on the question of making use of audio-visual aids. Again more than half (55.6 percent) indicated little or no need with 8.7 percent believing very strongly they needed help.

Teaching Job-Seeking Skills

Only 6.1 percent felt they had a strong need for assistance in teaching job-seeking skills. On the other hand 19.9 percent

felt they needed no help and when this is combined with those feeling they had a low need here, this percentage rose to 51 percent. Table 6 gives the results of this study.

Understanding Community College Philosophy

It was interesting to note that although these individuals taught for the Community College, 60.7 percent felt they needed to know more about the philosophy of the Community College. Table 6 presents the frequency and percentage distribution of the respondents on this question.

Establishing Grading Procedure

The instructors appeared to feel fairly comfortable with grading procedures as only 7.1 percent felt strongly that they needed help in this area while 23.0 felt they needed no help. These results are displayed in Table 6.

Providing Information on Educational and Career Opportunities

Over half of the instructors questioned (55.7 percent) indicated moderate to very strong need in the area of informing students concerning their educational and career opportunities in today's world. Table 6 gives a summary of these findings.

Determining the Effectiveness of Instructional Techniques

Table 6 presents a summary of the responses of this question with 61.4 percent of the respondents indicating a

moderate to very strong need in this area. Only 10.7 percent felt they had no need at all for assistance.

Assignment of Effective Outside Work

A large majority of the instructors (84.7 percent) felt they had some need for inservice training in assigning effective outside work. Table 6 gives the frequency and percentage distribution of the respondents on this question.

Understanding Human Relation between Student and Teacher

A majority of the instructors appeared to feel somewhat adequate in dealing with human relations as 60.2 percent felt they had little or no need for training in this area. The summary in Table 6 shows that only 7.1 percent felt they had a strong need for help.

Understanding College Policy for Course Withdrawals, Incompletes, Etc.

This was one of the most surprising findings in this research after having worked with so many part-time instructors who had so little knowledge in this area. Table 6 gives a summary of the findings showing that 51 percent felt they had little or no need in this area.

Understanding the Subject Matter

The instructors appeared to feel extremely confident in this area with 56.1 percent indicating no need at all. This

was to be expected since so many of the part-time teachers have occupational experience in their fields. Table 6 presents the frequency and percentage distribution of the respondents in response to this question.

Awareness of Safety Needs

Table 6 reflects a summary of the responses to this question where 65.3 percent felt they had little or no need. Only 5.6 percent felt a strong need. Again this is not surprising since so many of these individuals are engaged in industry and have to be aware of safety needs.

Recognizing and Dealing with Handicapped Students

The instructors do not feel quite so sure of themselves in this area as 61.2 percent feel they have moderate to very strong needs in this area, including 16.8 percent who feel very strongly they have inservice needs. Table 6 gives a summary to the responses to this question.

Evaluating Students According to Performance

Table 6 displays the frequency and percentage distribution of the respondents according to their perceived needs on grading students based on the students' performance. Only 6.1 percent felt a strong need for development in this area while 54.6 percent felt little or no need.

Understanding the Work of the Counseling Center

It is interesting to note that so few of the part-time teachers believe they have a good comprehension of the work done by the counselors. As seen in Table 6, 67.5 percent indicated a moderate to very strong need and 31.6 percent responded that they felt they had at least a strong need for additional training in this area.

Understanding Own Personal and Social Values

The majority of the respondents felt that they understood their own values, both personal and social, as 68.3 percent indicated they had a low or no need for training in this area. Only 7.1 percent felt a strong need. Table 6 gives the results of this question.

Determining Satisfactory Levels of Learning

More than half (63.2 percent) of the respondents indicated a need for training in the area of determining what are satisfactory levels of learning. Only 16.8 percent felt no need at all. Table 6 displays the number and percentage distribution of the respondents.

Summary Table of the Mean Responses for the Thirty-Six Areas of Need

Table 7 gives a summary of the mean scores of the responses for the 36 dependent variables or areas of need.

Research Question Two

Is there a significant relationship between the perceived staff development needs of part-time occupational-technical faculty

TABLE 6
SUMMARY TABLE OF DEPENDENT VARIABLES

	Level of Need										Total	
	None		Low		Moderate		Strong		Very Strong			
	N	%	N	%	N	%	N	%	N	%	N	%
Writing Learning Objectives	50	25.5	51	26.0	65	33.2	23	11.7	7	3.6	196	100.0
Writing Test Items to Match Learning Objectives	55	28.1	61	31.0	55	28.1	19	9.7	6	3.1	196	100.0
Writing Course Outlines	58	29.6	60	30.6	45	23.0	24	12.2	9	4.6	196	100.0
Determining Instructional Needs of Students	32	16.3	60	30.6	68	34.7	26	13.3	10	5.1	196	100.0
Writing a Lesson Plan	62	31.6	53	27.0	46	23.5	24	12.2	11	5.6	196	100.0
Planning a Unit of Instruction	52	26.5	71	36.3	40	20.4	19	9.7	14	7.1	196	100.0
Developing Instructional Materials	40	20.4	56	28.6	54	27.5	35	17.9	11	5.6	196	100.0
Introducing a Lesson	74	37.8	69	35.2	28	14.3	16	8.1	9	4.6	196	100.0
Learning Techniques	52	26.5	68	34.7	50	25.5	16	8.2	10	5.1	196	100.0
Individual Instruction	62	31.6	64	32.7	41	20.9	17	8.7	12	6.1	196	100.0

TABLE 6 (continued)

	Level of Need										Total	
	None		Low		Moderate		Strong		Very Strong			
	N	%	N	%	N	%	N	%	N	%	N	%
Group Instruction	54	27.6	76	38.7	36	18.4	20	10.2	9	4.6	196	100.0
Motivating Students	23	11.7	40	20.4	66	33.7	51	26.0	16	8.2	196	100.0
Setting up a Laboratory Experiment	40	20.4	49	25.0	52	26.5	34	17.3	16	8.2	191	97.4
Carrying Out an Experiment	43	21.9	45	23.0	53	27.0	32	16.3	17	8.7	193	96.9
Helping Students to Develop Projects	41	20.9	58	29.6	69	35.2	22	11.2	5	2.6	195	99.5
Presenting a Manipulative Skill	44	22.4	59	30.1	49	25.0	28	14.3	14	7.1	194	99.0
Using an Oral Questioning Session	48	24.5	72	36.7	46	23.5	23	11.7	7	3.6	196	100.0
Using Illustrations in the Lesson	61	31.1	69	35.2	31	15.8	23	11.8	11	5.6	195	99.5
Identifying Individual Differences	42	21.4	61	31.1	55	28.1	27	13.8	11	5.6	196	100.0
Making Use of the Blackboard	69	35.2	61	31.1	39	19.9	17	8.7	10	5.1	196	100.0

TABLE 6 (continued)

	Level of Need										Total	
	None		Low		Moderate		Strong		Very Strong			
	N	%	N	%	N	%	N	%	N	%	N	%
Using Audio Visuals	43	21.9	66	33.7	40	20.4	30	15.3	17	8.7	196	100.0
Teaching Job Seeking Skills	39	19.9	61	31.1	55	28.1	28	14.3	12	6.1	195	99.5
Understanding Community College Philosophy	28	14.3	47	24.0	60	30.6	32	16.3	27	13.8	194	99.0
Establishing Grading Procedures	45	23.0	60	30.6	48	24.5	28	14.3	14	7.1	195	99.5
Providing Educational and Career Information	27	13.7	59	30.1	57	29.1	36	18.4	16	8.2	195	99.5
Determining the Effectiveness of Instructional Techniques	21	10.7	35	17.9	75	38.3	44	22.4	21	10.7	196	100.0
Assigning Effective Outside Work	30	15.3	58	29.6	63	32.1	39	19.9	6	3.1	196	100.0
Understanding Human Relations Between Teacher and Student	42	21.4	76	38.8	42	21.4	22	11.3	14	7.1	196	100.0

TABLE 6 (continued)

	Level of Need										Total	
	None		Low		Moderate		Strong		Very Strong			
	N	%	N	%	N	%	N	%	N	%	N	%
Understanding College Policy on Withdrawals, etc.	42	21.4	58	29.6	51	26.0	23	11.8	21	10.7	195	99.5
Understanding Subject Matter	110	56.1	45	23.0	12	6.1	11	5.6	17	8.7	195	99.5
Awareness of Safety Needs	60	30.6	68	34.7	42	21.4	14	7.2	11	5.6	195	99.5
Recognizing and Dealing with Handicapped Students	30	15.3	45	23.0	58	29.6	29	14.8	33	16.8	195	99.5
Evaluating Students According to Performance	43	21.9	64	32.7	48	24.5	29	14.8	12	6.1	196	100.0
Understanding the Work of the Counseling Center	23	11.7	41	29.9	70	35.8	33	16.8	29	14.8	196	100.0
Understanding Personal and Social Values	72	36.7	62	31.6	24	12.3	23	11.8	14	7.1	195	99.5
Determining Satisfactory Levels of Learning	33	16.8	52	26.5	63	32.1	28	14.3	17	8.8	193	98.5

TABLE 7
MEAN RESPONSES FOR THE THIRTY-SIX AREAS OF NEED
ACCORDING TO MEAN SCORE RANK ORDER

Areas of Need	Mean Score
Understanding Subject Matter	1.87
Introducing a Lesson	2.06
Understanding Personal and Social Values	2.21
Awareness of Safety Needs	2.22
Group Instruction	2.24
Individual Instruction	2.25
Using Illustrations in the Lesson	2.25
Writing Test Items to Match Learning Objectives	2.29
Lecturing Techniques	2.31
Writing Course Outlines	2.32
Using an Oral Questioning Session	2.33
Writing a Lesson Plan	2.33
Planning a Unit of Instruction	2.35
Making Use of the Blackboard	2.38
Writing Learning Objectives	2.42
Understanding Human Relations Between Teacher and Student	2.44
Helping Students to Develop Projects	2.45
Identifying Individual Differences	2.51
Establishing Grading Procedures	2.52
Presenting a Manipulative Skill	2.53
Teaching Job Seeking Skills	2.55
Using Audio Visuals	2.55
Carrying out an Experiment	2.60
Developing Instructional Materials	2.60
Determining Instructional Needs of Students	2.60

Table 7 (continued)

Areas of Need	Mean Score
Understanding College Policy on Withdrawals, Etc.	2.61
Assigning Effective Outside Work	2.66
Determining Satisfactory Levels of Learning	2.71
Providing Educational and Career Information	2.77
Understanding Community College Philosophy	2.91
Recognizing and Dealing with Handicapped Students	2.95
Motivating Students	2.99
Evaluating Students According to Performance	3.02
Understanding the Work of the Counseling Center	3.02
Determining the Effectiveness of Instructional Techniques	3.05
Setting up a Laboratory Experiment	3.19

and the following five independent variables.

1. Educational levels of part-time occupational-technical faculty.
2. Number of clock hours of teacher training of the part-time occupational-technical faculty.
3. Years of teaching experience of part-time occupational-technical faculty.
4. Years of occupational experience related to the teaching area of the part-time occupational-technical faculty.
5. Age of the part-time occupational-technical faculty.

To resolve this research question chi square tests of significance were used to analyze the data. Due to the expected frequencies in the cells being too small, some categories were combined to make the chi square analyses valid. This was done in such a way that important information was not lost on these independent variables. Some chi square test were still not valid because of the small cell size, but no further combining of categories could be accomplished without losing important information.

Categories one (less than high school), two (high school diploma), and three (more than high school but less than a baccalaureate) were combined into one category (less than a baccalaureate) in order to make the chi square analysis valid. The following is a summary of those relationships found to be

significant at the .05 level.

