PERCEPTIONS OF INSERVICE STRATEGIES BY VOCATIONAL TEACHERS AND ADMINISTRATORS IN SELECTED PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

by

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CHAPTER I

PERCEPTIONS OF INSERVICE STRATEGIES BY VOCATIONAL TEACHERS AND ADMINISTRATORS IN SELECTED PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

Introduction

The rate of technological change and expansion makes continual updating of vocational teachers' skills and knowledge a necessity. Because vocational teachers are charged with the task of preparing students for the world of work, their level of updating is critical if they are to provide their students with a relevant and effective instructional program. Anderson (1980) stated the emphasis of inservice education for vocational teachers in the mid 1930's shifted to include updating in the skills area. State and Federal Administrators began to recognize that teachers were becoming out-dated in their occupational fields. The need for inservice programs which would place teachers back into an industrial setting for refresher courses became evident. The United States (U. S.) Office of Education reported this need in the 1934 Vocational Education Bulletin No. 172 (American Vocational Association 1934).
Shop teachers who have been away from industry for several years need very much to review their first hand knowledge of shop work. It seems probable that some form of summer session activity by the teachers should be pursued at intervals no greater than three years. (p. 19)

In order to provide high quality vocational education programs for today's rapidly changing technology, it is imperative that secondary and post-secondary vocational teachers remain up-to-date in the knowledge and skills of their occupational fields (Hamilton & Wonacott, 1984). Therefore, it is inevitable that staff improvement should start at the initial appointment and continue throughout one's working career.

According to Johnson (1980), there will be a new focus on excellence, and many educators view the area of staff development as one of the vital areas of concern to provide the avenue for improvement in our schools. Teachers are constantly confronted with new ideas, concepts, and skills that require them to develop or enhance their professional growth and development. Vocational teachers must stay up-to-date in their occupational specialty and refine their teaching skills. It is generally believed that teachers are provided with courses that are impractical and insignificant (Stein, 1985). This belief holds for much of the inservice training for vocational teachers, administrators, and teacher educators.
Many vocational teachers should be able to update their skills by approaches such as: work experience, internships, university and college classes, workshops, conferences, seminars, industry observations, and part-time employment. In deciding upon the appropriate update experience, teachers and administrators must consider the effectiveness and cost of the program and its relevancy to the skills that need updating.

Ohanneson (1981) stated that in any given year there are several occupational instructors in any public school setting who can benefit from participation in an updated/upgraded experience. In every existing occupation the technical language, equipment, and techniques are continually changing and evolving, while new occupational specialties are constantly emerging (e.g., solar technology from air conditioning; word processing from secretarial science). Therefore, there appears to be need for local education agencies to have an incentive process for generating business/industry updated/upgraded activities for selected vocational instructors.

The task of keeping vocational and technical teachers abreast of the technology of their occupational fields is becoming increasingly more important and, at the same time, more difficult. Rapidly expanding technologies and the application of new technology within existing occupations have created a need that many vocational and technical
teachers are not equipped to handle. Those experienced teachers, who have acquired their technology-related skills during earlier stages of technological development, are finding that many of their skills are outmoded. However, many of the newly hired vocational and technical teachers who have more recent experience with technology-related skills, are generally more adept with current, technological changes.

Because of the surge in technological advancement and the expandability of occupational choices, it becomes paramount for vocational teachers to become better prepared by updating through their own professional development programs.

Statement of the Problem

The current updating of teachers' technical knowledge and skills has traditionally been a major concern in vocational education. Teachers are confronted with the need for technical updating from the moment they enter the teaching profession. A variety of inservice training programs is available for such updating (Hamilton & Wonacott, 1984). Historically, these have been seen as an ineffective, haphazard, and incidental component of teacher education (Edelfelt & Lawrence, 1975; Meade, 1971). Many local school officials have not developed adequate
mechanisms and strategies for staying in touch with what is actually going on in the classroom (Stein, 1985).

Improvement and innovation increase when instructional staff members, including classroom teachers, are given opportunities for professional renewal. Administrators should create a climate in the schools that encourages teachers to seek business, labor, and community advice for additional updating techniques. It is important to document the types of training that teachers use and to determine their perceptions of the value of such training. With this information, inservice training programs can be reviewed and improved to better update teachers' skills in a more efficient and effective way.

Purposes of Study

The primary purposes of the study were: (a) to identify current inservice strategies for technical updating in which vocational teachers in the Metropolitan District of Columbia are participating, (b) to identify teachers' perceptions of the effectiveness of these strategies, and (c) to identify their level of participation.

A secondary purpose was to examine the relationship between the number of years since teachers received their last certification and number of times they participated in inservice training since that certification period.
Additionally, administrators and service area directors' perceptions of the importance of vocational inservice training for teachers were documented and the relationship between teachers' and administrators' perceptions were also investigated. In order to accomplish these tasks, and to fully define the sample used, the following questions were pursued.

1. **Demographic variables.** What are the demographic characteristics of the sample?
   
   a. age
   b. sex
   c. years of teaching experience in vocational area
   d. number of years of full-time teaching experience
   e. number of years of non teaching experience in service area
   f. highest educational level
   g. service area preparation
   h. present teaching assignment
   i. date of last teaching certification
   j. overall extent of participation in inservice training

2. **Reasons for pursuing training.** What are the teachers' reasons for pursuing inservice training?

   a. credit reasons (i.e., pursuing inservice credit only, pursuing training for university credit, pursuing inservice training credit toward a degree, and pursuing inservice training toward certification)
b. personal/professional reasons (e.g., professional advancement, release time, monetary benefits)

3. Convenience factors and preferred formats. What scheduling formats and modes of delivery do teachers prefer for inservice training?
   a. distance willing to travel to higher education credit courses
   b. time of the year preferred for inservice training
   c. preferred time of day for inservice training
   d. preferred type of activity (group or individual)
   e. preferred format for inservice training
   f. method of having inservice courses delivered

4. What importance do teachers place on various areas of inservice training?

5. How often do teachers participate in each of these areas?

6. For each area, is there a relationship between perceived importance and participation?

Pertaining to Administrators and Service Area Directors

7. What importance do administrators and service area directors place on various areas of inservice training for teachers?

8. What importance do administrators and service area directors place on various reasons for teachers' participation in inservice training?

   A final research question related to the relationship between teachers and administrators (including directors) perceptions.
9. What is the relationship between teachers' and administrators' perceptions of:

(a) the importance of areas of inservice training
(b) the importance of reasons for teachers participation in these areas.

The findings that resulted from these questions are presented in the chapters that follow.

Definition of Terms

1. **Inservice Training** - Inservice education, inservice training, growth, inservice activities, professional training, professional growth, teacher improvement, and staff development are all terms used frequently and often interchangeably when referring to the continuing educational activities of professional school personnel. (Valentine, 1980, p. 93).

2. **Vocational Education** - In its broadest sense vocational education is that part of education which makes an individual more employable in one group of occupations than in another. It may be differentiated from general education, which is of almost equal value regardless of the occupation to be pursued. (Evans & Herr, 1978, p. 3).

3. **Perceived Needs** - Educational knowledge or skill, regarded as desirable or necessary by the individual concerned (Kolendrianos, 1977, p. 7).

4. **Perception** - The comprehension or awareness of people, social relationships, or organizational interactions, processes, and effects, gained through direct or indirect experience (Schuttenberg, 1972, p. 9).

5. **Service Areas of Vocational Education** - The six different areas of vocational education that were investigated in the District of Columbia School System were (1) Business Education, (2) Health Occupation Education, (3), Industrial Arts Education, (4) Marketing and Distributive Education, (5) Trade and Industrial Education, and (6) Vocational Home Economics Education.

6. **Effectiveness** - The extent to which a program achieves its identified goals or produces specified results, (Shiver, 1984, p. 10).
The next question then, is, what would be the limitations from such an exercise?

Limitations

The generalization of findings presented in this research study was subjected to the following limitation:

The population for this study consisted of full-time vocational teachers employed in the District of Columbia Public Schools. There were only six service areas in this study, which were: (a) Business Education, (b) Health Occupation Education, (c) Industrial Arts Education, (d) Marketing and Distributive Education, (e) Trade and Industrial Education, and (f) Vocational Home Economics Education. Therefore, any generalizations from this study outside of the Washington, D. C. School System or to other curricular areas should be made with caution.

Summary

This study did not attempt to look into the many programs of inservice education, but instead looked at only selected strategies or techniques that were utilized by schools in the District of Columbia School System, for keeping vocational teachers technically up-to-date. The literature points out the need for constant assessment of these needs and how little has been done to keep teachers technically up-to-date in their fields. This study was
therefore an attempt to identify variables and opinions that could influence vocational teachers to become more professionally concerned for their future growth. By determining the areas of concerns of vocational teachers, a more efficient inservice program could be developed and implemented.
CHAPTER II

REVIEW OF LITERATURE

Introduction

Inservice education activities for teachers are developed with many purposes in mind. One purpose is to improve programs through the development of new ideas while another purpose is to assist teachers to attain a certain standard of instructional excellence. Meetings which are held for the sole purpose of exchanging information, while frequently helpful, are not regarded as inservice teacher education.

Inservice teacher education activities should be scheduled at the most appropriate times for teachers to participate with consideration given to the time needed to cover properly those activities which are necessary for a quality inservice program. Inservice teacher education programs can be one day, several days, or weeks, in length.

Mazzarella (1980) indicated there are numerous approaches to inservice education programs. The programs range from traditional university courses to school-based workshops to overall school improvement programs. Some programs are condensed into a day or a week of intense activities, while other inservice programs are ongoing, with
activities scheduled throughout the year. Inservice education programs in some schools utilize local personnel; whereas, others hire outside consultants to deliver educational programs. Some inservice education programs orient all teachers toward the same general objective(s); whereas, other programs focus on individualized teacher instructional goals.

The diverse nature of inservice education programs has raised several pertinent questions regarding inservice education program effectiveness. The questions typically include:

- "Which programs are best?"
- "What is the best way to help teachers increase new knowledge and develop attitudes they need and want?"
- "What kind of inservice programs do teachers prefer?"

Zigarmi, Betz, and Jensen (1977) believed answers to the previous questions would be helpful in planning more effective inservice programs. They conducted a statewide study of 1,239 teachers representing all school systems in the state of South Dakota to determine the kinds of inservice approaches most useful. Teachers were asked to react to a listing of 21 different types of inservice activities.