Table 8 details the relationship between the level of education of part-time instructors and their perceived staff development needs in writing learning objectives. This relationship had a chi square value of 35.02988 and was significant not only at the .05 level, but also at the .0000 level. It was found that as the educational level got higher, the level of perceived needs were lower.

The relationship between the level of education and the staff development needs in writing test items which match learning objectives is detailed in Table 9. This relationship had a chi square value of 27.73315 and was significant not only at the .05 level, but also at the .0005 level. In the first three levels of need it was found that the higher the level of education, the lower the need for training in this area.

Table 10 details the relationship between the level of education and the perceived staff development needs in developing course outlines. This relationship had a chi square value of 41.88821 and was significant at not only the .05 level but also at the .0000 level. Again it was found that as the educational level increased, more instructors found low or no need for training in developing course outlines.

Table 11 details the relationship between the level of education and the perceived staff development needs in writing

TABLE 8

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED
STAFF DEVELOPMENT NEEDS IN WRITING LEARNING OBJECTIVES

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	5 ^a 11.6 ^b 10.0 ^c 2.6 ^d	8 ^a 18.6 ^b 15.7 ^c 4.1 ^d	17 ^a 39.5 ^b 26.2 ^c 8.7 ^d	7 ^a 16.3 ^b 30.4 ^c 3.6 ^d	6 ^a 14.0 ^b 85.7 ^c 3.1 ^d	43 21.9
Baccalaureate Degree	10 ^a 16.7 ^b 20.0 ^c 5.1 ^d	16 ^a 26.7 ^b 31.4 ^c 8.2 ^d	26 ^a 43.3 ^b 40.0 ^c 13.3 ^d	8 ^a 13.3 ^b 34.8 ^c 4.1 ^d	0 ^a 0.0 ^b 0.0 ^c 0.0 ^d	16 30.6
Masters or Above	35 ^a 37.6 ^b 70.0 ^c 17.9 ^d	27 ^a 29.0 ^b 52.9 ^c 13.8 ^d	22 ^a 23.7 ^b 33.8 ^c 11.2 ^d	8 ^a 8.6 ^b 34.8 ^c 4.1 ^d	1 ^a 1.1 ^b 14.3 ^c 0.5 ^d	93 47.4
Column Total	50	51	65	23	7	196
Column Total Percent	25.5	26.0	33.2	11.7	3.6	100.0

Chi Square = 35.02988

Significance = .0000

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 9

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED
STAFF DEVELOPMENT NEEDS IN WRITING TEST ITEMS WHICH MATCH LEARNING OBJECTIVES

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	6 ^a 14.0 ^b 10.9 ^c 3.1 ^d	11 ^a 25.6 ^b 18.0 ^c 5.6 ^d	15 ^a 34.9 ^b 27.3 ^c 7.7 ^d	8 ^a 18.6 ^b 42.1 ^c 4.1 ^d	3 ^a 7.0 ^b 50.0 ^c 1.5 ^d	43 21.9
Baccalaureate Degree	9 ^a 15.0 ^b 16.4 ^c 4.6 ^d	23 ^a 38.3 ^b 37.7 ^c 11.7 ^d	20 ^a 33.3 ^b 36.4 ^c 10.2 ^d	7 ^a 11.7 ^b 36.8 ^c 3.6 ^d	1 ^a 1.7 ^b 16.7 ^c 0.5 ^d	60 30.6
Masters or Above	40 ^a 43.0 ^b 72.7 ^c 20.4 ^d	27 ^a 29.0 ^b 44.3 ^c 13.8 ^d	20 ^a 21.5 ^b 36.4 ^c 10.2 ^d	4 ^a 4.3 ^b 21.1 ^c 2.0 ^d	2 ^a 2.2 ^b 33.3 ^c 1.0 ^d	93 47.4
Column Total	55	61	55	19	6	196
Column Total Percent	28.1	31.1	28.1	9.7	3.1	100.0

Chi Square = 27.73315

Significance = .0005

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 10

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN DEVELOPING COURSE OUTLINES

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	7 ^a	10 ^a	14 ^a	6 ^a	6 ^a	43
	16.3 ^b	23.3 ^b	32.6 ^b	14.0 ^b	14.0 ^b	
	12.1 ^c	16.7 ^c	31.1 ^c	25.0 ^c	66.7 ^c	
	3.6 ^d	5.1 ^d	7.1 ^d	3.1 ^d	3.1 ^d	21.9
Baccalaureate Degree	10 ^a	17 ^a	18 ^a	14 ^a	1 ^a	60
	16.7 ^b	28.3 ^b	30.0 ^b	23.3 ^b	1.7 ^b	
	17.2 ^c	28.3 ^c	40.0 ^c	58.3 ^c	11.1 ^c	
	5.1 ^d	8.7 ^d	9.2 ^d	7.1 ^d	0.5 ^d	30.6
Masters or Above	41 ^a	33 ^a	13 ^a	4 ^a	2 ^a	93
	44.1 ^b	35.5 ^b	14.0 ^b	4.3 ^b	2.2 ^b	
	70.7 ^c	55.0 ^c	28.9 ^c	16.7 ^c	22.2 ^c	
	20.9 ^d	16.8 ^d	6.6 ^d	2.0 ^d	1.0 ^d	47.4
Column Total	58	60	45	24	9	196
Column Total Percent	29.6	30.6	23.0	12.2	4.6	100.0

Chi Square = 41.88821

Significance = .0000

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 11

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN WRITING LESSON PLANS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	5 ^a	9 ^a	13 ^a	9 ^a	7 ^a	43
	11.6 ^b	20.9 ^b	30.2 ^b	20.9 ^b	16.3 ^b	
	8.1 ^c	17.0 ^c	28.3 ^c	37.5 ^c	63.6 ^c	
	2.6 ^d	4.6 ^d	6.6 ^d	4.6 ^d	3.6 ^d	21.9
Baccalaureate Degree	10 ^a	22 ^a	16 ^a	10 ^a	2 ^a	60
	16.7 ^b	36.7 ^b	26.7 ^b	16.7 ^b	3.3 ^b	
	16.1 ^c	41.5 ^c	34.8 ^c	41.7 ^c	18.2 ^c	
	5.1 ^d	11.2 ^d	8.2 ^d	5.1 ^d	1.0 ^d	30.6
Masters or Above	47 ^a	22 ^a	17 ^a	5 ^a	2 ^a	93
	50.5 ^b	23.7 ^b	18.3 ^b	5.4 ^b	2.2 ^b	
	75.8 ^c	41.5 ^c	37.0 ^c	20.8 ^c	18.2 ^c	
	24.0 ^d	11.2 ^d	8.7 ^d	2.6 ^d	1.0 ^d	47.4
Column Total	62	53	46	24	11	196
Column Total Percent	31.6	27.0	23.5	12.2	5.6	100.0

Chi Square = 43.85512

Significance = .0000

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

a lesson plan. This relationship had a chi square value of 43.85512 and was significant not only at the .05 level, but also at the .0000 level. Instructors who reported a higher level of education tended to indicate a low need for training while instructors who reported a lower level of education reported more need for training on writing lesson plans.

Table 12 details the relationship between the level of education and the perceived staff development needs in developing teacher made instructional materials. This relationship had a chi square value of 27.20758 and was significant not only at the .05 level, but also at the .0007 level. It was found that those with the lowest level of need had the highest educational level and those with the highest level of need had the lowest educational level.

Table 13 details the relationship between the level of education and the perceived staff development needs in giving instruction for individuals. This relationship had a chi square value of 26.05563 and was significant not only at the .05 level but also at the .0010 level. In need levels one, two, and three, the higher the educational level, the fewer instructors indicating need for help in the area of giving instruction to individuals.

Table 14 details the relationship between the level of education and the perceived need in devising varying techniques to motivate students. This relationship had a chi square value

TABLE 12

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN DEVELOPING TEACHER MADE MATERIALS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	6 ^a 14.0 ^b 15.0 ^c 3.1 ^d	7 ^a 16.3 ^b 12.5 ^c 3.6 ^d	14 ^a 32.6 ^b 25.9 ^c 7.1 ^d	9 ^a 20.9 ^b 25.7 ^c 4.6 ^d	7 ^a 16.3 ^b 63.6 ^c 3.6 ^d	43 21.9
Baccalaureate Degree	8 ^a 13.3 ^b 20.0 ^c 4.1 ^d	18 ^a 30.0 ^b 32.1 ^c 9.2 ^d	15 ^a 25.0 ^b 27.8 ^c 7.7 ^d	17 ^a 28.3 ^b 48.6 ^c 8.7 ^d	2 ^a 3.3 ^b 18.2 ^c 1.0 ^d	60 30.6
Masters or Above	26 ^a 28.0 ^b 65.0 ^c 13.3 ^d	31 ^a 33.3 ^b 55.4 ^c 15.8 ^d	25 ^a 26.9 ^b 46.3 ^c 12.8 ^d	9 ^a 9.7 ^b 25.7 ^c 4.6 ^d	2 ^a 2.2 ^b 18.2 ^c 1.0 ^d	93 47.4
Column Total	40	56	54	35	11	196
Column Total Percent	20.4	28.6	27.6	17.9	5.6	100.0

Chi Square = 27.20758

Significance = .0007

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 13

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN GIVING INSTRUCTION TO INDIVIDUALS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	8 ^a 18.6 ^b 12.9 ^c 4.1 ^d	12 ^a 27.9 ^b 18.8 ^c 6.1 ^d	12 ^a 27.9 ^b 29.3 ^c 6.1 ^d	7 ^a 16.3 ^b 41.2 ^c 3.6 ^d	4 ^a 9.3 ^b 33.3 ^c 2.0 ^d	43 21.9
Baccalaureate Degree	11 ^a 18.3 ^b 17.7 ^c 5.6 ^d	21 ^a 35.0 ^b 32.8 ^c 10.7 ^d	16 ^a 26.7 ^b 39.0 ^c 8.2 ^d	6 ^a 10.0 ^b 35.3 ^c 3.1 ^d	6 ^a 10.0 ^b 50.0 ^c 3.1 ^d	60 30.6
Masters or Above	43 ^a 46.2 ^b 69.4 ^c 21.9 ^d	31 ^a 33.3 ^b 48.4 ^c 15.8 ^d	13 ^a 14.0 ^b 31.7 ^c 6.6 ^d	4 ^a 4.3 ^b 23.5 ^c 2.0 ^d	2 ^a 2.2 ^b 16.7 ^c 1.0 ^d	93 47.4
Column Total	52	54	41	17	12	196
Column Total Percent	31.6	32.7	20.9	8.7	6.1	100.0

Chi Square = 26.05563

Significance = .0010

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 14

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED STAFF
DEVELOPMENT NEEDS IN DEVISING VARYING TECHNIQUES TO MOTIVATE STUDENTS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	4 ^a	7 ^a	9 ^a	17 ^a	6 ^a	43
	9.3 ^b	16.3 ^b	20.9 ^b	39.5 ^b	14.0 ^b	
	17.4 ^c	17.5 ^c	13.6 ^c	33.3 ^c	37.5 ^c	
	2.0 ^d	3.6 ^d	4.6 ^d	8.7 ^d	3.1 ^d	21.9
Baccalaureate Degree	3 ^a	11 ^a	24 ^a	16 ^a	6 ^a	60
	5.0 ^b	18.3 ^b	40.0 ^b	26.7 ^b	10.0 ^b	
	13.0 ^c	27.5 ^c	36.4 ^c	31.4 ^c	37.5 ^c	
	1.5 ^d	5.6 ^d	12.2 ^d	8.2 ^d	3.1 ^d	30.6
Masters or Above	16 ^a	22 ^a	33 ^a	18 ^a	4 ^a	93
	17.2 ^b	23.7 ^b	35.5 ^b	19.4 ^b	4.3 ^b	
	59.6 ^c	55.0 ^c	50.0 ^c	35.3 ^c	25.0 ^c	
	8.2 ^d	11.2 ^d	16.8 ^d	9.2 ^d	2.0 ^d	47.4
Column Total	23	40	65	51	16	196
Column Total Percent	11.7	20.4	33.7	26.0	8.2	100.0

Chi Square = 17.07982

Significance = .0293

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

of 17.07982 and was significant not only at the .05 level but also at the .0293 level. The instructors who reported a higher level of education also reported a lower need level at the second and third levels of need.