They concluded that:

1. Useful inservice education programs should be planned to respond to the assessed needs of teachers and build on the interests and strengths of the teachers for whom they are designed.
2. There is a need to provide teachers with choices about whether to attend inservice education programs, what to focus on, when to start and who to use as a resource for professional growth.

3. Teachers are more committed to inservice programs if they have been involved in planning and feel that they have some control over their own inservice experiences.

4. Teachers seem to prefer inservice experiences that provide individual consultation with another teacher and on-site workshops or special courses designed in response to locally defined needs. (p. 551)

Professional development through inservice training is very important for today's education. The recentness of teachers' knowledge and skills has traditionally been a major concern in vocational education. Vocational educators today often need to update their technical knowledge and skills to keep pace with the ever increasing demand on technology of the world of work.

The Future Outlook on Vocational Education

The success and outcome of vocational education in the future is going to be largely dependent upon the relevance and quality of the instructional staff. Inservice programs should be developed to help teachers become more competent in their subject discipline. Ryor 1979 alluded to this point in stating:

While the purposes of inservice education are multiple, two primary purposes are most compelling. Besides school program improvement, another major objective is personal professional
Any professional is a constantly developing person. The never-ending challenge of educational growth is one of the significant attributes of professional life. (p. 14)

Anderson (1980), emphasized that inservice education has been on-going for many years. The development of education has been highlighted by the efforts of leaders who have influenced teachers and administrators alike. According to Anderson many leaders including Roger Ascham, Richard Mulcaster, Charles Hoale, John Dury, B. F. Skinner, Charles Prosser, John Dewey, and Maria Montessori advocated professional development and influenced their role in the educational framework.

According to Kolendrianos (1977, p. 10), The Research Division of the National Education Association carried out the majority of the research on inservice education at the national level. The most current studies were completed in the late 1960's, reported in the 1960's and early 1970's, and covered a wide range of topics. In the research summary entitled "Teachers as Students," it was reported by Kolendrianos that between June 1970 and June 1971, 39 percent of the public school instructional staff had attended a summer or part-time university course.

Preparation for Vocational Educators

Milan in his (1972) comparison study of Colorado Trade and Industrial Teachers, found that, "the more teacher
preparation an instructor received, the higher the ratio of success that the instructor experienced" (p. 119). A document by Hamilton and Wonacott (1984) related a strategy for updating secondary and postsecondary vocational technical teachers in their teaching areas. The design of their study was intended for use by vocational educators and others who provide technological update.

Inservice teacher education activities take place in a variety of ways, and under many different circumstances. The Department of Education, Commonwealth of Virginia (1977) stated the following ways that inservice training could be provided:

1. self-study
2. planned observations
3. investigations
4. supervisory visits
5. local conferences and workshops
6. regional conferences and workshops
7. state conferences and conventions
8. state workshop
9. college courses, institutes, seminars, workshops
10. national conferences and conventions (p. 37)

In Virginia, inservice teacher education activities were instituted by individual teachers or groups of teachers in a school or division, by local supervisors and administrators, by State supervisory staff, by teacher-educators, and or by professional organizations. The inservice activities included:

1. Self-study -Through personal contact with teacher newsletters, and recommendations to local supervisory personnel, state supervisors can recommend appropriate study materials to
teachers, including professional literature, instructional materials, and community resources. State supervisors can arrange to utilize educational television. Workshops, credit courses, and seminars conducted by outstanding individuals can be conducted through the television media. Self-instructional modules can be developed by teacher educators working with state supervisors. Such modules are used to introduce a conference topic, to summarize a conference topic, or to assist teachers in gaining new competencies.

2. **Observations** - Each state supervisor should recommend model programs to be visited, demonstrations of value, and visits to business and industry that have the expertise the teacher is seeking.

3. **Investigations** - Each supervisor should direct local personnel to appropriate procedures for making surveys, job studies, analysis of student performance, follow-up studies, and for conducting research and developmental projects.

4. **Supervisory Visits to the Classroom** - Only rarely does a state supervisor visit in the classroom to assist the teacher with classroom planning and management activities. This is the bailiwick of local supervisors. The state supervisor normally spends little time in the classroom and rarely can follow-up a visit, so the value to the teacher in improving instruction is negligible. The state supervisor visits in the classroom primarily to keep in touch with programs and students at the grass roots level—for their own inservice education. The value of this is difficult to assess since students and teachers often react differently from their usual behavior when a state supervisor is in the classroom.

5. **Local Conference and Workshops** - In school divisions having at least ten or more teachers in a vocational area, the state supervisor may assist the locality in planning and executing inservice education activities and by serving as a consultant. State supervisors keep local personnel informed about business and industry training sessions and arrange for them to participate.
6. **Regional Area Conferences and Workshops** - State supervisors accomplish many of their strategies for program and instructional improvement through well-organized and executed regional activities. Through such activities many teachers and school divisions can be reached simultaneously. Programs are developed around priorities in the State Plan for Vocational Education and the program field service plans. State and Federal policies and regulations may be a topic for a regional meeting with teachers and other local personnel.

7. **State Conferences and Conventions** - Centered around staff development and leadership development activities, the state conference is in actuality a teacher education workshop. The program field service supervisory staff is responsible for developing a conference program which attracts teachers, which holds their interest, and gives them what they need to carry back into the classroom.

8. **State Workshops** - The State supervisory staff organizes workshops on a state or regional level usually during the summer, for a variety of important purposes: to introduce teachers to a new program, to get assistance from teachers in developing curriculum guides, to focus attention on an aspect of the service program that statewide is in difficulty, or to bring about a change in the direction of a program.

9. **College Courses, Institutes, Seminars and Workshops** - The State supervisory staff works closely and in harmony with teacher-education institutions in assuring that inservice teacher education needs are met.

10. **State and National Conferences and Conventions of Professional Organization** - The State supervisor encourages teachers to belong to and participate in professional organizations as an important part of a staff development program. State supervisors support teachers who hold State and national offices or are assigned to State and national committees. (p. 40)

Every inservice teacher education program, regardless of length, should have a definite purpose or measurable
objectives, so that teachers know what to expect and will feel that the program is worthwhile when the objectives are met.

The Professional Needs of Inservice Education

Inservice education is one answer to the need for classroom teachers to become more knowledgable in their teaching programs. Recognizing that the teacher needs additional preparation, one solution has been to bring the teacher back to the college campus for special institutes or conference type experiences. A second approach has been to bring inservice programs to teachers and their classrooms.

Noda (1952) has described some additional "blocks" to the implementation of "new" curriculum. These blocks resulted from the attitudes of the teacher and the nature of the teacher relationship with the administrators and with other teachers. To what extent do teachers' attitudes reflect the effectiveness of an inservice program? If their relationship with administrators is a significant factor, then can change be expected in teachers who do not have the support of their administration in using the new program in their classroom? Will those teachers show a difference in their change of attitude when compared to those who do have this type of administrative support or commitment? Butts (1967) concluded that inservice education programs for teachers do contribute to change in the teacher's competence
in science and attitude for the curriculum innovation. The significant relationship between the change in the teacher's perception of the principal's attitude toward the new curriculum and the commitment of the school district would seem to indicate that a teacher takes more from an inservice program when he/she is aware of the appropriateness and approval of the administration for his/her classroom.

Goetsch (1978) conducted a study to determine what is being done nationally in terms of inservice education for part-time vocational faculty and the most pressing inservice needs of part-time vocational faculty at Okaloosa Walton Junior College. As a result of the study, there emerged an inservice education program for part-time faculty at the college that could serve as a model for other institutions.

It was further stated by Hamilton and McElroy (1983) that nearly one-half of all post secondary instructors are considered to be in need of update and 30% of secondary vocational teachers are in need of technological update. One of Kentucky's approaches to keeping vocational teachers up-to-date is the Business/Industry Exchange Program—which Kentucky calls the Kentucky Vocational Staff Industry Exchange Program. This is a state-operated and funded program for all vocational teachers and administrators in Kentucky. The program is designed to enable vocational teachers and administrators to gain short-term, up-to-date work experience. The review of the literature stated that
technological updating focuses on the implementation of individual approaches and tactics for linking vocational/technical teachers with sources of up-to-date expertise in their own occupational fields. The tactics are individually sound but do not attain the desired result (i.e., vocational/technical teachers who remain abreast of the technologies of their field), because the individual tactics, of themselves, fail to provide the range of opportunities necessary to meet diverse situational needs of all teachers. Such tactics also fail to provide the incentives, motivation, coordination, and resources necessary to obtain and sustain the necessary high level of participation by teachers.

A project was undertaken by the Georgia State Department of Education, Atlanta Department of Vocational and Career Development (1983) to assess the needs for skills and knowledge among Georgia's high technology teachers and to develop a model for meeting those needs. During the project, 52 teachers involved in teaching electronics, electromechanical, and mechanical courses at six pilot high technology schools were assessed. Included among the processes used to gather information on the teachers' deficiencies in high tech subject areas were a review of existing program information, a review of state-of-the-art programs, a review of literature, a consultation with industry, and a series of meetings with the 52 teachers.
themselves. While these data sources indicated that Georgia's technical school teachers involved in high technology programs are educationally well-qualified for their jobs, a considerable need exists to provide teachers with experiences and support services to maintain their level of expertise and to stay up-to-date in their field. It was further recommended that the Georgia State Department of Education conduct routine skills assessments and staff development activities for high technology teachers and that the state adopt a student-to-teacher ratio formula and class schedule that will permit at least one high technology teacher per quarter per department to be free for research, study, and/or update activities.

Research In Inservice Education

Brown (1968) concluded that inservice education is vital to the continuing growth of every teacher. Teacher educators, administrators, and supervisors are aware of the need to provide inservice teacher education. Stiles (1960) recommended that every professional member of a school system should participate in a continuing program of inservice education. Hass (1957) considered inservice education in subject matter specialities as necessary for teachers to maintain and improve their present subject matter competence. He also recognized the need for teachers to continue to improve their proficiency as educators by
acquiring a better understanding of how learning occurs and, thereby, improving in teaching competence. Hass concluded that inservice education was necessary for the maintenance of subject matter mastery and for the acquisition of new knowledge about human development, learning processes, and professional education. Hamilton, and others (1983), examined the extent and nature of the problem of keeping secondary and post-secondary vocational and technical teachers in the United States up to date in the technology of their fields. During the study, 18 knowledgeable individuals were identified in 18 states to prepare papers on the need for and the problems of technological update of secondary and postsecondary vocational and technical teachers. Analysis of these papers indicated that large numbers of vocational and technical teachers at both the secondary and postsecondary levels are considered to have substantial or critical need for updating their knowledge of the technology of their field. Furthermore, this need exists for all occupational services areas examined. Despite the fact that a variety of approaches to technological update are being used, lack of resources in terms of money, time, and links with external organizations are seen as major barriers to the successful technological update of teachers. Among those approaches considered to have the greatest potential for successfully updating programs were workshops, conferences, and seminars as well
as collaborative activities and programs among schools, business, and industry for teacher occupational experiences and curriculum content revision. As a part of an effort to address the problem of the technological update of vocational and technical teachers, Hamilton, and McElroy, (1984) from the National Center for Research in Vocational Education conducted a status study. The status study was to determine the nature and extent of the problem with respect to institutional level and occupational area. A second aspect of the study dealt with currently used approaches to the technological update of teachers. This phase of the study resulted in descriptions of the following nine promising approaches to the task of providing teachers technological update:

1. work experience internship
2. university and college course work
3. workshops, conferences, and seminars
4. industry observation
5. education and industry staff exchange
6. part-time employment
7. local programs
8. nonlocal programs
9. industry training and update programs (p. 4)

Workshops, conferences and seminars were the most widely used approaches to teacher update. This was true for both secondary and postsecondary instructors, with all but one of the 18 consultants providing data in the study citing these approaches. Another approach that was identified as having a high potential for success was that of organizing collaborative activities and programs among schools,
business, and industry for teacher occupational experiences and curriculum content revision. Singled out as a particularly noteworthy example of this type of program was The Kentucky Vocational Staff and Industry Exchange Program.

According to The North Carolina State Department of Public Instruction (1975), a research study was done to study specific objectives to: (a) determine the various methods and techniques currently being used to provide occupational updating by a review of research studies and literature; (b) sample the opinions of administrators and vocational education teachers as to the frequency of participation in, effectiveness of, and preferences for each of these methods and techniques; (c) identify the methods and techniques that should be used, based on these opinions; and (d) develop a model for facilitating occupational updating. Stratified random samples of vocational education teachers, school administrators, and chief state administrators of vocational-technical education were surveyed by mailed questionnaires. It was concluded that teachers and administrators rated both independent study activities and activities that bring the teacher in contact with industry as the most effective methods of providing inservice updating in vocational education.

Lasell, and others (1973) developed a model to provide states with one means of evaluating personnel development programs and projects. This study was designed to
supplement other state evaluation efforts by presenting guidelines and materials for use by state coordinators and evaluation teams in evaluating state inservice personnel development in vocational-technical education. The model and procedures described in the research project may be modified by individual states to better suit their programs.

According to Nichols (1971), nineteen participants, along with special consultants, took part in an institute designed to examine and categorize the information services needed by vocational educators in order to use research and other technical information, in planning, implementing, and evaluating vocational education programs. A second objective of the institute was the assessment of the major activities or planned information systems or services relevant to vocational education. Presentations heard at the institute included: (a) ERIC: An Information System, by Roy Butler, (b) Research Coordinating Units as an Information System, by Clayton Omvig, (c) An Innovative Program: The Minneapolis Work Opportunity Center, by Michael Joseph, (d) Occupational Training Information System, by Paul Braden, and (e) A New Approach to Vocational Teacher Education, by Carl Gorman. Such techniques as total group lectures, large and small group discussion, small group work sessions, and individual conferences with the resource consultants were used to enhance the skills and knowledge of the participants and to achieve the objective
of the institute in providing better inservice models for vocational education.

Halasz (1984) conducted a study to help the staff of the National Academy for Vocational Education at the National Center for Research in Vocational Education. This study was to determine what methods of electronic communications technology would be feasible for providing inservice training for vocational educators throughout the country. It was determined that the use of such technologies would be helpful in order to serve more clients in more locations at lower costs, especially in a time of rising travel costs and decreasing educational budgets. Using the Attitudes Toward Women Scale (AWS), a comparative study of college student attitudes concerning sex role stereotyping and sex bias was undertaken by Moore, (1979) to evaluate the effectiveness of a project consisting of inservice training for college faculty and staff. Utilization of results included availability of nonsexist materials to college faculty, staff, and students as well as community facilities. It was recommended that a comprehensive inservice training program be set up for postsecondary level vocational education personnel, and that a model training program for child development students be tested in community colleges.

Daugherty, and others (1979) conducted a vocational education inservice training needs assessment survey among
secondary school principals, teachers, superintendents, coordinators, and teacher aides throughout the state of Alaska. Individuals were asked to rate their own needs for inservice training in various areas of vocational education, the methods of inservice training which they preferred, and their ratings of the importance of several characteristics of inservice training. Not all inservice education programs were beneficial. There was a study conducted by Zakraysek, and others (1983) in Idaho, Oregon, and Washington to determine the extent of their participation in professional activities for inservice training. The data show that the teachers lacked professional commitment to such activities as conferences, conventions, workshops, clinics, inservice meetings, and professional reading.

In the *Educational Leadership* (Dec 84/Jan 85) article *What Makes A Difference In Inservice Teacher Education, A Meta—Analysis of Research* was conducted. A meta-analysis of 91 well documented studies showed that:

- Inservice training that includes both elementary and secondary teachers is often more effective than inservice for either group separately.

- Inservices are most successful when participants are given special recognition for their involvement, are selected on a competitive basis, or are designated to participate.

- Regardless of who conducts inservice sessions (trainers come under many different job classifications), teachers are more likely to benefit
when they learn on their own. Similarly, of all the different types of training structures, independent study is the most effective.

- There is no magical combination of methods for successful inservice. Nevertheless, inservice programs that use observation, micro teaching, audio and visual feedback, and practice—either individually or in some combination—are more effective than programs that do not use these methods.

- There is no evidence that "coaching" greatly enhances instructional effectiveness. As best, it is moderately effective.

- Inservice is less successful when participants are regarded as major contributors. Programs are more effective when the leader assumes the role of "giver of information" and the participants are "receivers of information." (p. 48)

Research according to Evans and Terry (1971), should be initiated to determine the staffing of personnel and teachers for all levels of vocational education, including collection of information on preparation, certification, and upgrading. Studies should be undertaken regionally to determine the composition of the pool of qualified personnel who represent potential entrants to the teaching profession. If possible, the social and economic factors which influence the occupational decisions of present as well as potential teachers should be determined to permit policymakers to alter the relevant variables to attract and retain teachers.

What Demography Characteristics Are Necessary: Related To The Needs of Inservice Education

Evans and Terry (1971) expressed variables related to differences in needs which are almost innumerable: age at
entry into teaching; breadth and extent of occupational experience; kind and amount of general education background; level of competence achieved during inservice education; sex; nature of teaching responsibilities; family responsibilities; etc. Each teacher, supervisor or administrator needs to: analyze his or her own needs; establish professional goals; and design an inservice program by selecting those activities which are personally most appropriate. Similarly, Kolendrianos (1977) stated variables that appeared to affect teachers' opinions as to the effectiveness of inservice education were school district size, instructional level, teaching experience and educational attainment. Tuck (1981) further mentioned data related to demographic characteristics and staff development needs as important variables for inservice education. These variables were: teaching experience, related work experience, age, occupational background, and academic preparation. Brantner (1970) concluded that years of teaching experience, age, professional preparation, and school size all appeared to influence instructors' opinions on inservice education activities. Subject matter area, grade level, teacher preparation and years of teaching experience all appeared to have a definite effect on the demographic characteristics of inservice education. These aspects were examined in this study, and the results presented in chapter four.
Santos and Olinzock (1977) developed a work experience component for vocational educators based on demonstrated competence. The basis of their research was concerning vocational education; sociometric conditions and needs; analyses of the past, present, and future of vocational education; and the current state of the art relative to curriculum systems. This competency-based model utilizes the research effort of Groneman, including the ten purposes of occupational experience and thirty-two teaching competencies developed through occupational experience. These purposes and competencies were correlated with a list of the ten major factors in the role of the vocational teacher as taken from performance-based teacher education materials developed at the Ohio State University by the National Center for Research in Vocational Education. In addition, Santos and Olinzock, (1980) developed a comprehensive work experience model based on demonstrated competence in a business or office occupational areas for training or retraining vocational education teachers in Ohio. This model was developed to meet occupational certification requirements within pre-service and inservice professional courses. The model provides for three alternative program strands, each available on the undergraduate, graduate, and inservice levels. The three
strands were categorized by no occupational experience, minimal occupational experience, and occupational experience of one year or more. Santos and Olinzock further stated that this model may be incorporated into existing independent study courses or by use of a three-course format: Introduction to Work Education, Business Seminar—Work Observation, and Business Internship—on-The-Job Training.

The Minnesota Research Coordinating unit (1968) brought together vocational teacher educators, research and development personnel, state department vocational staff members, and vocational school directors from Iowa, North Dakota, South Dakota, and Wisconsin, to consider potential directions for change in teacher preparation. The objectives were: (a) to stimulate participants to evaluate existing systems for preparing instructional personnel in vocational-technical education, and to plan for new improved programs, (b) to provide participants with information and opinions on goals and competencies for today and tomorrow, teacher education models, legislation, problems and issues, and proposed systems and (c) to explore the desirability and feasibility of further cooperative activities in the region. Complete presentation papers and a rationale for selection of the presenters are included in the document. Nine individual presentations are included, and ideas evolving from the resulting group discussions are outlined according
to needed changes, problems in meeting future needs, areas of agreement on need for change, current projects and ideas. Like many programs, Ryan (1968) instituted a 4-week program at Oregon State University to prepare vocational educators in leadership positions for a change agent role in vocational education curriculum. A broad-based approach to the curriculum process was used, implementing an organic curriculum concept and behavioral definition of objectives in a systems approach to curriculum development. Major objectives were to (a) develop greater understanding of curriculum theory and design, (b) increase familiarity with innovative programs and practices, and (c) develop proficiency in using techniques and strategies of a decision model of curriculum development. An enrollment of 30 participants was selected from 130 applications. From this study a task force project developed a guide to vocational education curriculum development.