Table 15 details the relationship between the level of education and the perceived needs in carrying out a laboratory experiment. This relationship held a chi square value of 15.76636 and was significant not only at the .05 level but also at the .0458 level. It was found at the second, third, and fourth levels of need that the higher the level of need the lower the level of education.

Table 16 details the relationship between the level of education and the perceived needs in effectively using an oral questioning session. This relationship had a chi square value of 18.3369 and was significant not only at the .05 level but also at the .0188 level. In the second and third levels of need, it was found that the higher the level of need, the lower the educational level.

Table 17 details the relationship between the level of education and the staff development needs in being able to effectively use illustrations in presenting a lesson. This relationship had a chi square value of 31.51849 and was significant not only at the .05 level but also at the .0001 level. It was found that in the first three levels of need that those instructors indicating the highest level of education also indicated the

TABLE 15

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED STAFF
DEVELOPMENT NEEDS IN CARRYING OUT A LABORATORY EXPERIMENT

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	10 ^a 23.8 ^b 23.3 ^c 5.3 ^d	13 ^a 31.0 ^b 28.9 ^c 6.8 ^d	9 ^a 21.4 ^b 17.0 ^c 4.7 ^d	7 ^a 16.7 ^b 21.9 ^c 3.7 ^d	3 ^a 7.1 ^b 17.6 ^c 1.6 ^d	42 22.1
Baccalaureate Degree	5 ^a 8.3 ^b 11.6 ^c 2.6 ^d	17 ^a 28.3 ^b 37.8 ^c 8.9 ^d	21 ^a 35.0 ^b 39.6 ^c 11.1 ^d	9 ^a 15.0 ^b 28.1 ^c 4.7 ^d	8 ^a 13.3 ^b 47.1 ^c 4.2 ^d	60 31.6
Masters or Above	28 ^a 31.8 ^b 65.1 ^c 14.7 ^d	15 ^a 17.0 ^b 33.3 ^c 7.9 ^d	23 ^a 26.1 ^b 43.4 ^c 12.1 ^d	16 ^a 18.2 ^b 50.0 ^c 8.4 ^d	6 ^a 6.8 ^b 35.3 ^c 3.2 ^d	88 46.3
Column Total	43	45	53	32	17	190
Column Total Percent	22.6	23.7	27.9	16.8	8.9	100.0

Chi Square = 15.76636

Significance = .0458

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 16

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN USING EFFECTIVELY AN ORAL QUESTIONING SESSION

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	9 ^a	12 ^a	10 ^a	10 ^a	2 ^a	43
	20.9 ^b	27.9 ^b	23.3 ^b	23.3 ^b	4.7 ^b	
	18.8 ^c	16.7 ^c	21.7 ^c	43.5 ^c	28.6 ^c	
	4.5 ^d	6.1 ^d	5.1 ^d	5.1 ^d	1.0 ^d	21.9
Baccalaureate Degree	8 ^a	25 ^a	17 ^a	6 ^a	4 ^a	60
	13.3 ^b	41.7 ^b	28.3 ^b	10.0 ^b	6.7 ^b	
	16.7 ^c	34.7 ^c	37.0 ^c	26.1 ^c	57.1 ^c	
	4.1 ^d	12.8 ^d	8.7 ^d	3.1 ^d	2.0 ^d	30.6
Masters or Above	31 ^a	35 ^a	19 ^a	7 ^a	1 ^a	93
	33.3 ^b	37.6 ^b	20.4 ^b	7.5 ^b	1.0 ^b	
	64.6 ^c	48.6 ^c	41.3 ^c	30.4 ^c	14.3 ^c	
	15.8 ^d	17.9 ^d	9.7 ^d	3.6 ^d	0.5 ^d	47.4
Column Total	48	72	46	23	7	196
Column Total Percent	24.5	36.7	23.5	11.7	3.6	100.0

Chi Square = 18.33691

Significance = .0188

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 17

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED
STAFF DEVELOPMENT NEEDS IN MAKING USE OF ILLUSTRATIONS IN A LESSON

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	11 ^a 25.6 ^b 18.0 ^c 5.6 ^d	9 ^a 20.9 ^b 13.0 ^c 4.6 ^d	9 ^a 20.9 ^b 29.0 ^c 4.6 ^d	13 ^a 30.2 ^b 56.5 ^c 6.7 ^d	1 ^a 2.3 ^b 9.1 ^c 0.5 ^d	43 22.1
Baccalaureate Degree	13 ^a 21.7 ^b 21.3 ^c 6.7 ^d	24 ^a 40.0 ^b 34.8 ^c 12.3 ^d	10 ^a 16.7 ^b 32.3 ^c 5.1 ^d	6 ^a 10.0 ^b 26.1 ^c 3.1 ^d	7 ^a 11.7 ^b 63.6 ^c 3.6 ^d	60 30.8
Masters or Above	37 ^a 40.2 ^b 60.7 ^c 19.0 ^d	36 ^a 39.1 ^b 52.2 ^c 18.5 ^d	12 ^a 13.0 ^b 38.7 ^c 6.2 ^d	4 ^a 4.3 ^b 17.4 ^c 2.1 ^d	3 ^a 3.3 ^b 27.3 ^c 1.5 ^d	92 47.2
Column Total	61	69	31	23	11	195
Column Total Percent	31.3	35.4	15.9	11.8	5.6	100.0

Chi Square = 31.51849

Significance = .0001

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

lowest level of need.

Table 18 details the relationship between the level of education and the staff development needs instructors indicated in identifying individual differences. This relationship had a chi square value of 32.47113 and was significant not only at the .05 level but also at the .0001 level. In the first and second levels of need it was found that as the level of education went up fewer instructors indicated a need for training.

Table 19 details the relationship between the level of education and the staff development needs which instructors indicated when they were questioned about utilizing audio-visual aids. This relationship had a chi square value of 32.85605 and was significant not only at the .05 level but also at the .0001 level. The level of need expressed by the instructors decreased as their educational level increased.

Table 20 details the relationship between the level of education and the staff development needs the instructors indicated with establishing grading procedures. This relationship had a chi square value of 20.60992 and was significant not only at the .05 level but also at the .0083 level. Those individuals with the highest level of education tended to express a lower level of need in establishing grading procedures.

Table 21 details the relationship between the level of education and the staff development needs expressed by the instructors on providing educational and career information.

TABLE 18

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED
STAFF DEVELOPMENT NEEDS IN IDENTIFYING INDIVIDUAL DIFFERENCES

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	3 ^a	11 ^a	17 ^a	7 ^a	5 ^a	43
	7.0 ^b	25.6 ^b	39.5 ^b	16.3 ^b	11.6 ^b	
	7.1 ^c	18.0 ^c	30.9 ^c	25.9 ^c	45.5 ^c	
	1.5 ^d	5.6 ^d	8.7 ^d	3.6 ^d	2.6 ^d	21.9
Baccalaureate Degree	9 ^a	13 ^a	20 ^a	13 ^a	5 ^a	60
	15.0 ^b	21.7 ^b	33.3 ^b	21.7 ^b	8.3 ^b	
	21.4 ^c	21.3 ^c	36.4 ^c	48.1 ^c	45.5 ^c	
	4.6 ^d	6.6 ^d	10.2 ^d	6.6 ^d	2.6 ^d	30.6
Masters or Above	30 ^a	37 ^a	18 ^a	7 ^a	1 ^a	93
	32.3 ^b	39.8 ^b	19.4 ^b	7.5 ^b	1.1 ^b	
	71.4 ^c	60.7 ^c	32.7 ^c	25.9 ^c	9.1 ^c	
	15.3 ^d	18.9 ^d	9.2 ^d	3.6 ^d	0.5 ^d	47.4
Column Total	42	61	55	27	11	196
Column Total Percent	21.4	31.1	28.1	13.8	5.6	100.0

Chi Square = 32.47113

Significance = .0001

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 19

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN USING AUDIO-VISUAL AIDS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	9 ^a 20.9 ^b 20.9 ^c 4.5 ^d	10 ^a 23.3 ^b 15.2 ^c 5.1 ^d	11 ^a 25.6 ^b 27.5 ^c 5.6 ^d	4 ^a 9.3 ^b 13.3 ^c 2.0 ^d	9 ^a 20.9 ^b 52.9 ^c 4.6 ^d	43 21.9
Baccalaureate Degree	6 ^a 10.0 ^b 14.0 ^c 3.1 ^d	19 ^a 31.7 ^b 28.8 ^c 9.7 ^d	12 ^a 20.0 ^b 30.0 ^c 6.1 ^d	18 ^a 30.0 ^b 60.0 ^c 9.2 ^d	5 ^a 8.3 ^b 29.4 ^c 2.6 ^d	60 30.5
Masters or Above	28 ^a 30.1 ^b 65.1 ^c 14.3 ^d	37 ^a 39.8 ^b 56.1 ^c 18.9 ^d	17 ^a 18.3 ^b 42.5 ^c 8 ^d	8 ^a 8.6 ^b 26.7 ^c 4.1 ^d	3 ^a 3.2 ^b 17.6 ^c 1.5 ^d	93 47.4
Column Total	43	66	40	30	17	196
Column Total Percent	21.9	33.7	20.4	15.3	8.7	100.0

Chi Square = 32.85605

Significance = .0001

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 20

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN ESTABLISHING A GRADING PROCEDURE

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A	8 ^a	6 ^a	13 ^a	11 ^a	5 ^a	43
Baccalaureate Degree	18.6 ^b	14.0 ^b	30.2 ^b	25.6 ^b	11.6 ^b	
	17.8 ^c	10.0 ^c	27.1 ^c	39.3 ^c	35.7 ^c	
	4.1 ^d	3.1 ^d	6.7 ^d	5.6 ^d	2.6 ^d	22.1
Baccalaureate Degree	9 ^a	19 ^a	18 ^a	9 ^a	5 ^a	60
	15.0 ^b	31.7 ^b	30.0 ^b	15.0 ^b	8.3 ^b	
	20.0 ^c	31.7 ^c	37.5 ^c	32.1 ^c	35.7 ^c	
	4.6 ^d	9.7 ^d	9.2 ^d	4.6 ^d	2.6 ^d	30.8
Masters or Above	28 ^a	35 ^a	17 ^a	8 ^a	4 ^a	92
	30.4 ^b	38.0 ^b	18.5 ^b	8.7 ^b	4.3 ^b	
	62.2 ^c	58.3 ^c	35.4 ^c	28.6 ^c	28.6 ^c	
	14.4 ^d	17.9 ^d	8.7 ^d	4.1 ^d	2.1 ^d	47.2
Column Total	45	60	48	28	14	195
Column Total Percent	23.1	30.8	24.6	14.4	7.2	100.0

Chi Square = 20.60992

Significance = .0083

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 21

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED
STAFF DEVELOPMENT NEEDS IN PROVIDING INFORMATION ON EDUCATIONAL AND CAREER OPPORTUNITIES

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	6 ^a 14.0 ^b 22.2 ^c 3.1 ^d	8 ^a 18.6 ^b 13.6 ^c 4.1 ^d	15 ^a 34.9 ^b 26.3 ^c 7.7 ^d	5 ^a 11.6 ^b 13.9 ^c 2.6 ^d	9 ^a 20.9 ^b 56.3 ^c 4.6 ^d	43 22.1
Baccalaureate Degree	3 ^a 5.0 ^b 11.1 ^c 1.5 ^d	22 ^a 36.7 ^b 37.3 ^c 11.3 ^d	17 ^a 28.3 ^b 29.8 ^c 8.7 ^d	17 ^a 28.3 ^b 47.2 ^c 8.7 ^d	1 ^a 1.7 ^b 6.3 ^c 0.5 ^d	60 30.8
Masters or Above	18 ^a 19.6 ^b 66.7 ^c 9.2 ^d	29 ^a 31.5 ^b 49.2 ^c 14.9 ^d	25 ^a 27.2 ^b 43.9 ^c 12.8 ^d	14 ^a 15.2 ^b 38.9 ^c 7.2 ^d	6 ^a 6.5 ^b 37.5 ^c 3.1 ^d	92 47.2
Column Total	27	59	57	36	16	195
Column Total Percent	13.8	30.3	29.2	18.5	8.2	100.0

Chi Square = 25.68668

Significance = .0012

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

This relationship had a chi square value of 25.68668 and was significant not only at the .05 level but also at the .0012 level. More instructors indicating a lower level of education expressed a strong need for training while the selection of those with a high level of education was the opposite.