Need for Inservice Training Evaluation

Finch and Crunkilton (1979) emphasized that in recent years, educators have placed greater and greater emphasis on the area of materials evaluation. Whether this emphasis has evolved from administrative pressure, public displeasure, a shrinking funding base, or professional concern is dependent upon the particular educational environment. However, the fact remains that educators are increasingly aware of the
need to gather information about the worth of materials they use. Two most useful resources were completed by Worthen and Sanders (1973), and Wentling and Lawson (1975). The Worthen and Sanders book deals with evaluation from a more general frame of reference and provides information about the various models one might apply to an evaluation effort. While the Wentling and Lawson book focuses directly on evaluation as it relates to vocational and technical education and details the ways that occupational education programs may be systematically evaluated.

The professional literature (Worthen & Sanders, 1973; Wentling & Lawson, 1975; Steele, 1973; Edelfelt & Lawrence, 1975) contains many discussions of the need for evaluating inservice education. Both Shiver (1984), and Steele (1973) described the evaluation of inservice education in the following manner:

In many ways inservice programs are like a mountain. They are complex with many planes and facets. These planes and facets can be examined in a variety of ways. People have varying needs and types of information exists that are useful to those purposes. Therefore, just as there are many ways in which a mountain can be described, analyzed, and evaluated, so are there many ways that programs can be examined and evaluated. The approach one takes depends on your particular needs. (p. 4)

Instructor Perception

Eason (1978) developed guides to assist vocational-technical institutions in conducting a systemized approach
to local evaluation. The instructor perceptions guide presents a suggested methodology for conducting a needs assessment with institutional instructors. The matrix included in the guide depicts the factors and indicators assessed by the instructor and also includes the derivation of the sample instruments used in the assessment process. The guides are a part of an assessment model developed by project LEAP (Local Educational Assessment Program) and are designed to assist the local institution in organizing and delivering an evaluation program that produces institutional, program, and individual improvement in the educational process.

Incentives Used for Motivating Professional Growth

A study of participation in the Louisiana Educational Employees Professional Improvement Program (PIPS) was conducted by two parish (county) school systems. Broussard, (1982) indicated that the program was very attractive and that a wide variety of university courses, workshops, conferences, and conventions were attended under the program. PIPS provided monetary incentives to educators who improve their skills or abilities while following a personally prepared 5-year plan of professional development involving both academic and inservice projects. A publication developed by Cory (1969) was designed to study problems of inservice teacher education and to assemble data
on promising practices that might stimulate schools to
develop vigorous programs of professional growth. From this
study there were 60 practice principles found to be effec-
tive and 60 incentives listed by teachers as the most
promising in their school system. Also there were topics
that included: elements of a good inservice program; major
problems faced by principals in initiating programs;
important characteristics of teacher orientation and
induction programs; school-community relations incentives;
specific salary incentives; and advantages to inservice
education of an extended school year. There is no better
measure of the success of an incentive for in-service growth
of teachers than the impact of the practice or experience
upon the members of the faculty. No one is better qualified
to judge the value of the experience in motivating teacher
growth than the ones in whom the growth occurred, i.e., the
teachers themselves. The key to a successful program of
inservice training is participation by the school staff.
Participation motivates teachers to grow.

Trends in Professional Development

Adams (1976) concluded that inservice education efforts
must be planned in such a way that participants add to their
theory and research base. Educators will improve their
ability to plan, make decisions, communicate, evaluate and
motivate; and put into practice almost immediately the new concepts and principles they acquire.

An examination of salient features of federal and state legislation for vocational education since 1963 revealed a parallelism among major factors in the technological situation, educational situation, and legislative scene. According to the Vocational Education Act of 1963, vocational educators have witnessed several significant trends in personnel development. Among them were six which appeared to support efforts to produce vocational educators who were able to handle changing conditions in the profession and the resulting changes in roles and responsibilities. These six trends were:

(1) Comprehensive, statewide planning, development, and evaluation.

(2) Across-the-board, general, and comprehensive leadership development.

(3) Utilization of research-theory-practice inservice education strategies.

(4) Utilization of the cooperative concept for preservice and inservice education.

(5) Preparation of regular and special teachers to work with handicapped and disadvantage students in the mainstream.

(6) Utilization of externships in inservice education. (p. 23)
Whose Responsibility is it to Provide Inservice Education?

The review of literature revealed a difference of opinion on the point of who was responsible for inservice education. Some felt the question of responsibility centered on the individual teacher. Finch (1969) stated that:

Not only is the individual teacher the person responsible for his own professional growth, but he also is responsible for taking the initiative in planning the various activities for that growth. (p. 30)

Scarborough (1966) expressed the same conviction in an article which stated, "Let's talk about self-education rather than inservice education" (p. 171). He asked the serious question:

Why do supervisors and teacher educators find themselves pushing inservice education?... if the inservice education programs are for the benefit of teachers, why aren't they doing the pushing? They are adults, intelligent individuals, interested in their profession and its future as well as their own. (p. 171)

The point of the editorial was "... the teacher... must take the initiative for his own future education rather than waiting for someone else to provide him with whatever he needs whenever...it is most convenient for him." Gross (1977) made a similar statement, "Adults need to be architects of their own development, not merely passive
victims... To be adult is to move beyond dependency..." (p. 137). Gardner (1964) felt that it is the individual who must bear the burden of pursuing his own education. Lierheimer (1966) reported that the factors of time and money often kept teachers from receiving the inservice training they desired. Lierheimer further stated teachers who have to initiate and seek out educational programs do not do so.

The American Association of School Administrators (1963) felt that, "...financial support of inservice programs must and does often come from different sources; private and public institutions alike are making important contributions to inservice programs..." (p. 122). Annis (1971) advocated the position that there should be a person to provide assistance to the teacher in receiving the maximum benefit from inservice education. He recommended the development of a position within the State Department of Education that he called a Coordinator of Professional Development. The role of this coordinator was defined by Annis as:

The Coordinator of Professional Development would be in a position to know the needs of teachers as well as the competencies of the various teacher education programs. Utilizing the reports of supervisors, teacher educators, teachers, and superintendents he would be aware of the inservice needs of all and could coordinate inservice programs as to subject matter, location, etc., with both teacher education institutions and teachers, thus providing a better program for more teachers. (p. 264)
Evans and Terry (1971) concluded that the basic needs for inservice education are similar for all vocational educators. The relative importance of each will be dependent upon the occupational structure of the education program, and the type of position held. Guidance counselors may need more inservice study in the interpretation of testing than classroom teachers; directors of instruction will need more work in the theory of curriculum development than those who supervise skill development in a shop; and supervisors may need more work in social dynamics than some classroom teachers. Home economics teachers who are teaching homemaking will renew contacts with the occupation through a variety of informal contacts with homes and families, and technical teachers may need to renew skills by working for a period of time in an industry. Local schools, professional organizations, state educational agencies, associations and organizations of workers, businesses, or agencies employing vocational education students, and institutions of higher education all have a responsibility for inservice education.

There was no specific answer to the question, whose responsibility is it to provide inservice education? The state department of education, universities, administrators, and teachers all indicated a need for inservice education and felt that they all had some responsibility for providing it.
Thus, it became imperative that in order to find what the state of affairs was for the District of Columbia Public School vocational training program, the questions referred to earlier were put forward to the teachers, administrators and directors of the program. In order to present a systematic discussion of their views, a methodological approach was in order. Hence, the chapter that follows became useful.
Chapter III

METHOD

This study was carried out to identify perceptions about inservice for vocational teachers, and to determine the importance of various inservice areas as perceived by vocational teachers, administrators, and directors of each service area in selected public schools of the District of Columbia.

The Population and Sample

The study was conducted in the District of Columbia School System during the 1987-1988 academic school year. The population of the study included three distinct groups: (a) full time secondary vocational teachers, (b) full time secondary vocational administrators, and (c) directors of each of the six service areas. To assure that the entire discipline of vocational education was represented in the District of Columbia curriculum, the vocational educators and administrators were stratified into six major areas as utilized by the school system. These content areas were: (a) Business Education, (b) Health Occupations Education, (c) Industrial Arts Education, (d) Marketing and
Distributive Education, (e) Trade and Industrial Education, and (f) Vocational Home Economics Education. The population included 247 full time secondary vocational teachers, 46 administrators, and six directors of the service areas. The entire population in each of these three groups was surveyed.

To ascertain the most current listing of secondary vocational teachers and administrators, the subjects were identified through the Division of Vocational and Career Education Directors Office of the District of Columbia Public Schools (See Appendices A and B).

Procedures

The questionnaire method was the data collection device utilized in this research. A questionnaire was developed for vocational teachers. Two sections of this questionnaire were modified for use with administrators and directors of vocational education to meet the stated purposes of the study (see Appendix C, D, and E for the three instruments). The format for the questionnaires consisted of predominantly Likert-scale items.

The questionnaires were pilot tested using small groups of vocational educational teachers, administrators and directors. Suggestions and comments were used to evaluate each question for clarity, readability and appropriateness. Once the suggested changes were made, revised versions of
the instruments were used for the actual study. Extreme caution was taken to ensure that none of the teachers, administrators and directors from the pilot study were included in the actual study.

The vocational directors in all six areas of vocational education were contacted by phone and informed about the study and its purposes. A total of 247 questionnaires was mailed to the vocational teachers in the District of Columbia School System. One questionnaire was sent to each of the directors of the six service areas, and 46 questionnaires were sent to vocational administrators. Each packet included a numbered questionnaire, a cover letter, a pencil, and a self-addressed stamped return envelope. The initial response period was two weeks in length. Participants who failed to respond to the first mailing were sent the following items:

1. A revised cover letter
2. A questionnaire
3. A pencil
4. A self-addressed, stamped envelope for returning the completed questionnaire

Instruments and Research Questions

The questionnaire for teachers was created for this study and was organized into two sections. The content of these sections, and the related research questions, are summarized below.
Section I - General Information. The general information section obtained basic demographic data from the respondents. Additional questions in this section addressed reasons for pursuing training and factors related to convenience and preferred inservice formats.