Table 22 details the relationship between the level of education and the staff development needs expressed by the instructors in understanding human relations between the teacher and the student. This relationship had a chi square value of 16.64337 and was significant not only at the .05 level but also at the .0340 level. It was found that as the level of education increased, the level of needs decreased.

Table 23 details the relationship between the level of education and the perceived staff development needs of the instructors on understanding college policy and procedures for course withdrawals, incomplete grades, etc. This relationship had a chi square value of 20.86606 and was significant not only at the .05 level but also at the .0075 level. In the first three levels of need it was found that those who indicated a higher level of education tended to feel less need for staff development in this area of understanding college policy.

Table 24 details the relationship between the levels of education and the perceived staff development needs indicated

TABLE 22

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED STAFF
DEVELOPMENT NEEDS IN UNDERSTANDING HUMAN RELATIONS BETWEEN THE TEACHER AND THE STUDENT

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	6 ^a	13 ^a	12 ^a	8 ^a	4 ^a	43
	14 ^b	30.2 ^b	27.9 ^b	18.6 ^b	9.3 ^b	
	14.3 ^c	17.1 ^c	28.6 ^c	36.4 ^c	28.6 ^c	
	3.1 ^d	6.6 ^d	6.1 ^d	4.1 ^d	2.0 ^d	21.9
Baccalaureate Degree	7 ^a	27 ^a	12 ^a	8 ^a	6 ^a	60
	11.7 ^b	45.0 ^b	20.0 ^b	13.3 ^b	10.0 ^b	
	16.7 ^c	35.5 ^c	28.6 ^c	36.4 ^c	42.9 ^c	
	3.6 ^d	13.8 ^d	6.1 ^d	4.1 ^d	3.1 ^d	30.6
Masters or Above	29 ^a	36 ^a	18 ^a	6 ^a	4 ^a	93
	31.2 ^b	38.7 ^b	19.4 ^b	6.5 ^b	4.3 ^b	
	69.0 ^c	47.4 ^c	42.9 ^c	27.3 ^c	28.6 ^c	
	14.8 ^d	18.4 ^d	9.2 ^d	3.1 ^d	2.0 ^d	47.4
Column Total	42	76	42	22	14	196
Column Total Percent	21.4	38.8	21.4	11.2	7.1	100.0

Chi Square = 16.64337

Significance = .0340

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 23

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE
PERCEIVED STAFF DEVELOPMENT NEEDS IN UNDERSTANDING COLLEGE POLICY

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	7 ^a 16.3 ^b 16.7 ^c 3.6 ^d	9 ^a 20.9 ^b 15.5 ^c 4.6 ^d	9 ^a 20.9 ^b 17.6 ^c 4.6 ^d	6 ^a 14.0 ^b 26.1 ^c 3.1 ^d	12 ^a 27.9 ^b 57.1 ^c 6.2 ^d	43 22.1
Baccalaureate Degree	11 ^a 18.3 ^b 26.2 ^c 5.6 ^d	18 ^a 30.0 ^b 31.0 ^c 9.2 ^d	20 ^a 33.3 ^b 39.2 ^c 10.3 ^d	8 ^a 13.3 ^b 34.8 ^c 4.1 ^d	3 ^a 5.0 ^b 14.3 ^c 1.5 ^d	60 30.8
Masters or Above	24 ^a 26.1 ^b 57.1 ^c 12.3 ^d	31 ^a 33.7 ^b 53.4 ^c 15.9 ^d	22 ^a 23.9 ^b 43.1 ^c 11.3 ^d	9 ^a 9.8 ^b 39.1 ^c 4.6 ^d	6 ^a 6.5 ^b 28.6 ^c 3.1 ^d	92 47.2
Column Total	42	58	51	23	21	195
Column Total Percent	21.5	29.7	26.2	11.8	10.8	100.0

Chi Square = 20.86606

Significance = .0075

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 24

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED STAFF
DEVELOPMENT NEEDS OF THE INSTRUCTOR IN RECOGNIZING AND DEALING WITH HANDICAP STUDENTS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	4 ^a 9.5 ^b 13.3 ^c 2.1 ^d	9 ^a 21.4 ^b 20.0 ^c 4.6 ^d	8 ^a 19.0 ^b 13.8 ^c 4.1 ^d	8 ^a 19.0 ^b 27.6 ^c 4.1 ^d	13 ^a 31.0 ^b 39.4 ^c 6.7 ^d	42 21.5
Baccalaureate Degree	10 ^a 16.7 ^b 33.3 ^c 5.1 ^d	10 ^a 16.7 ^b 22.2 ^c 5.1 ^d	18 ^a 30.0 ^b 31.0 ^c 9.2 ^d	13 ^a 21.7 ^b 44.8 ^c 6.7 ^d	9 ^a 15.0 ^b 27.3 ^c 4.6 ^d	60 30.8
Masters or Above	16 ^a 17.2 ^b 53.3 ^c 8.2 ^d	26 ^a 28.0 ^b 57.8 ^c 13.3 ^d	32 ^a 34.4 ^b 55.2 ^c 16.4 ^d	8 ^a 8.6 ^b 27.6 ^c 4.1 ^d	11 ^a 11.8 ^b 33.3 ^c 5.6 ^d	93 47.7
Column Total	30	45	58	29	33	195
Column Total Percent	15.4	23.1	29.7	14.9	16.9	100.0

Chi Square = 16.83261

Significance = .0319

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

by the instructors when they considered recognizing and dealing with handicapped students. This relationship had a chi square value of 16.83261 and was significant not only at the .05 level but also at the .0319 level. In the second and third levels of need the instructors indicating a higher level of education tended to indicate a lower level of need.

Table 25 details the relationship between the level of education and the perceived inservice needs of the instructors in evaluating students according to performance levels. This relationship had a chi square value of 28.40816 and was significant not only at the .05 level but also at the .0004 level. It was found in the first two levels of need that those instructors with the highest level of education tended to indicate the lowest level of need.

Table 26 details the relationship between the level of education and the perceived staff development needs of the instructors in determining satisfactory levels of learning. This relationship had a chi square value of 18.52498 and was significant not only at the .05 level but also at the .0170 level. The instructors with the highest level of education tended to indicate the lowest level of need while the instructors with the lowest level of education tended to indicate higher levels of need.

TABLE 25

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED STAFF
DEVELOPMENT NEEDS OF INSTRUCTORS IN EVALUATING STUDENTS ACCORDING TO PERFORMANCE LEVELS

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A	5 ^a	9 ^a	18 ^a	5 ^a	6 ^a	43
Baccalaureate Degree	11.6 ^b	20.9 ^b	41.9 ^b	11.6 ^b	14.0 ^b	
	11.6 ^c	14.1 ^c	37.5 ^c	17.2 ^c	50.0 ^c	
	2.6 ^d	4.6 ^d	9.2 ^d	2.6 ^d	3.1 ^d	21.9
Baccalaureate Degree	8 ^a	20 ^a	16 ^a	13 ^a	3 ^a	60
	13.3 ^b	33.3 ^b	26.7 ^b	21.7 ^b	5.0 ^b	
	18.6 ^c	31.3 ^c	33.3 ^c	44.8 ^c	25.0 ^c	
	4.1 ^d	10.2 ^d	8.2 ^d	6.6 ^d	1.5 ^d	30.6
Masters or Above	30 ^a	35 ^a	14 ^a	11 ^a	3 ^a	93
	32.3 ^b	37.6 ^b	15.1 ^b	11.8 ^b	3.2 ^b	
	69.8 ^c	54.7 ^c	29.2 ^c	37.9 ^c	25.0 ^c	
	15.3 ^d	17.9 ^d	7.1 ^d	5.6 ^d	1.5 ^d	47.4
Column Total	43	64	48	29	12	196
Column Total Percent	21.9	32.7	24.5	14.8	6.1	100.0

Chi Square = 28.40816

Significance = .0004

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

TABLE 26

RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION AND THE PERCEIVED
STAFF DEVELOPMENT NEEDS OF INSTRUCTORS IN DETERMINING LEVELS OF LEARNING

Level of Education	Level of Need					Row Total
	None	Low	Moderate	Strong	Very Strong	
Less Than A Baccalaureate Degree	4 ^a	10 ^a	15 ^a	9 ^a	5 ^a	43
	9.3 ^b	23.3 ^b	34.9 ^b	20.9 ^b	11.6 ^b	
	12.1 ^c	19.2 ^c	23.8 ^c	32.1 ^c	29.4 ^c	
	2.1 ^d	5.2 ^d	7.8 ^d	4.7 ^d	2.6 ^d	22.3
Baccalaureate Degree	7 ^a	12 ^a	20 ^a	14 ^a	6 ^a	59
	11.9 ^b	20.3 ^b	33.9 ^b	23.7 ^b	10.2 ^b	
	21.2 ^c	23.1 ^c	31.7 ^c	50.0 ^c	35.3 ^c	
	3.6 ^d	6.2 ^d	10.4 ^d	7.3 ^d	3.1 ^d	30.6
Masters or Above	22 ^a	30 ^a	28 ^a	5 ^a	6 ^a	91
	24.2 ^b	33.0 ^b	30.8 ^b	5.5 ^b	6.6 ^b	
	66.7 ^c	57.7 ^c	44.4 ^c	17.9 ^c	35.3 ^c	
	11.4 ^d	15.5 ^d	14.5 ^d	2.6 ^d	3.1 ^d	47.2
Column Total	33	52	63	28	17	193
Column Total Percent	17.1	26.9	32.6	14.5	8.8	100.0

Chi Square = 18.52498

Significance = .0176

a Number of Observations

c Percent of Column Total

b Percent of Row Total

d Percent of Total Observations

On teacher training, categories three (101 - 150 clock hours) and four (151 - 200 clock hours) were combined into one category (101 - 200 clock hours) in order to increase cell sizes. No relationship was found to be significant at the .05 level between the number of clock hours of teacher training and 35 of the 36 dependent variables. The relationship between teacher training and writing learning objectives had a chi square value of 22.09630 and was significant at the .0365 level but was invalid because the expected frequency was too small in 23.3 percent of the cells.

On teacher experience, categories one (less than one year of experience) and two (one to five years of experience) were combined into one category (five or less years of experience) in order to increase cell sizes. No relationship was found to be significant at the .05 level between teacher experience and 35 of the 36 dependent variables. The relationship between teacher experience and understanding your own personal and social values had a chi square value of 24.42195 and was significant at the .0178 level but was invalid because the expected frequency was too small in 23.3 percent of the cells.

No relationship was found to be significant at the .05 level between occupational experience and 35 of the 36 dependent variables. The one exception was the relationship between occupational experience and determining the effectiveness of

various techniques of instruction. This relationship had a chi square value of 22.65639 and was significant at the .0308 level but was not valid because the expected frequency was less than five in 25 percent of the cells.

On teacher age categories one (25 years of age or less) and two (26 years of age to 35 years of age) were combined into one category (35 years of age or less) in order to increase cell sizes. No relationship was found to be significant at the .05 level between age and 34 of the 36 dependent variables. The two exceptions were between age and writing learning objectives and between age and carrying out a laboratory experiment. The relationship between age and writing learning objectives had a chi square value of 21.23677 and was significant at the .0470 level but was invalid because the expected frequency was less than five in 35 percent of the cells. The relationship between age and carrying out a laboratory experiment had a chi square value of 21.07393 and was significant at the .0493 level but was invalid because the expected frequency was less than five in 25 percent of the cells.

Research Question Three

Does the part-time occupational-technical faculty feel that staff development is important?

To resolve this research question, a question was included in the questionnaire to measure instructor support for a staff

development program. The instructor was able to select one of three choices for this question. The choices were (1) that he felt that staff development for part-time instructors was important, (2) was not important, or (3) he was undecided whether it was important. Only 13.3 percent felt that staff development was not important while 61.2 percent felt it was important. This left 25.5 percent undecided on whether or not it was important. Table 27 provides a summary of the responses by the instructors when questioned on the importance of staff development.

Table 28 shows the number and percentage of the respondents on the question of the importance of staff development when the respondents were divided into educational levels. Only four instructors indicated less than a high school diploma, and three of these, or 75 percent, felt staff development was important. Both of those who reported only a high school diploma indicated that staff development was important. Of those reporting more than a high school diploma but less than a baccalaureate degree 56.8 percent felt that staff development was important, 16.2 percent felt it was not important, and 27.0 percent indicated they were undecided. Those who reported a baccalaureate degree but less than a master's degree were tabulated and it was found that 55.0 percent felt that staff development was important, 16.7 percent felt it was unimportant, and 28.3 percent were undecided. Only 9.7 percent of these instructors with a master's degree or above felt that staff development was unimportant, while 65.6

TABLE 27
INSTRUCTOR RESPONSE TO WHETHER OR NOT
STAFF DEVELOPMENT IS IMPORTANT

Response	N	Percent (%)
Yes	120	61.2
No	26	13.3
Undecided	50	25.5
Total	196	100.0

TABLE 28
INSTRUCTOR RESPONSE ON THE IMPORTANCE OF STAFF DEVELOPMENT
WHEN INSTRUCTORS ARE GROUPED BY EDUCATIONAL LEVELS

Educational Level	Total		RESPONSE					
			Yes		No		Undecided	
	N	%	N	%	N	%	N	%
Less Than High School	4	2.0	3	75.0	1	25.0	0	0.0
High School Diploma	2	1.0	2	100.0	0	0.0	0	0.0
More Than High School But Less Than Baccalaureate Degree	37	18.9	21	56.8	6	16.2	10	27.0
Baccalaureate Degree	60	30.6	33	55.0	10	16.7	17	28.3
Masters or Above	93	47.5	61	65.6	9	9.7	23	24.7
Total	196	100.0	120	61.2	26	13.3	50	25.5

percent felt it was important.

Table 29 shows the number and percentage of the respondents on the question of the importance of staff development when the instructors are grouped according to teacher training hours. In the group which reported fifty or less hours of training, 56.4 percent felt that staff development was important, with 17.9 percent indicating that it was not important. In the group reporting 51 to 100 hours of teacher training, 55 percent were in favor of it and 25 percent did not believe it was important. In the group indicating 101 to 150 hours of training, 58.8 percent thought staff development was important, and 29.4 percent were undecided. In the group stating they had 151 to 200 hours of training, 55.6 percent indicated they thought it was important and 22.2 percent thought it was not important. The group that had the highest percentage favoring staff development was the group with more than 200 clock hours of teacher training, and 64.9 percent of these felt it was important. Those who did not believe it was important constituted 9.0 percent.

Table 30 details the number and percentage of the respondents regarding importance of staff development when the instructors were grouped according to teaching experience. When those with less than one year of experience were questioned, 67.0 percent thought staff development was important, 21.9 percent felt it was unimportant, and 11.1 percent were undecided. Of those with one to five years experience, 59.5 percent felt it was

TABLE 29

INSTRUCTOR RESPONSE ON THE IMPORTANCE OF STAFF DEVELOPMENT
WHEN INSTRUCTORS ARE GROUPED BY NUMBER OF CLOCK HOURS OF TEACHER TRAINING

Clock Hours of Teacher Training in Hours	Total		RESPONSE					
			Yes		No		Undecided	
	N	%	N	%	N	%	N	%
0 - 50	39	19.9	22	56.4	7	17.9	10	25.7
51 - 100	20	10.2	11	55.0	5	25.0	4	20.0
101 - 150	17	8.7	10	58.8	2	11.8	5	29.4
151 - 200	9	4.6	5	55.6	2	22.2	2	22.2
More Than 200	111	56.6	72	64.9	10	9.0	29	26.1
Total	196	100.0	120	61.2	26	13.3	50	25.5

TABLE 30
INSTRUCTOR RESPONSE ON THE IMPORTANCE OF STAFF
DEVELOPMENT WHEN INSTRUCTORS ARE GROUPED BY TEACHING EXPERIENCE

Teaching Experience in Years	Total		RESPONSE					
			Yes		No		Undecided	
	N	%	N	%	N	%	N	%
Less Than 1 Year	9	4.6	6	67.0	2	21.9	1	11.1
1 - 5 Years	79	40.3	47	59.5	8	10.1	24	30.4
6- 10 Years	62	31.6	37	59.7	7	11.3	18	29.0
11 - 15 Years	26	13.3	17	64.4	5	19.2	4	15.4
16 or More Years	20	10.2	13	65.0	4	20.0	3	15.0
Total	196	100.0	120	61.2	26	13.3	50	25.5

important, with only 10.1 percent responding unfavorably toward it. Those in the category of six to ten years experience responded with 59.7 percent in favor and 11.3 percent against staff development. In the 11 to 15 years of experience category, 64.4 percent favored staff development and 19.2 percent thought it was unimportant. Of those with the most experience as teachers, with experience varying from 16 years and up, 65.0 percent favored staff development, and 20.0 percent did not think it was important.

Table 31 details the number and percentage of the respondents when questioned on the importance of staff development and grouped according to their occupational experience. When those with one to five years of occupational experience were questioned, 62.2 percent were in favor of staff development, and 13.3 percent were not. In the six to ten years of occupational experience category, 62.3 percent were in favor of it and 15.1 percent were against. In the 11 to 15 years of occupational experience group, 59.5 percent were favorable toward it, and 11.9 percent did not think it was important. A total of 60.7 percent of those with 16 or more years of occupational experience favored staff development for part-time occupational-technical teachers, and only 12.5 percent did not think it was important.

Table 32 details the number and percentage of the respondents on the question of the importance of staff development when the instructors were grouped according to age. No one in the

TABLE 31

INSTRUCTOR RESPONSE ON THE IMPORTANCE OF STAFF DEVELOPMENT
WHEN INSTRUCTORS ARE GROUPED ACCORDING TO OCCUPATIONAL EXPERIENCE

Occupational Experience In Years	Total		RESPONSE					
			Yes		No		Undecided	
	N	%	N	%	N	%	N	%
1 - 5	45	23.0	28	62.2	6	13.3	11	24.5
5 - 10	53	27.0	33	62.3	8	15.1	12	22.6
11 - 15	42	21.4	25	59.5	5	11.9	12	28.6
16 or More	56	28.6	34	60.7	7	12.5	15	26.8
Total	196	100.0	120	61.2	26	13.3	50	25.5

TABLE 32
INSTRUCTOR RESPONSE ON THE IMPORTANCE OF STAFF
DEVELOPMENT WHEN INSTRUCTORS ARE GROUPED ACCORDING TO AGE

Age In Years	Total		RESPONSE					
			Yes		No		Undecided	
	N	%	N	%	N	%	N	%
25 or Less	6	3.1	4	66.7	0	0.0	2	33.3
26 - 35	69	35.2	42	60.9	9	13.0	18	26.1
36 - 45	71	36.2	45	63.4	10	14.1	16	22.5
46 - 55	32	16.3	19	59.4	4	12.5	9	28.1
56 or Older	18	9.2	10	55.6	3	16.7	5	27.7
Total	196	100.0	120	61.2	26	13.3	50	25.5

group who was 25 years of age or less felt staff development was unimportant while 67.7 percent considered it important. In the 26.35 years of age group, 60.9 percent felt it was important and 13.6 percent felt it was unimportant. Of those who were 46 to 55 years of age, 59.4 percent felt it was important and 12.5 percent felt it was not. The oldest group, age 56 and older responded with 55.6 percent in favor of staff development and 16.7 percent did not think it important.

Research Question Four

Would the part-time occupational-technical faculty member participate in a staff development program if one were offered and under what circumstances?

The respondent could reply by saying he would not participate or he would participate under the following circumstances:

1. If a program were offered at a convenient time
2. If given time off from teaching
3. If paid the same as for teaching

Table 33 presents the summary of the response to this question. It shows that 51.0 percent would participate if given at a convenient time, 12.3 percent would participate if given time off from teaching, and 31.6 percent would participate if paid the same as teaching. Only 5.1 percent indicated they would not participate.

TABLE 33
INSTRUCTOR RESPONSE TO CIRCUMSTANCES UNDER WHICH THEY
WOULD PARTICIPATE IN A STAFF DEVELOPMENT PROGRAM

Circumstances	N	Percent (%)
If Given at a Convenient Time	100	51.0
If Given Time Off From Teaching Duties	24	12.3
If Paid the Same as For Teaching	62	31.6
Would Not Participate Under Any Circumstances	10	5.1
Total	196	100.0

Table 34 shows the number and percentage of the respondents on the question of participating in a staff development program when the instructors were grouped according to educational levels. Of those with less than a high school diploma, 75.0 percent indicated they would participate if a program were offered at a convenient time and 25.0 percent said they would not participate. Both of those with only a high school diploma said they would participate if a program were offered at a convenient time. Of those with more than a high school diploma but less than a baccalaureate degree, 54.1 percent indicated they would participate if it were given at a convenient time, 16.2 percent if given time off from teaching, 21.6 percent if paid the same as for teaching, and 8.1 percent would not participate. When those with a baccalaureate degree were questioned, 41.7 percent said they would participate if a program were offered at a convenient time, 13.3 percent would participate if given time off from teaching, 40.0 percent if paid the same as for teaching, and 5.0 percent would not participate. Of those with a master's degree or above, 53.8 percent indicated they would participate if a program were offered at a convenient time, 10.7 percent would if given time off from teaching, 32.3 percent would participate if paid the same as for teaching, and 3.2 percent said they would not participate.