1. Demographic variables. What are the demographic characteristics of the sample?

   a. age
   b. sex
   c. years of teaching experience in vocational area
   d. number of years of full-time teaching experience
   e. number of years of non teaching experience in service area
   f. highest educational level
   g. service area preparation
   h. present teaching assignment
   i. date of last teaching certificate
   j. overall extent of participation in inservice training

2. Reasons for pursuing training. What are teachers' reasons for pursuing inservice training?

   a. credit reasons (i.e., pursuing inservice credit only, pursuing training for university credit, pursuing inservice training credit toward a degree, and pursuing inservice training toward certification)

   b. personal/professional reasons (e.g., professional advancement, release time, monetary benefits)
3. **Convenience factors and preferred formats.** What scheduling formats and modes of delivery do teachers prefer for inservice training?

   a. distance willing to travel to higher education credit courses
   b. time of the year preferred for inservice training
   c. preferred time of day for inservice training
   d. preferred type of activity (group or individual)
   e. preferred format for inservice training
   f. method of having inservice courses delivered

**Section II - Perception.** This section of the questionnaire enabled the respondents to rate 12 inservice areas as to their importance to themselves and the frequency with which they have participated in each area. This was accomplished through a series of likert-type items. These items related to the following questions:

4. What importance do teachers place on various areas of inservice training?

5. How often do teachers participate in each of these areas?

6. For each area, is there a relationship between perceived importance and participation?

The questionnaire for administrators and service area directors was similar to two sections from the teacher's questionnaire (i.e., question 4 under section II and question 2 under section I). Here, respondents were asked
for their perceptions in order to answer the following research questions:

7. What importance do administrators and service area directors place on various areas of inservice training for teachers?

8. What importance do administrators and service area directors place on various reasons for teachers participation in inservice training?

A final research question related to the relationship between teachers and administrators (including directors) perceptions.

9. Is there a relationship between teachers’ and administrators' perceptions of:

(a) the importance of areas of inservice training

(b) the importance of reasons for teacher participation in these areas

Method of Data Analysis

The analytic approach was employed with the aid of a computer. The data were analyzed in this study using frequencies, percents, means, chi-square, crosstabulations, and Pearson correlation as appropriate.

Crosstabulations and chi squares were used for specified variables. These results provided p-values to determine if relationship existed between how important teachers perceived various reasons for pursuing inservice training, and frequency of attendance.

A Pearson correlation was used to test whether or not there was a significant relationship between the number of
years since certification and the number of inservice training activities attended.

The .05 level of significant was used for all chi square tests and correlations.
Chapter IV

RESULTS

This chapter presents the results from the data analyses. The discussion that follows is divided into six categories to address the pertinent questions:

1. demographic characteristics of the teachers
2. teachers' reasons for pursuing inservice training
3. convenience factors and preferred formats
4. the importance of topics in inservice training
5. the frequency teachers participate in inservice training
6. the similarities and differences of the perceptions of teachers and administrators on the importance of inservice training for teachers

As stated in chapter two, special attention was paid to demographic variables as they relate to the teachers who were surveyed. Teachers returned a 68% response rate, administrators returned a 61% response rate, and directors returned a 100% response rate. Overall, a total of 68% response rate of the survey instruments was returned, (see Appendix F, Page 102.)

Demographic Characteristics

Two-thirds of the teachers in this study were female (66%). On the average, the teachers were 45 years old
(S D = 8.4), with slightly more than one-third (35%) in their forties and the remaining two-thirds almost evenly split between under 40 and over 50 (see Appendix G, Tables 1 & 2).

Most of the 169 teachers responding (75%) had masters degrees or above (see Appendix G, Table 3). With respect to previous experience in both teaching and related non-teaching service areas, the averages were 18 years of full-time teaching in any area, 16 years in their vocational specialty, and 6 years of non-teaching experience (see Appendix G, Table 4). Within their vocational area, almost half (45%) have taught for 11 to 20 years and one-third (32%) from 21 to 44 years. In contrast, the majority (60%) had 10 years or less non-teaching experience, while over a quarter (26%) had no related experience. Together their level of education and experience revealed a highly qualified group of teachers in the school system.

Most of the teachers in this sample were currently teaching in their area of specialization (see Appendix G, Table 5). Over (85%) of teachers trained in Business Education, Health Occupation Education, Trade and Industrial Education and Vocational Home Economics were assigned in their respective area, as were over (70%) of those trained in Industrial Arts Education and Marketing and Distributive Education.
There was a significant but low (.20) correlation between number of years since the last certification was issued and the number of inservice training activities attended. On the average, teachers attended 1.2 inservice programs a year. However, only (7%) attended 3 or more inservice training activities per year, while (30%) attended less than one a year (Appendix G, Table 6).

Teachers' Reasons for Pursuing Inservice Training

In order to determine the reasons why teachers pursued inservice training, subjects were asked to rank order four categories. As seen in Table 1, no clear or strong preferences were evident. However, of the four categories, training toward certification appears to be the most preferred reason for pursuing training. It was ranked by 32% of the teachers as their first choice, as well as having the best modal rank of one (first choice).

Training toward a degree and for university credit appear to be tied as the second important reason for pursuing inservice training. Although minor differences in the rankings were evident, the respondents were almost equally divided across the four ranks in these two categories.

Finally, training for inservice credit only was clearly the least preferred reason by teachers to pursue inservice training. This is shown by the fact that
### Table 1

**Teachers' Reasons for Pursuing Inservice Training**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Median Rank</th>
<th>Modal Rank</th>
<th>% Responses In Each Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>Training toward certification</td>
<td>2</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>Training toward degree</td>
<td>2</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Training for university credits</td>
<td>2</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Training for inservice credit only</td>
<td>3</td>
<td>4</td>
<td>18</td>
</tr>
</tbody>
</table>

**Note.**

a

Rank ordered, where 1 = most preferred reason and 4 = least preferred reason.

b

Percentages based on 169 responses, total percent do not add 100 because some categories were left unranked.
one-third (34%) gave this as their least preferred reason and it had the worst median and modal ranks.

In essence, teachers placed the least value on training for inservice credit only as the reason for pursuing the training. They placed the highest value on training toward certification as the most important reason for pursuing the training, followed by training toward a degree and training for university credit respectively.

**Personal/Professional Reasons**

In an effort to determine the importance that teachers and administrators place on reasons for teachers attending inservice training, nine categories were generated (refer to Table 2). An examination of the results on the nine categories is therefore in order.

The three most important reasons given by teachers for pursuing inservice training were: (a) helps me to become more professionally knowledgeable in my service area; (b) provides self growth to improve my teaching; and (c) provides an opportunity for professional advancement. In general, these three reasons were all centered around furthering advancement and/or professional enhancement for teachers. In as much as, for each of these three reasons between 80% and 90% of the teachers said that they were important.
### Table 2

Teachers' and Administrators' Views of the Importance of Reasons Why Teachers Participate in Inservice Activities

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Teachers</th>
<th>Administrators</th>
<th>2</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps me to become more professionally knowledgeable in my service area</td>
<td>88</td>
<td>94</td>
<td>.985</td>
<td>.32</td>
</tr>
<tr>
<td>Provides self growth to improve my teaching</td>
<td>85</td>
<td>88</td>
<td>.152</td>
<td>.70</td>
</tr>
<tr>
<td>Provides an opportunity for professional advancement</td>
<td>81</td>
<td>81</td>
<td>.001</td>
<td>.98</td>
</tr>
<tr>
<td>Provides an avenue for genuine interests</td>
<td>77</td>
<td>94</td>
<td>5.252</td>
<td>.02*</td>
</tr>
<tr>
<td>Provides me an opportunity to have input in what should be taught</td>
<td>74</td>
<td>94</td>
<td>6.483</td>
<td>.01*</td>
</tr>
<tr>
<td>Provides an opportunity for gaining academic credit</td>
<td>67</td>
<td>59</td>
<td>.893</td>
<td>.34</td>
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<tr>
<td>Provides monetary benefits</td>
<td>54</td>
<td>57</td>
<td>.060</td>
<td>.81</td>
</tr>
<tr>
<td>Provides needed representative for the school</td>
<td>48</td>
<td>58</td>
<td>1.069</td>
<td>.30</td>
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<tr>
<td>Provides release time away from the students</td>
<td>30</td>
<td>55</td>
<td>7.208</td>
<td>.01*</td>
</tr>
</tbody>
</table>

Note.

P < .05 on a chi-square test.

a

Percents include respondents who evaluated these reasons as either 3 = important or 4 = very important.
Comparisons between teachers and administrators indicated agreement on the importance of all but three of these reasons. As shown in Table 2, there were significant differences between teachers and administrators on the following: (a) provides teachers an opportunity to have input in what should be taught; (b) provides an avenue for genuine interests on the inservice training in terms of the reasons for teachers' participation; and (c) provides release time away from the students. Where three-fourths of the teachers believed that the first two reasons above were important, almost all (94%) of the administrators believed that they were important.

Also, more than half (50%) of the administrators thought that Time Away from Students was an important reason for teachers going to inservice. In contrast, only 30% of the teachers believed this was important. This was by far the lowest reason for teachers.

Convenience Factors and Types of Inservice Activities and Formats Teachers Prefer

As the title of this section clearly states, the purpose here is to present those suggestions that teachers made vis-a-vis those convenience factors and types of inservice training activities and formats they preferred when the survey was conducted. In order to solicit these attributes
from the teachers, questions were asked under six separate subsections, a discussion of which follows.

**Distance Willing to Travel.** A Majority of the teachers (73%) were willing to travel shorter distances (1-39 miles) to take courses of particular interest to them (Appendix G, Table 7). On the average, vocational teachers said they were willing to travel 42 miles. However, the mode was only 10 miles (18% of the teachers) and the median was 17 miles. Also, 11% said they were unwilling to travel any distances.

**Time of Year.** Of the 169 teachers surveyed, the largest group (34%) in the distribution on the time of the year, preferred inservice training in the Spring. The second choice was split between Summer and Fall (26% in each). The least preferred was Winter (13%) (see Appendix G, Table 8).

**Time of Day.** About one-third preferred afternoons (35%), and another third preferred mornings (31%). The remaining third was about evenly split among evenings, weekend, or no preference (see Appendix G, Table 9).