Table 35 presents the data results of the question concerning participating in a staff development program when

TABLE 34

INSTRUCTOR RESPONSE TO CIRCUMSTANCES UNDER WHICH THEY WOULD PARTICIPATE
IN A STAFF DEVELOPMENT PROGRAM WHEN GROUPED ACCORDING TO EDUCATIONAL LEVEL

Level of Education	RESPONSE									
	Total		If Given At A Convenient Time		If Given Time Off From Teaching		If Paid the Same as For Teaching		Would Not Participate	
	N	%	N	%	N	%	N	%	N	%
Less Than a High School Diploma	4	2.0	3	75.0	0	0.0	0	0.0	1	25.0
High School Diploma	2	1.0	2	100.0	0	0.0	0	0.0	0	0.0
More Than High School But Less Than a Baccalaureate Degree	37	18.9	20	54.1	6	16.2	8	21.6	3	8.1
Baccalaureate Degree	60	30.6	25	41.7	8	13.3	24	40.0	3	5.0
Masters Degree or Above	93	47.5	50	53.8	10	10.7	30	32.3	3	3.2
Total	196	100.0	100	51.0	24	12.3	62	31.6	10	5.1

TABLE 35

INSTRUCTOR RESPONSE TO CIRCUMSTANCES UNDER WHICH THEY WOULD PARTICIPATE
IN A STAFF DEVELOPMENT PROGRAM WHEN GROUPED ACCORDING TO TEACHER TRAINING HOURS

Teacher Training By Clock Hours	RESPONSE									
	<u>Total</u>		<u>If Given At A Convenient Time</u>		<u>If Given Time Off From Teaching</u>		<u>If Paid the Same as For Teaching</u>		<u>Would Not Participate</u>	
	N	%	N	%	N	%	N	%	N	%
0 - 50	39	19.9	19	48.7	4	10.3	12	30.8	4	10.2
51 - 100	20	10.2	11	55.0	2	10.0	6	30.0	1	5.0
101 - 150	17	8.7	7	41.2	3	17.6	4	23.5	3	17.7
151 - 200	9	4.6	5	55.6	1	11.1	2	22.2	1	11.1
More Than 200	111	56.6	58	55.3	14	12.6	38	34.2	1	.9
Total	196	100.0	100	51.0	24	12.3	62	31.6	10	5.1

grouped according to the number of teacher training hours. Of those with fifty or less clock hours of teacher training, 48.7 percent said they would participate if a program were offered at a convenient time, 10.3 percent if given time off from teaching, 30.8 percent if paid the same as for teaching, and 10.2 percent said they would not participate. In the group having 51 to 100 clock hours of training, 55.0 percent said they would participate if a program were given at a convenient time, 10.0 percent if given time off from teaching, 30.0 percent if paid the same as for teaching, and 5.0 percent did not want to participate. In the group having 101 - 150 clock hours of training, 41.2 percent said they would participate if the program were offered at a convenient time, 17.6 percent if given time off from teaching, 33.5 percent if paid the same as for teaching, and 17.7 percent said they would not participate. In the group having 151 to 200 clock hours of training, 55.6 percent felt they would participate if a program were offered at a convenient time, 11.1 percent if given time off from teaching, 22.2 percent if paid the same as for teaching, and 11.1 percent would not participate. The largest group were those with more than 200 clock hours of training, and 55.3 percent of those said they would participate if a program were given at a convenient time, 12.6 percent if given time off from teaching, 34.2 percent if paid the same as for teaching, and only .9 of one percent said they would not participate.

Table 36 presents the results of the question concerning participation in a staff development program when the instructors were grouped according to years of teaching experience. There were only 9 individuals with less than one year of teaching experience and 33.3 percent indicated they would participate if a staff development program were offered at a convenient time, 22.2 percent if given time off from teaching, 33.3 percent if paid the same as for teaching, and 11.1 percent said they would not participate. In the one to five years category, 51.9 percent indicated participation if the program were offered at a convenient time, 11.4 percent if given time off from teaching, 31.6 percent if paid the same as for teaching, and only 5.1 percent said they would not participate. Of those in the six to ten year category, exactly half said they would participate if it were offered at a convenient time, 12.9 percent if given time off from teaching, 32.3 percent if paid the same as for teaching, and 4.8 percent indicated they would not participate. In the 11 to 15 years of experience group, 57.7 percent said they would participate if the program were given at a convenient time, 11.5 percent if given time off from teaching, 26.8 percent if paid the same as for teaching, and 3.8 percent would not participate. In the group with the most experience (16 or more years), one-half said they would participate if a program were given at a convenient time, 10.0 percent if given time off from teaching, 35.0 percent if paid the same as for teaching, and 5.5 percent would not participate.

TABLE 36

INSTRUCTOR RESPONSE TO CIRCUMSTANCES UNDER WHICH THEY WOULD PARTICIPATE
IN A STAFF DEVELOPMENT PROGRAM WHEN GROUPED ACCORDING TO TEACHER EXPERIENCE

Teacher Experience In Years	RESPONSE									
	<u>Total</u>		<u>If Given At A Convenient Time</u>		<u>If Given Time Off From Teaching</u>		<u>If Paid the Same as For Teaching</u>		<u>Would Not Participate</u>	
	N	%	N	%	N	%	N	%	N	%
Less Than One	9	4.6	3	33.3	2	22.2	3	33.3	1	11.1
1 - 5	79	40.3	41	51.9	9	11.4	25	31.6	4	5.1
6 - 10	62	31.6	31	50.0	8	12.9	20	32.3	3	4.8
11 - 15	26	13.3	15	57.7	3	11.5	7	26.8	1	3.8
16 or More	20	10.2	10	50.0	2	10.0	7	35.0	1	5.5
Total	196	100.0	100	51.0	24	12.3	62	31.6	10	5.1

Table 37 shows the results when the instructors were questioned on participation in a staff development program and when the instructors were grouped according to occupational experience. Of those with 1 to 5 years experience, 53.3 percent said they would participate if it were offered at a convenient time, 11.1 percent if given time off from teaching, 31.1 percent if paid the same as for teaching, and 4.4 percent would not participate. In the group having six to ten years of experience, 47.2 percent indicated they would participate if it were offered at a convenient time, 11.3 percent if given time off from teaching, 32.1 percent if paid the same as for teaching, and 9.4 percent would not participate. In the group with 11 to 15 years of occupational experience, 47.6 percent said they would participate if the program were offered at a convenient time, 11.9 percent if given time off from teaching, 38.1 percent if paid the same as for teaching, and 2.3 percent would not participate. Of those indicating 16 or more years of occupational experience, 53.6 percent indicated participation if the program were given at a convenient time, 14.3 percent if given time off from teaching, 26.8 percent if paid the same as for teaching, and 3.6 percent would not participate.

Table 38 presents the number and percentage of the respondents on the question of participation in a staff development program when the instructors were grouped according to age. Exactly half of those who were 25 years of age or less said they

TABLE 37

INSTRUCTOR RESPONSE TO CIRCUMSTANCES UNDER WHICH THEY WOULD PARTICIPATE
IN A STAFF DEVELOPMENT PROGRAM WHEN GROUPED ACCORDING TO OCCUPATIONAL EXPERIENCE

Occupational Experience	RESPONSE									
	<u>Total</u>		<u>If Given At A Convenient Time</u>		<u>If Given Time Off From Teaching</u>		<u>If Paid the Same as For Teaching</u>		<u>Would Not. Participate</u>	
	N	%	N	%	N	%	N	%	N	%
1 - 5	45	23.0	24	53.3	5	11.1	14	31.1	2	4.4
6 - 10	53	27.0	25	47.2	6	11.3	17	32.1	5	2.4
11 - 15	42	21.4	20	47.6	5	11.9	16	38.1	1	2.3
16 or More	56	28.6	31	53.6	8	14.3	15	26.8	2	3.6
Total	196	100.0	100	51.0	24	12.3	62	31.6	10	5.1

TABLE 38

INSTRUCTOR RESPONSE TO CIRCUMSTANCES UNDER WHICH THEY WOULD PARTICIPATE
IN A STAFF DEVELOPMENT PROGRAM WHEN GROUPED ACCORDING TO INSTRUCTOR AGE.

Age in Group	RESPONSE									
	Total		If Given At A Convenient Time		If Given Time Off From Teaching		If Paid the Same as For Teaching		Would Not Participate	
	N	%	N	%	N	%	N	%	N	%
25 or Less	6	3.1	3	50.0	1	16.7	1	16.7	1	16.7
26 - 35	69	35.2	36	52.2	8	11.6	23	33.3	2	2.9
36 - 45	71	36.2	34	47.9	7	9.9	28	39.4	2	2.8
46 - 55	32	16.3	18	56.3	3	9.4	7	21.9	4	12.5
56 or Older	18	9.2	9	50.3	5	27.8	3	16.7	1	5.6
Total	196	100.0	100	51.0	24	12.3	62	31.6	10	5.1

would participate in a program if one were offered at a convenient time, 16.7 percent if given time off from teaching, 16.7 percent if paid the same as for teaching, and 16.7 percent would not participate. In the 26 to 35 years of age group, 52.2 percent would participate if it were offered at a convenient time, 11.6 percent if given time off from teaching, 33.3 percent if paid the same as for teaching, and only 2.9 percent would not participate. Of those indicating they were 36 to 45 years of age, 47.9 percent would participate if the program were offered at a convenient time, 9.9 percent if given time off from teaching, 39.4 percent if paid the same as for teaching, and 2.8 percent would not participate. In the 46 to 55 years of age group, 56.3 percent said they would participate if it were given at a convenient time, 9.4 percent if given time off from teaching, 21.9 percent if paid the same as for teaching, and 12.5 percent would not participate. In the oldest group (56 or older), 50.3 percent would participate if the program were given at a convenient time, 27.8 percent if given time off from teaching, 16.7 percent if paid the same as for teaching, and 5.6 percent would not participate.

An additional question on the questionnaire concerned itself with other needs the individual might have which was not listed. Only four people responded to that question and three of those listed a staff development medium. This suggestion was that the part-time instructor should be given time to mingle with full-time instructors in order to learn more about teaching. The additional

suggested need was in the area of knowing how to select a textbook for a class.

Summary

This chapter contained the results of this study. It included the analyses of the survey responses and the presentation and analyses of each of the research questions. The following is a summary of this chapter.

Of the 308 questionnaires mailed out, 63.6 percent or 196 were returned. Only eight of those which were returned were not filled out completely. These eight had a total of nineteen questions left unanswered and these omitted variables were coded as missing values.

A picture of the background of the part-time occupational-technical instructor was gotten from the responses to the questionnaire. The largest number of these individuals (47.5 percent) had at least a master's degree and another 30.6 percent had a bachelor's degree. Only three percent reported only a high school diploma or less. More than half (56.6 percent) reported having more than 200 clock hours of teacher training, and 55.1 percent reported six or more years of teaching experience. A total of 77.0 percent reported at least six years of occupational experience. The largest group of instructors (71.4 percent) were between the ages of 26 and 45.

The perceived staff development needs of the instructors were ascertained. Those areas for which more than half of the

instructors felt a moderate to strong inservice training need were:

1. Determining Instructional Needs of Student
2. Developing Instructional Material
3. Motivating Student
4. Setting up a Laboratory Experiment
5. Carrying out a Laboratory Experiment
6. Understanding Community College Policy
7. Providing Information on Educational and Career

Opportunities

8. Determining the Effectiveness of Instructional

Techniques

9. Assignment of Effective Outside Work
10. Recognizing and Dealing with Handicapped Students
11. Understanding Satisfactory Levels of Learning
12. Determining Satisfactory Levels of Learning

The majority of the instructors felt they had little or no need in the other twenty-four areas.

Chi square tests of significance were employed to analyze the data. Some categories were combined in order to increase the cell size so as to make these test valid. A Significant relationship at the .05 level was found between the level of education and the following dependent variables:

1. Writing Learning Objectives

2. Writing Test Items which Match Learning Objectives
3. Developing Course Outlines
4. Writing a Lesson Plan
5. Developing Teacher-Made Instructional Materials
6. Giving Instructions for Individuals
7. Divising Varying Techniques to Motivate Students
8. Carrying out a Laboratory Experiment
9. Effectively Using an Oral Questioning Session
10. Effectively Using Illustrations in Presenting a Lesson
11. Identifying Individual Differences
12. Utilizing Audio-Visual Aids
13. Establishing Grading Procedures
14. Providing Educational and Career Information
15. Understanding Human Relations Between the Teacher and the Student
16. Understanding College Policy and Procedure
17. Recognizing and Dealing with Handicapped Students
18. Evaluating Students According to Performance Levels
19. Determining Satisfactory Levels of Learning

No other significant relationships which were valid were found in this study.