**Preferred Activity.** When it comes to the types of instructional methods teachers preferred, two-thirds (65%) selected group activity as their first choice. It dominated the second choice—individual activity (33%) by a ratio of 2 to 1 (see Appendix G, Table 10).
Preferred Format. A close look at (Appendix G, Table 11) reveals that an intensive format of 6 hours per day for 1 week was selected by 34% of the teachers as being very important. The intensive format of 3 hours per day for 2 weeks was chosen by 22% of the teachers as being very important and by 41% as important.

Methods of Delivery. As Appendix G, Table-12 reveals, industry training was deemed very important by 52% of the teachers as well as university or college courses 47%, and workshops by 38%. Self-study materials were considered of least preference with only 15% checking very important.

The Importance of Topics in Inservice Training for Teachers

The major purpose of the analysis in this section is two fold: (a) to understand what the perceptions of teachers were on the importance of various topics of inservice training for them, and (b) to see how the perceptions of administrators as a group differed from those of teachers. In order to determine out the perceptions of these various groups on the importance of inservice training to teachers, 12 categories were developed under which their responses were cataloged.

A significant relationship, indicating some differences between teachers' and administrators' perceptions, was evident for only two topics: (a) Discovering Needs of Students, and (b) Instructional and Student records.
Management. However, even here, the general patterns were fairly similar between the two groups.

Table 3 lists the 12 areas of inservice topics in order of overall perceived importance. In general, all were seen as important by over half of the respondents. Discovering Needs of Students was clearly the most important, with 88% of the teachers and 100% of administrators rating it as important. Although even the least important in the list, Fiscal Policies of the Total Institution, was rated as important by 51% of the teachers and 65% of the administrators.

After the most important topic, the next three important areas for teachers were: (a) new developments in your occupational teaching specialty (88%), (b) developing student interest (87%), and (c) preparing effective instructional materials (86%). Administrators were in agreement, with only slightly lower percentages deeming these areas as important. However, the administrators believed the following four topics to be of greater
Table 3

Teachers' and Administrators' Views of the Importance of Topics Covered in Inservice Training

<table>
<thead>
<tr>
<th>Variables by Importance</th>
<th>Total</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovering needs of students</td>
<td>90</td>
<td>88</td>
<td>100*</td>
</tr>
<tr>
<td>New developments in your occupational teaching specialty</td>
<td>88</td>
<td>88</td>
<td>85</td>
</tr>
<tr>
<td>Developing student interest</td>
<td>86</td>
<td>87</td>
<td>82</td>
</tr>
<tr>
<td>Preparing effective instructional materials</td>
<td>86</td>
<td>86</td>
<td>85</td>
</tr>
<tr>
<td>Students evaluation and testing</td>
<td>84</td>
<td>82</td>
<td>94</td>
</tr>
<tr>
<td>Selecting instructional materials</td>
<td>84</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>Methods or techniques to maintain student retention</td>
<td>81</td>
<td>79</td>
<td>91</td>
</tr>
<tr>
<td>Instructional and student records management</td>
<td>80</td>
<td>77</td>
<td>97*</td>
</tr>
<tr>
<td>Developing course outline</td>
<td>77</td>
<td>78</td>
<td>75</td>
</tr>
<tr>
<td>Using audio visual aids</td>
<td>75</td>
<td>76</td>
<td>74</td>
</tr>
<tr>
<td>Recruitment of students</td>
<td>73</td>
<td>72</td>
<td>79</td>
</tr>
<tr>
<td>Fiscal policies of the total institution</td>
<td>53</td>
<td>51</td>
<td>65</td>
</tr>
</tbody>
</table>

Note.

* P < .05 on a chi-square test.

a % includes respondents who evaluated these reasons as either 3 = important or 4 = very important.
importance: (a) instructional and student records management (97%), (b) student evaluating and testing (94%), (c) methods or techniques to maintain student retention (91%), and (d) selecting instructional materials (88%).

Frequency of Participation

Two types of inservice activities most frequently attended by teachers (i.e., often or very frequently) were "preparing effective instructional materials" and "students evaluation and testing."

After the most frequently attended inservice training, over half of the teachers attended the following four types of inservice often or very frequently: new developments in your occupational teaching specialty, developing students interest, discovering needs of students, and instructional and student records management. The remaining six areas were attended infrequently, with over one-quarter (29%) never attending inservice on recruitment of students and fiscal policies of the total institution (refer to Table 4).
Table 4

Teachers' Responses on How Often They Have Participated in Inservice Training

<table>
<thead>
<tr>
<th>Variables</th>
<th>Often Attended</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovering needs of students</td>
<td>11</td>
<td>28</td>
<td>39</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>New developments in your occupational teaching specialty</td>
<td>8</td>
<td>31</td>
<td>35</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Developing student interest</td>
<td>12</td>
<td>30</td>
<td>30</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Preparing effective instructional materials</td>
<td>6</td>
<td>30</td>
<td>31</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Students evaluation and testing</td>
<td>9</td>
<td>27</td>
<td>37</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Selecting instructional materials</td>
<td>10</td>
<td>40</td>
<td>27</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Methods or techniques to maintain student retention</td>
<td>18</td>
<td>35</td>
<td>28</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Instructional and student records management</td>
<td>14</td>
<td>30</td>
<td>30</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Developing course outlines</td>
<td>17</td>
<td>30</td>
<td>31</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Using audio visual aids</td>
<td>7</td>
<td>44</td>
<td>29</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Recruitment of students</td>
<td>29</td>
<td>25</td>
<td>23</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Fiscal policies of the total institution</td>
<td>29</td>
<td>31</td>
<td>21</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Note.

a

% includes respondents who evaluated these reasons as either 1 = never, 2 = slightly, 3 = often or 4 = very frequently.
Relationship Between Perceived Importance and Participation

The following is in answer to research question number six. Is there a relationship between perceived importance and participation?

The major purpose of the analysis in this section is to determine whether or not teachers' perceptions on the twelve topics could be explained by their level of participation on each inservice training activities.

This ranking did not commensurate with how frequently teachers participated in these activities—as it can be seen from Tables 3 and 4. The area that has the highest level of participation was ranked as fifth in terms of importance by teachers and first in terms of importance by administrators. The topical area fiscal policies of the total institution were ranked as the least important by both teachers and administrators and the least participated in.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary and Findings

The purpose here is threefold: (a) to present a summary of the discussions and findings in the preceding chapters; (b) to draw some pertinent conclusions from those discussions and findings; and (c) to suggest some recommendations for future research on the subject, and for policy-making relative to inservice training strategies for teachers in the District of Columbia Public School System.

The primary purposes of the research study were: (a) to identify current inservice strategies for technical updating in which vocational teachers in the Metropolitan District of Columbia were participating; (b) to identify teachers' perceptions of the importance of these strategies; and (c) to identify their level of participation.

A secondary purpose was to examine the relationship between the number of years since teachers received their last certification and the number of times they participated in inservice training since that certification period. Additionally, administrators and service area directors' perceptions of the importance of vocational inservice
training for teachers were documented and the relationship between teachers' and administrators' perceptions analyzed.

In order to accomplish this task, the data analysis was divided into five categories:

1. demographic characteristics of the teachers
2. teachers' reasons for pursuing inservice training
3. convenience factors and types of inservice training activities and formats teachers prefer
4. the importance of topics in inservice training for teachers
5. the similarities and differences of the perceptions of teachers and administrators on the importance of inservice training for teachers

A summary of the findings in examining these categories is presented below:

1. The average age of the teachers surveyed was 45 years old, with a very high (2 to 1) ratio of females. Most of the teachers surveyed are currently teaching in their area of specialization.

2. Seventy-five percent of the teachers had masters degrees, 18 years of full-time teaching with 16 years in their vocational area and six years of non-teaching experience.

3. Teachers placed the highest value on training toward certification as their reason for pursuing the training, followed by training toward a degree and training for university credit respectively.
Training for inservice credit only was the least preferred reason for teachers to pursue inservice training.

4. The majority of the teachers are willing to travel an average of 42 miles. However, 11% were unwilling to travel at all. The Spring and Summer seasons and afternoon hours were suggested as the ideal times to pursue these inservice training activities.

5. There was a significant but low correlation between number of years since the last certification issuance and the number of inservice training activities attended with the teachers participating on the average of 1.2 inservice programs per year.

6. The three most important reasons given by teachers for pursuing inservice training were: (a) helps me to become more professionally knowledgeable in my service area; (b) provides self growth to improve my teaching; and (c) provides an opportunity for professional advancement.

7. There were three significant differences between teachers and administrators on the following: (a) provides teachers an opportunity to have input in what should be taught; (b) provides an avenue for genuine interests on the inservice training in terms of the reasons for teachers' participation;
and (c) provides release time away from the students. Where three-fourths of the teachers believed that the first two reasons above were important, almost all of the administrators believed that these topics were important. More than half of the administrators thought that time away from students was an important reason for teachers going to inservice. In contrast, only one-third of the teachers believed this was important.

8. Two-thirds of the teachers preferred group activities as their first choice when it comes to the instructional method.

9. The most preferred format was 6 hours per day for one week with 3 hours per day for two weeks as the second choice.

10. In terms of method of delivery, 52% indicated industry training was very important with 47% rated university or college courses important and workshops rated third with 38%. Self study materials were considered the least preferred method of delivery.

11. In terms of topics for inservice training, discovering the needs of students was clearly the
most important of area by both teachers and administrators with fiscal policies viewed as least important by both groups.

12. Both teachers and administrators perceived as reasons for participation was to become more professional knowledgeable in the teaching area.

13. Inservice activities frequently attended by teachers were: (a) students evaluation and testing; (b) preparing effective instructional materials; and the least participated in dealt with fiscal policies of the total institution.

Conclusions

By analyzing the findings of this study, the following conclusions are presented.

1. Based on the finding regarding reasons for pursuing inservice activities it is concluded that: teachers most prefer inservice activities that count toward certification and they are not interested in taking inservice activities that don't at least provide university degree or certification credit.

2. The District of Columbia vocational teachers prefer inservice programs that help them become more professionally knowledgeable in their service area.
3. It is concluded that teachers wanted inservice training within a reasonable commuting distance, such as no more than 45 miles.

4. The District of Columbia vocational teachers highly prefer industrial training over other methods of delivery.

5. The District of Columbia vocational teachers prefer topics that deal with new developments in their occupational speciality, discovering and developing needs and interests of students, and preparing more effective instructional materials.

6. Based on the findings that the administrators viewed the two most important topics as discovering needs of students and instructional student records management which is different from what the teachers viewed as important, it is concluded that there is a lack of communication between administrators and teachers as to the important topics of inservice programs.

7. It is concluded that there is a difference of opinion between teachers and administrators perceptions on why teachers participated in inservice activities.
Recommendation

As stated at the beginning of this chapter, the focus in this subsection is recommendations for future research on the topic examined in this study and for policy-making on inservice training. Thus, the discussion that follows is centered on the five survey sections that were utilized to ferret out the perceptions of teachers, and administrators on the inservice training program.

Based on the results of this study, the following recommendations are presented:

1. Because teachers placed the least value on training for inservice credit only as the reason for participating in the program, and placed the highest value on training toward certification, a more clear reorientation may be needed--one that emphasizes the main purpose of the program to enhance the vocational teaching skills of the teachers.

2. As far as convenience factors, formats and topics of inservice training are concerned, it is recommended that: courses for inservice training be offered within a radius of 0 to 42 miles to meet during the Spring and Summer sessions; preferably during the early afternoon hours; through intensive formats of either 6 hours per day for 1 week or 3 hours per day for 2 weeks; group
instructional methods for obtaining industrial training and assistance in discovering and developing needs and interests of students; and preparing effective instructional materials.

3. It is recommended that the District of Columbia Public Schools put increased emphasis on improving communication between teachers and administrators regarding inservice training programs.

4. It is further recommended additional research be conducted in the District of Columbia Public School System in regards to effective inservice training.

It is quite evident from this research that the importance of the issue examined here should transcend the academic exercise for which it is done. It is my hope that the need for further studies and analyses of this topic will encourage other scholars to join me in such an endeavor in the not too distant future.

Implications

Based upon the findings of this study, and the researcher's opinion, the following implications are presented:

1. The district of Columbia Public School System should consider several innovative ways and incentives to attract the younger generation into the teaching profession.

2. The District of Columbia Public School System
should consider alternative ways in providing their vocational teachers with updated training in an industry setting. This should be on a rotated basis for teachers to gain increased knowledge in their professional field.

3. The differences in the perception of providing inservice training for teachers should be reinforced by having all levels of the hierarchy involved in the planning of inservice activities.
REFERENCE


Butts, D. P. (1967). *The Classroom Experience Model. Designs for Inservice Education,* In E. W. Bessent (Ed), Research and Development Center for Teacher Education. The University of Texas, Austin.


Ryor, J. (1979, Jan-Feb.). Three Perspectives on Inservice Education. Journal of Teacher Education. 30 (1).


APPENDIX A

PERMISSION TO PERFORM RESEARCH STUDY
October 8, 1987

Mr. Linwood E. Lawton

Dear Mr. Lawton:

Your proposal for conducting research in D.C. Public Schools has been approved. Access to schools, however, is at the discretion of regional and building supervisors and separate permission from them needs to be obtained.

Information collected from administrators and teachers is voluntary and therefore at their discretion. Finally, collection of information from or about students must be approved by parents and meet all requirements for protection of subjects.

Sincerely,

Norman Gold
Director
Research and Evaluation

/cdw
July 24, 1987

Dr. Norman Gold
D.C. Public Schools
Director of Research and Evaluation
Presidential Building - Room 1013
415 12th Street, N.W.
Washington, D. C. 20004

Dr. Gold, my advisor at Virginia Tech University, has informed me that it is necessary to communicate with your office in regard to fulfilling the requirements for my dissertation. This entails the Perceptions of Inservice Strategies by Vocational Teachers and Administrators in Selected Schools in the District of Columbia.

At the present time I am a Business Education Teacher at Friendship Educational Center, Route 5, here in the District.

It would be greatly appreciated if permission is granted to administer a survey to selected vocational teachers, administrators, and service directors for the academic year 1987 - 1988.

Enclosed is a copy of my proposal for your review. Any information or suggestions which you might wish to add would be beneficial to the completion of this study.

Since this requirement has to be submitted in late September, it would be appreciated if I could hear from you as soon as possible. Upon completion of the study a copy of the compile data will be forwarded to your office for the sake of accuracy.

If any questions should arise, please contact me at my home, , or , which is at Friendship Educational Center.

Thanking you in advance.

Sincerely,

Linwood E. Lawton
APPENDIX B

MEMO TO EACH SCHOOL REPRESENTATIVE
Hello

I really do appreciate you giving these questionnaires to your fellow co-workers. Please have each co-worker mail them in the enclosed envelopes directly to me.

Thanks a Million,

Linwood

<table>
<thead>
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<th>HOME ECONOMICS ED.</th>
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</thead>
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</tr>
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<td>3.</td>
</tr>
<tr>
<td>4.</td>
<td>4.</td>
</tr>
</tbody>
</table>
APPENDIX C

TEACHERS' SURVEY
May 25, 1987

Dear

I am seeking your assistance in collecting data for a research study to determine inservice strategies for vocational teachers in the District of Columbia Public Schools.

The goal of this research is to describe, as accurately as possible, the effectiveness of strategies as perceived by teachers, administrators, and service area directors. Hopefully, this research will provide answers to help facilitate the establishment of effective strategies for technical updating for vocational teachers use in the Metropolitan District of Columbia.

The research study has been approved by the Department of Quality Assurance of the District of Columbia Public Schools, and by the Graduate School of Education at Virginia Polytechnic Institute and State University.

As a colleague of yours, I am very much aware of the value of your time. This questionnaire has been carefully constructed to require as little of your time as possible. The estimated time of completion is approximately thirty minutes. I would appreciate it if you would complete the questionnaire and return it to me in the self addressed envelope by ________________.

Thank you for your assistance.

Sincerely,

Linwood E. Lawton
PERCEPTIONS OF INSERVICE STRATEGIES BY VOCATIONAL TEACHERS AND ADMINISTRATORS IN SELECTED PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

TEACHER SURVEY

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

Section I
General Information

Please circle one number code or fill in the appropriate information for each question unless otherwise instructed.

Demographic Information:

1. What is the year of your birth? ......................

2. Sex: Male........1 Female........2

3. Indicate your total years of teaching experience in vocational programs only. (rounded to nearest whole number).............................

4. Indicate your total years of full-time teaching experience in all subject areas? (Include this year and all levels - public, private, and military).....................

5. How many total years of non-teaching work experience do you have in a field that relates to your teaching area? (round answers to nearest whole number)........

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

   College but no Degree.......................1
   Associate Degree..........................2
   BA or BS Degree..........................3
   Bachelors plus graduate...................4
   MA or Equivalent Degree...................5
   Masters plus Graduate....................6
   Specialist or Equivalent..................7
   Doctorate...............................8
7. In what service area was your preparation? (Circle only primary area).

Business Education........................1
Health Occupation Education..............2
Industrial Arts Education..................3
Marketing and Distributive Education.....4
Trade and Industrial Education............5
Vocational Home Economics Education.....6
Other............................................7

8. In what service area is your present teaching assignment? (Circle only primary area).

Business Education........................1
Health Occupation Education..............2
Industrial Arts Education..................3
Marketing and Distributive Education.....4
Trade and Industrial Education............5
Vocational Home Economics Education.....6
Other............................................7

9. Please indicate the year you were issued your last certification certificate

10. Indicate the number of times you participated in inservice training since your last certification expiration date

Reasons for pursuing inservice training:

11. Please rank order the following types of credit preferred from inservice training where:

1 = most preferable
2 = second most preferable
3 = third most preferable
4 = fourth or least preferable

inservice credit only.....................
university credit........................
credit toward university degree.........
credit toward certification............
12. Please evaluate each of the following reasons for taking inservice training with respect to how important it is to you, where:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides an opportunity for professional advancement</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Helps me to become more professionally knowledgeable in my service area</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides release time away from the students</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides me an opportunity to have input in what should be taught</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides monetary benefits</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides needed representation for the school</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides an avenue for genuine interests</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides self growth to improve my teaching</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>Provides an opportunity for gaining academic credit</td>
<td>4 3 2 1 0</td>
</tr>
</tbody>
</table>
Convenience factors and types of activities:

13. How far are you willing to travel to a university, four-year college, or educational extension center which offers credit courses of particular interest to you? __________ miles

14. Which time of the year do you prefer to have inservice training provided to you? (Circle one)

- Fall.................................. 1
- Winter................................ 2
- Spring................................ 3
- Early Summer.......................... 4
- Late Summer........................... 5

15. During what time of the day do you prefer inservice education classes to meet?

- Morning (7:00 a.m. - 12:00 Noon)........... 1
- Lunch...................................... 2
- Early Afternoon (1:00 p.m. - 3:00 p.m.)... 3
- Late Afternoon (3:00 p.m. - 6:00 p.m.).... 4
- Evening (6:00 p.m. - 9:00 p.m.)............ 5
- Weekends (8:00 a.m. - 12:00 p.m.).......... 6
- No preference.............................. 7

16. Which instructional method do you most prefer for classes that you attend? (Please circle one choice).

- Individual Activity................................. 1
- Group Activity..................................... 2
17. Please evaluate each of the following formats for inservice training with respect to how important the availability of such a format is to you, where:

<table>
<thead>
<tr>
<th>Format Description</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Intensive format, such as 6 hours per day for one week</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>b. Intensive format, such as 3 hours per day for two weeks</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>c. One, three hour period a week for ten weeks</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>d. Three, one hour periods weekly for ten weeks</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>e. One, six hour period a month for five months</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>f. One, six hour period a week for five weeks</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>g. One, five hour period a week for six weeks</td>
<td>4 3 2 1 0</td>
</tr>
<tr>
<td>h. Other, please specify__</td>
<td>4 3 2 1 0</td>
</tr>
</tbody>
</table>
18. Please evaluate each of the following methods of inservice delivery with respect to how important each one is to you, where:

4 = Very Important
3 = Important
2 = Somewhat Important
1 = Not Important
0 = No Opinion

a. university or college courses
b. workshops
c. self-study materials
d. industry training
e. other, please specify

Section II
Instructor Perception

Responses to the questionnaire items should reflect your perception only. (Please circle your response that closely describes your perceived needs).

Below is a list of potential topics for inservice training. Please evaluate each one in two ways:

(A) How important is each of these areas of inservice training for you?