An attempt was made to measure instructional support for a staff development program. Of those responding 61.2 percent felt

staff development was important, 13.3 percent felt it was not important, and 25.5 percent were undecided on its importance.

On the question of the circumstances under which they would participate in a program exactly 51 percent said they would participate if a program were offered at a convenient time. Another 12.5 percent would participate if they were given time off from teaching, and 21.6 percent would participate if paid the same as for teaching. Only 5.1 percent said they would not participate under any circumstances.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

A summary of the entire study is given here by reviewing the problem situation, the literature review, the methodology, and the discussion of the results. A presentation of the conclusions and recommendations is then made.

Problem

Community colleges are utilizing great numbers of part-time instructors. These individuals have needs which are not being met by existing staff development programs. The specific needs of these individuals should be discovered and categorized so that staff development programs can be designed to meet them in the most efficient and effective way. By assessing the staff development needs and then structuring a staff development program to meet these needs, institutions can enhance their chances of having capable and efficient part-time faculty members.

Specifically, the study answered the following questions:

1. What are the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System?
2. Is there a significant relationship between the perceived staff development needs of part-time occupational-technical faculty and the following five independent variables?

- a. Educational levels of part-time occupational-technical faculty.
 - b. Clock hours of teacher-training courses of the part-time occupational-technical instructor.
 - c. Years of teaching experience of the part-time occupational-technical instructor.
 - d. Years of subject-related occupational experience of the part-time occupational-technical teacher.
 - e. Age of the part-time occupational-technical instructor.
3. Does the part-time occupational-technical faculty feel that staff development is important?
4. Would the part-time occupational-technical faculty member participate in a staff development program if one were offered and under what circumstances?

Literature Review

A review of the related literature concerning the staff development needs of part-time occupational-technical faculty in community colleges demonstrated that these individuals are being utilized in large numbers, but little research and relatively few studies are being conducted on them. Information received from the literature search was mainly descriptive in nature. However, a fairly complete picture of the part-time faculty member could be painted using this information.

The part-time teacher gives flexibility to the college. More classes, different types of classes, and various schedules can be offered because of these individuals. Their effectiveness may depend on such things as their age, teaching experience, work-related experience, and educational background (Hall, 1970). Some of the reasons they teach part time are to get a full-time teaching job, for financial reasons, or simply for personal satisfaction (Kuhns, 1971).

Their qualifications may vary. Some will have advanced degrees, while more will have a bachelor's degree or less (Cooke, 1973). Some will have a great deal of experience, while others will have little experience. Most will have work-related experience (Kuhns, 1971). Their background and willingness to teach part time may be an advantage or a disadvantage (Messerschmidt, 1974).

The literature reveals how little is done toward giving in-service training to these individuals (Grymes, 1978). Most of the part-time faculty members who get any type of staff development program will receive only orientation. A few others may get more. The scarcity of in-service training has caused a great deal of concern for the experts who write about the programs or the lack of them. These experts believe that for the educational institutions to get the most good out of the part-time faculty, they must offer them training programs to help them reach their potential.

The literature search produced only one needs assessment instrument which was designed strictly for part-time faculty. Others

were mentioned which assessed full-time faculty. Some individuals concerned with part-time faculty gave ideas on what should be contained in a staff development needs assessment (Gallup, 1976). Some writers felt that administrators should be responsible for dealing with needs assessments and the planning of a staff development program. Some individuals contended that assessment and staff development should be controlled at the central office level, while others believed that faculty members best know their needs. A number of writers believed that the central office level should be included in the planning as well as the faculty (O'Banion, 1972).

A number of staff development delivery systems were mentioned in the literature with orientation being the most used system. Other systems were traditional school-centered meetings, periodicals, conferences, and extension courses. Various forms of staff development were also considered by the individuals in the literature. These varied from simply giving a key, room number, and roll to the instructor to complex models. All were designed to help the part-time faculty member reach his potential. Some appeared to be successful, while others were not (Smith, 1966).

The review pointed out the need for additional studies on the subject of part-time occupational-technical instructors as so few studies have been done relating to this subject.

Methodology

The purpose of the research was to determine the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System. Each faculty member's level of need was explored. Five independent variables were selected after a review of the literature indicated which ones were likely to affect the staff development needs of the individual.

The independent variables selected were the educational level of the faculty, clock hours of teacher training courses, years of teaching experience, years of subject related occupational experience, and age. Relationship between the selected independent variables and staff development needs were explored. Additionally, it was determined the faculty member's reaction to in-service staff development and under what conditions the individuals would participate in such program. Four research questions were used to fulfill the purpose of the study.

The sample survey was comprised of 196 part-time occupational-technical teachers in the Virginia Community College System. The sample was selected by random selection from 1547 part-time occupational-technical teachers in the Virginia Community College System. The questionnaire method was employed to obtain the data. The questionnaire was validated by a review panel and was field-tested prior to being mailed.

The analytical techniques included absolute frequencies,

percentage frequencies, and chi square tests of significance. The minimum required expected frequency was at least five in eighty percent or more of the cells or the chi square analysis was not considered valid. The .05 level of significance was used.

Results

The following is a summary of the results of this study. It includes the analyses of the survey responses and the presentation and analyses of each of the research questions.

Of the 308 questionnaires mailed out, 63.6 percent or 196 were returned. Only eight of those which were returned were not filled out completely. These eight had a total of nineteen questions left unanswered and these omitted variables were coded as missing values.

A better understanding of the part-time occupational-technical instructor was obtained from the responses to the questionnaire. The largest number of these individuals (47.5 percent) had at least a master's degree and another 30.6 percent had a bachelor's degree. Only three percent reported only a high school diploma or less. More than half (56.6 percent) reported having more than 200 clock hours of teacher training, and 55.1 percent reported six or more years of teaching experience. A total of 77.0 percent reported at least six years of occupational experience. The largest group of instructors (71.4 percent) were between the ages of 26 and 45.

The perceived staff development needs of the instructors were ascertained. Those areas for which more than half of the instructors felt a moderate to strong in-service training needs were:

1. Determining instructional needs of student
2. Developing instructional material
3. Motivating student
4. Setting up a laboratory experiment
5. Carrying out a laboratory experiment
6. Understanding community college policy
7. Providing information on educational and career opportunities
8. Determining the effectiveness of instructional techniques
9. Assignment of effective outside work
10. Recognizing and dealing with handicapped students
11. Understanding satisfactory levels of learning
12. Determining satisfactory levels of learning

The majority of the instructors felt they had little or no need in the other twenty-four areas.

Chi square test of significance were employed to analyze the data. A significant relationship at the .05 level was found between the level of education and the following dependent variables:

1. Writing learning objectives
2. Writing test items which match learning objectives
3. Developing course outlines
4. Writing a lesson plan
5. Developing teacher-made instructional materials
6. Giving instructions for individuals
7. Devising varying techniques to motivate students
8. Carrying out a laboratory experiment
9. Effectively using an oral questioning session
10. Effectively using illustrations in presenting a

lesson

11. Identifying individual differences
12. Utilizing audio-visual aids
13. Establishing grading procedures
14. Providing educational and career information
15. Understanding human relations between the teacher

and the student

16. Understanding college policy and procedure
17. Recognizing and dealing with handicapped students
18. Evaluating students according to performance levels
19. Determining satisfactory levels of learning

There were no other valid significant relationships found between the other four independent variables and the thirty-six dependent variables.

An attempt was made to measure faculty support for a staff development program. Of those responding, 61.2 percent felt staff development was important, 13.3 percent felt it was not important, and 25.5 percent were undecided on its importance.

On the question of the circumstances under which they would participate in a program exactly 51 percent said they would participate if a program were offered at a convenient time. Another 12.5 percent would participate if they were given time off from teaching, and 21.6 percent would participate if paid the same as for teaching. Only 5.1 percent said they would not participate under any circumstances.

Conclusion

By utilizing the 196 usable questionnaires coded for this study, the following conclusions are presented.

1. Based on the findings of this study it can be concluded that a typical part-time occupational-technical teacher in the Virginia Community College System will:

- a. Hold at least a Baccalaureate Degree
- b. Have more than 200 clock hours of teacher training
- c. Have from one to ten years experience
- d. Have more than ten years of occupational experience in the field in which they are teaching
- e. Be between 26 and 45 years of age

2. Based on the findings that more than half of the respondents indicated a moderate to very strong staff development need, it may be concluded that there is a need for in-service training for part-time occupational-technical instructors in the Virginia Community College System and that their needs are found in the following areas:

- a. Determining instructional needs of students
- b. Developing instructional materials
- c. Motivating students
- d. Setting up a laboratory experiment
- e. Carrying out a laboratory experiment
- f. Understanding community college policy
- g. Providing information on educational and career opportunities
- h. Determining the effectiveness of instructional techniques
- i. Assignment of effective outside work
- j. Recognizing and dealing with handicapped students
- k. Understanding the work of the Counseling Center
- l. Determining satisfactory levels of learning

3. Based on the finding that there is an inverse relationship between the educational level and certain perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System, it can be concluded that as the educational

level increases, the level of need decreases in the following areas:

- a. Writing learning objectives
- b. Writing test items which match learning objectives
- c. Developing course outlines
- d. Writing lesson plans
- e. Developing teacher-made materials
- f. Giving instructions for individuals
- g. Devising varying techniques to motivate students
- h. Carrying out a laboratory experiment
- i. Using affectively an oral questioning session
- j. Making use of illustrations in a lesson
- k. Identifying individual differences
- l. Using audio-visual aids
- m. Establishing a grading procedure
- n. Providing information on educational and career information.
- o. Understanding human relations between the teacher and the student
- p. Understanding college policy
- q. Recognizing and dealing with handicapped students
- r. Evaluating students according to performance levels
- s. Determining levels of learning.

This finding tends to agree with Hall (1970) who found in his study that effective teaching depended upon the amount of formal education.

4. Since 61.2 percent of the respondents indicated that staff development was important for part-time instructors, it can be concluded that staff development is important to the part-time occupational-technical faculty in the Virginia Community College System.

5. Based on the finding that 94.9 percent of the respondents indicated they would participate in a staff development program for part-time instructors, it can be concluded that a staff development program offered under the right conditions would be utilized by most of the part-time occupational-technical faculty in the Virginia Community College System.

6. Based on the finding that 82.6 percent of the respondents indicated that they would participate if only two conditions were met, it can be concluded that part-time occupational-technical faculty members in the Virginia Community College System would participate in a program if it were offered at a convenient time and if these individuals were paid the same rate as they would receive for teaching.

Recommendations

The following recommendations based on the findings and conclusions of this study are presented. These recommendations are given concerning staff development for part-time occupational-technical faculty in the Virginia Community College System.

1. This research has shown the characteristics of the part-time occupational-technical faculty in the Virginia Community College System. Any staff development program which is set up for these individuals should take into consideration these characteristics.

2. The majority of the respondents indicated a need for in-service training. They listed a need for training in certain areas, and it is recommended that any in-service training for these individuals be developed to give training in these areas.

- a. Determining instructional needs of students
- b. Developing instructional materials
- c. Motivating students
- d. Setting up a laboratory experiment
- e. Carrying out a laboratory experiment
- f. Understanding community college policy
- g. Providing information on educational and career opportunities
- h. Determining the effectiveness of instructional techniques
- i. Assignment of effective outside work
- j. Recognizing and dealing with handicapped students
- k. Understanding the work of the counseling center
- l. Determining satisfactory levels of learning

3. Based on the finding that there is an inverse relationship between the level of education and the level of staff develop-

ment needs in certain areas, it is recommended that any in-service program be developed with the idea in mind that as the level of education increases, the level of need decreases in the following areas:

- a. Writing learning objectives
- b. Writing test items which match learning objectives
- c. Developing course outlines
- d. Writing lesson plans
- e. Developing teacher-made materials
- f. Giving instructions to individuals
- g. Devising varying techniques to motivate students
- h. Carrying out a laboratory experiment
- i. Using effectively an oral questioning session
- j. Making use of illustrations in a lesson
- k. Identifying individual differences
- l. Using audio-visual aids
- m. Establishing a grading procedure
- n. Providing information on educational and career information
- o. Understanding human relations between the teacher and the student
- p. Understanding college policy
- q. Recognizing and dealing with handicapped students
- r. Evaluating students according to performance levels
- s. Determining levels of learning

4. Since 61.2 percent of the part-time occupational-technical faculty in the Virginia Community College System indicated a favorable response toward staff development and since 94.9 percent said they would participate if the right conditions were met, it is recommended that a staff development program be developed and offered to these individuals at a convenient time and that they be paid the teaching rate for participating in the program.

5. It is further recommended that a study be conducted to find out what specific kinds of staff development programs would best fit the perceived needs of these individuals and how such a program could be best implemented.

Discussion

The findings of this study, although probably predictable in many cases, are important because some of our ideas about the staff development needs of part-time faculty have been verified. The inverse relationship between the level of education of the part-time faculty member and his perceived staff development needs is a case in point. As one's level of education increases, it stands to reason that one would perceive oneself as having fewer in-service needs, and in this writer's opinion, probably in reality would have fewer needs. Not only has the individual possibly had more job and living experiences, but one may have been exposed to more methods of teaching and more educational experiences. The author, although realizing the study brought out no valid signifi-

cant relationships between clock hours of training and the instructors' perceived staff development needs, believes that those individuals with more clock hours of teacher training would perceive themselves as having fewer staff development needs. The author contends this because most individuals who have had some teacher training, whether it be military, educational, industrial, or church oriented, would likely feel more comfortable in front of a group of students and would probably believe they have a better idea of getting this information across to the student because of their teacher training.

This study has reaffirmed what Grymes (1978) and others have said about the great utilization of part-time faculty. The findings also agreed with Gallagher (1977) and others who believed that adjunct faculty would be more than willing to participate in a staff development program. The perceived staff development needs brought out by this study were not unlike those pointed out by Andreyka (1971), Kuhns (1963), Messerschmidt (1974), and Grymes (1979).

Although many of the findings of this study have been expressed by many writers over a long period of time, most educators have chosen to ignore what has been said. It is hoped that this study, along with other related studies by such individuals as Lombardi (1975), and Grymes (1978), will bring more pressure on educators to not only recognize the needs of these individuals but to attempt to meet these needs with an adequate staff development program.

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APPENDIX A

INSTRUMENT

A SURVEY OF PERCEIVED STAFF DEVELOPMENT NEEDS
OF PART-TIME OCCUPATIONAL-TECHNICAL FACULTY
IN THE VIRGINIA COMMUNITY COLLEGE SYSTEM

SECTION I

College _____

(All individual responses to the questionnaire will be treated confidentially and will be revealed in group data only.)

Please circle one code each.

1. What is the highest level of formal education you have completed?

1. Less than high school
2. High school diploma
3. More than high school but less than baccalaureate degree
4. Baccalaureate degree
5. Masters or above

2. How many clock hours of teaching training do you have? (Include teaching training experience gained from industry, military, church, college, university, etc.)

1. 0 - 50 clock hours
2. 51 - 100 clock hours
3. 101 - 150 clock hours
4. 151 - 200 clock hours

3. How many years of teaching experience have you had? (Include this year.)
 1. Less than one
 2. One to five
 3. Six to ten
 4. Eleven to fifteen
 5. Sixteen or more
4. How many years of occupational experience have you had which are related to what you are teaching?
 1. One to five
 2. Six to ten
 3. Eleven to fifteen
 4. Sixteen or more
5. What was your age at your last birthday?
 1. 25 or less
 2. 26 - 35
 3. 36 - 45
 4. 46 - 55
 5. 56 or older
6. Do you feel in-service staff development for part-time faculty is important?
 1. Yes
 2. No
 3. Undecided

7. How would you feel about participating in a staff development program?
1. I would participate if one were offered at a convenient time even if I were not given time off or paid to attend.
 2. I would participate if I were given time off from teaching duties to participate.
 3. I would participate if I were paid the same as for teaching.
 4. I would not participate under any circumstances.

Please rate your own perceived staff development needs by making a circle around the number that best indicates your need. A rating of 1 indicates no improvement is needed because you have expertise, and a rating of 5 indicates a great need because you do not have expertise in this area.

SECTION II

Indicator - Need to Improve

1 = None

2 = Low

3 = Moderate

4 = Strong

5 = Very Strong

	None	Low	Moderate	Strong	Very Strong
1. Writing learning objectives	1	2	3	4	5
2. Writing test items which match learning objectives	1	2	3	4	5
3. Developing course outlines	1	2	3	4	5
4. Determining instructional needs of student	1	2	3	4	5
5. Writing lesson plan	1	2	3	4	5
6. Planning a unit of instruction	1	2	3	4	5
7. Developing teacher made instructional materials	1	2	3	4	5
8. Introducing the lesson	1	2	3	4	5
9. Lecturing techniques	1	2	3	4	5
10. Giving instruction for individuals	1	2	3	4	5
11. Giving instruction for group	1	2	3	4	5
12. Devising varying techniques to motivate students	1	2	3	4	5

	None	Low	Moderate	Strong	Very Strong
13. Setting up a laboratory experiment	1	2	3	4	5
14. Carrying out a laboratory experiment	1	2	3	4	5
15. Helping students in planning and carrying out projects	1	2	3	4	5
16. Presenting a manipulative skill	1	2	3	4	5
17. Using an oral questioning session	1	2	3	4	5
18. Making use of illustrations in a lesson	1	2	3	4	5
19. Identifying individual differences	1	2	3	4	5
20. Making use of blackboard	1	2	3	4	5
21. Making use of audio-visual aids	1	2	3	4	5
22. Teaching job seeking skills	1	2	3	4	5
23. Understanding community college philosophy	1	2	3	4	5
24. Establishing grading procedure	1	2	3	4	5
25. Providing information on educational and career opportunities	1	2	3	4	5
26. Determining the effectiveness of various techniques of instruction	1	2	3	4	5
27. Assigning effective work outside the classroom	1	2	3	4	5
28. Understanding human relations between teacher and student	1	2	3	4	5
29. Understanding college policy and procedures for course withdrawal, incomplete grade, etc.	1	2	3	4	5

	None	Low	Moderate	Strong	Very Strong
30. Understanding of the subject matter	1	2	3	4	5
31. Awareness of safety needs	1	2	3	4	5
32. Recognizing and dealing with handicapped students	1	2	3	4	5
33. Evaluating students according to performance levels (grading)	1	2	3	4	5
34. Understanding work of the counseling center	1	2	3	4	5
35. Understanding your own personal and social values	1	2	3	4	5
36. Determining satisfactory levels of learning	1	2	3	4	5
37. Please list on the back of this sheet any other staff development needs which you have.	1	2	3	4	5

Thank you for your time and effort. Please place the inventory in the self-addressed envelope and return as soon as possible.

APPENDIX B
QUESTIONNAIRE COVER LETTERS

April, 1980

Dear Colleague:

As a member of the Virginia Community College occupational-technical staff, I am inviting you to participate in a study concerning the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System.

The goal of this research is to ascertain as accurately as possible the perceived staff development needs of part-time occupational-technical faculty and compare these needs to selected independent variables. Hopefully, this research will lead to the establishment of an efficient staff development program for part-time staff in the Virginia Community College System.

The research study has been approved by the Council of Presidents of the Virginia Community College System and by the Division of Research and Planning of the Department of Community Colleges.

As a colleague of yours, I am well aware of the value of your time, and this survey instrument has been carefully constructed to require as little of your time as possible to complete. It is anticipated it will take about fifteen minutes to complete the questionnaire.

I would appreciate very much your cooperation in this research. Please complete the questionnaire and return it in the enclosed envelope to me within two weeks.

Thank you for your assistance.

Sincerely,

Grady C. Tuck

April, 1980

Dear Colleague:

Approximately two weeks ago I mailed you a questionnaire concerning a research study I am conducting on the perceived staff development needs of part-time occupational-technical faculty in the Virginia Community College System. As of this date, I have not received a completed copy of the questionnaire from you.

You will find enclosed another copy of the questionnaire which was sent to you earlier. I would sincerely appreciate your taking the time to complete and return this questionnaire in the enclosed envelope. Your response is vitally needed for the successful completion of this study.

Thank you for your prompt attention.

Sincerely,

Grady C. Tuck

Enclosures

APPENDIX C
REVIEW PANEL

Review Panel

, Part-Time Secretarial Science Instructor, Danville Community College, Danville, Virginia

, Director of Continuing Education, Danville Community College, Danville, Virginia

, Provost, J. Sargeant Reynolds Community College, Richmond, Virginia

, Part-Time Accounting Instructor, New River Community College, Dublin, Virginia

, Dean of Instruction, Danville Community College, Danville, Virginia

, Director of Continuing Education, Patrick Henry Community College, Martinsville, Virginia

Part-Time Business Instructor, Southside Community College, Keysville, Virginia

, Part-Time Law Enforcement Instructor, New River Community College, Dublin, Virginia

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THE PERCEIVED STAFF DEVELOPMENT NEEDS OF PART-TIME
OCCUPATIONAL-TECHNICAL INSTRUCTORS IN THE VIRGINIA
COMMUNITY COLLEGE SYSTEM

by

Grady C. Tuck

(ABSTRACT)

The purpose of this study was to ascertain the perceived staff development needs of part-time occupational-technical instructors in the Virginia Community College System and to determine if there was a relationship between these needs and selected independent variables. Also considered were the instructors' attitude toward staff development and under what conditions they would participate in an in-service program. The 308 part-time occupational-technical faculty members who made up the sample were surveyed. A total of 196 or 63.6 percent of the 308 questionnaires used in the survey were returned and coded for use in resolving the four research questions. Absolute frequencies, percentage frequencies, and chi square tests of significance were used.

Using the responses on the 196 returned questionnaires, the following conclusions were rendered concerning part-time occupational-technical teachers in the Virginia Community College System.

1. That a typical part-time occupational-technical teacher will:

- a. Hold at least a Baccalaureate Degree

- b. Have more than 200 clock hours of teacher training
- c. Have from one to ten years experience
- d. Have more than ten years of occupational experience in the field in which they are teaching

- e. Be between 26 and 45 years of age

2. There is a need for in-service training for these teachers and that their needs are found in certain areas.

3. There is an inverse relationship between the educational level and certain perceived staff development needs, and that as their education level increases, their staff development needs in the given areas decrease.

4. Staff development is important to these teachers.

5. If a staff development program were offered at a convenient time and if the teachers were paid the same amount as they would receive for teaching, the majority of the teachers would participate in the staff development program.

Recommendations rendered concerning staff development for part-time occupational-technical faculty in the Virginia Community College System were as follows:

1. The characteristics of these teachers discovered by this research should be considered when establishing a staff development program for these individuals.

2. When a staff development program is set up the in-service training should be organized so as to give training in the areas in

which the instructors indicated having need.

3. Any in-service program should be developed with the idea in mind that as the level of education increases, the level of need decreases in certain areas.

4. A staff development program should be developed and offered to these teachers at a convenient time and that they be paid the teaching rate for the hours they participate in the program.

5. A study should be conducted to find out what specific kinds of staff development programs would best fit the needs of these individuals.