(B) How often have you participated in each of the following types of inservice training?
<table>
<thead>
<tr>
<th></th>
<th>A: How Important</th>
<th>B: How Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Very Important</td>
<td>4 = Very</td>
</tr>
<tr>
<td>3</td>
<td>Important</td>
<td>Frequently</td>
</tr>
<tr>
<td>2</td>
<td>Somewhat</td>
<td>3 = Often</td>
</tr>
<tr>
<td>1</td>
<td>Not Important</td>
<td>2 = Slightly</td>
</tr>
<tr>
<td>0</td>
<td>No Opinion</td>
<td>1 = Never</td>
</tr>
</tbody>
</table>

a. Instructional and student records management 4 3 2 1 0 4 3 2 1 0

b. Discovering needs of students 4 3 2 1 0 4 3 2 1 0
c. Fiscal policies of the total institution 4 3 2 1 0 4 3 2 1 0
d. Recruitment of students 4 3 2 1 0 4 3 2 1 0
e. Student evaluation and testing 4 3 2 1 0 4 3 2 1 0
f. Preparing effective instructional materials 4 3 2 1 0 4 3 2 1 0
g. Using audio visual aids 4 3 2 1 0 4 3 2 1 0
h. Selecting instructional materials 4 3 2 1 0 4 3 2 1 0
i. Methods or techniques to maintain student retention 4 3 2 1 0 4 3 2 1 0
j. New developments in your occupational teaching specialty 4 3 2 1 0 4 3 2 1 0
k. Developing student interest 4 3 2 1 0 4 3 2 1 0
l. Developing course outlines 4 3 2 1 0 4 3 2 1 0
APPENDIX D

ADMINISTRATORS' SURVEY
May 25, 1987

Dear

I am seeking your assistance in collecting data for a research study to determine inservice strategies for vocational teachers in the District of Columbia Public Schools.

The goal of this research is to describe, as accurately as possible, the effectiveness of strategies as perceived by teachers, administrators, and service area directors. Hopefully, this research will provide answers to help facilitate the establishment of effective strategies for technical updating for vocational teachers use in the Metropolitan District of Columbia.

The research study has been approved by the Department of Quality Assurance of the District of Columbia Public Schools, and by the Graduate School of Education at Virginia Polytechnic Institute and State University.

I am very much aware of the value of your time. This questionnaire has been carefully constructed to require as little of your time as possible. The estimated time of completion is approximately thirty minutes. I would appreciate it if you would complete the questionnaire and return it to me in the self addressed envelope by

__________________.

Thank you for your assistance.

Sincerely,

Linwood E. Lawton
PERCEPTIONS OF INSERVICE STRATEGIES BY VOCATIONAL TEACHERS AND ADMINISTRATORS IN SELECTED PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

ADMINISTRATOR SURVEY

All individual responses to the questions will be treated confidentially and will be revealed in group data only. Responses to the questionnaire items should reflect your perception only. (Please circle your response that closely describes your perceptions).

SECTION I

Below is a list of potential topics for inservice training. Please evaluate each one in terms of:

How important is each of these areas of inservice training for teachers?
<table>
<thead>
<tr>
<th>How Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = Very Important</td>
</tr>
<tr>
<td>3 = Important</td>
</tr>
<tr>
<td>2 = Somewhat</td>
</tr>
<tr>
<td>1 = Not Important</td>
</tr>
<tr>
<td>0 = No Opinion</td>
</tr>
</tbody>
</table>

| a. Instructional and student records management | 4 3 2 1 0 |
| b. Discovering needs of students             | 4 3 2 1 0 |
| c. Fiscal policies of the total institution   | 4 3 2 1 0 |
| d. Recruitment of students                   | 4 3 2 1 0 |
| e. Student evaluation and testing            | 4 3 2 1 0 |
| f. Preparing effective instructional materials| 4 3 2 1 0 |
| g. Using audio visual aids                   | 4 3 2 1 0 |
| h. Selecting instructional materials         | 4 3 2 1 0 |
| i. Methods or techniques to maintain student retention | 4 3 2 1 0 |
| j. New developments in occupational teaching specialty | 4 3 2 1 0 |
| k. Developing student interest               | 4 3 2 1 0 |
| l. Developing course outlines                | 4 3 2 1 0 |
Section II

Please evaluate each of the following reasons for teaching inservice training in terms of how important you feel each is to teachers. Please circle each response as:

4 = Very Important
3 = Important
2 = Somewhat Important
1 = Not Important
0 = No Opinion

Pursuing inservice training:

a. provides an opportunity for professional advancement
   4 3 2 1 0

b. helps teachers to become more professionally knowledgeable in their service area
   4 3 2 1 0

c. provides release time away from the students
   4 3 2 1 0

d. provides teachers an opportunity to have input in what should be taught
   4 3 2 1 0

e. provides monetary benefits
   4 3 2 1 0

f. provides needed representation for the school
   4 3 2 1 0

g. provides an avenue for genuine interests
   4 3 2 1 0

h. provides self growth to improve their teaching
   4 3 2 1 0

i. provides an opportunity for gaining academic credit
   4 3 2 1 0
APPENDIX E

DIRECTORS' SURVEY
May 25, 1987

Dear

I am seeking your assistance in collecting data for a research study to determine inservice strategies for vocational teachers in the District of Columbia Public Schools.

The goal of this research is to describe, as accurately as possible, the effectiveness of strategies as perceived by teachers, administrators, and service area directors. Hopefully, this research will provide answers to help facilitate the establishment of effective strategies for technical updating for vocational teachers use in the Metropolitan District of Columbia.

The research study has been approved by the Department of Quality Assurance of the District of Columbia Public Schools, and by the Graduate School of Education at Virginia Polytechnic Institute and State University.

I am very much aware of the value of your time. This questionnaire has been carefully constructed to require as little of your time as possible. The estimated time of completion is approximately thirty minutes. I would appreciate it if you would complete the questionnaire and return it to me in the self addressed envelope by

Thank you for your assistance.

Sincerely,

Linwood E. Lawton
All individual responses to the questions will be treated confidentially and will be revealed in group data only. Responses to the questionnaire items should reflect your perception only. (Please circle your response that closely describes your perceptions).

SECTION I

Below is a list of potential topics for inservice training. Please evaluate each one in terms of:

How important is each of these areas of inservice training for teachers?
<table>
<thead>
<tr>
<th>How Important</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = Very Important</td>
<td>3 = Important</td>
</tr>
<tr>
<td>2 = Somewhat</td>
<td>1 = Not Important</td>
</tr>
<tr>
<td>0 = No Opinion</td>
<td></td>
</tr>
</tbody>
</table>

| a. Instructional and student records management | 4 3 2 1 0 |
| b. Discovering needs of students | 4 3 2 1 0 |
| c. Fiscal policies of the total institution | 4 3 2 1 0 |
| d. Recruitment of students | 4 3 2 1 0 |
| e. Student evaluation and testing | 4 3 2 1 0 |
| f. Preparing effective instructional materials | 4 3 2 1 0 |
| g. Using audio visual aids | 4 3 2 1 0 |
| h. Selecting instructional materials | 4 3 2 1 0 |
| i. Methods or techniques to maintain student retention | 4 3 2 1 0 |
| j. New developments in occupational teaching specialty | 4 3 2 1 0 |
| k. Developing student interest | 4 3 2 1 0 |
| l. Developing course Outline | 4 3 2 1 0 |
Section II

Please evaluate each of the following reasons for teaching inservice training in terms of how important you feel each is to teachers. Please circle each response as:

- **4** = Very Important
- **3** = Important
- **2** = Somewhat Important
- **1** = Not Important
- **0** = No Opinion

**Pursuing inservice training:**

- a. provides an opportunity for professional advancement 4 3 2 1 0
- b. helps teachers to become more professionally knowledgeable in their service area 4 3 2 1 0
- c. provides release time away from the students 4 3 2 1 0
- d. provides teachers an opportunity to have input in what should be taught 4 3 2 1 0
- e. provides monetary benefits 4 3 2 1 0
- f. provides needed representation for the school 4 3 2 1 0
- g. provides an avenue for genuine interests 4 3 2 1 0
- h. provides self growth to improve their teaching 4 3 2 1 0
- i. provides an opportunity for gaining academic credit 4 3 2 1 0
APPENDIX F

SUMMARY OF QUESTIONNAIRES MAILED AND RETURNED
<table>
<thead>
<tr>
<th></th>
<th>Survey Mailed</th>
<th>Survey Returned</th>
<th>Percent Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>247</td>
<td>169</td>
<td>68%</td>
</tr>
<tr>
<td>Administrators</td>
<td>46</td>
<td>28</td>
<td>61%</td>
</tr>
<tr>
<td>Directors</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>299</td>
<td>203</td>
<td>68%</td>
</tr>
</tbody>
</table>
APPENDIX G

TABLES
Table 1

Ages of Teachers

<table>
<thead>
<tr>
<th>Ages</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 - 40</td>
<td>51</td>
<td>33.8</td>
</tr>
<tr>
<td>41 - 49</td>
<td>53</td>
<td>35.1</td>
</tr>
<tr>
<td>50 - 64</td>
<td>47</td>
<td>31.1</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note.

Mean  44.89  
Standard deviation  8.4  
Median  45.00  
Mode  44.00  

Table 2

Sex of Teachers

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>56</td>
<td>33.7%</td>
</tr>
<tr>
<td>Female</td>
<td>110</td>
<td>66.3%</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Table 3

Teachers' Levels of Formal Education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate degree</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Bachelors of arts/science degree</td>
<td>12</td>
<td>7.2</td>
</tr>
<tr>
<td>Bachelors plus graduate studies</td>
<td>25</td>
<td>15.1</td>
</tr>
<tr>
<td>Masters of arts or equivalent degree</td>
<td>35</td>
<td>21.1</td>
</tr>
<tr>
<td>Masters plus graduate studies</td>
<td>69</td>
<td>41.6</td>
</tr>
<tr>
<td>Specialist education or equivalent</td>
<td>15</td>
<td>9.0</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Note.

a Percentages based on 166 responses, some categories left unranked.
### Table 4

**Previous Teaching and Non-Teaching Experience in Vocational Programs**

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Teaching Experience</th>
<th>Non-teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In VOC Area</td>
<td>Any Area</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>1 - 10</td>
<td>31</td>
<td>18.6</td>
</tr>
<tr>
<td>11 - 20</td>
<td>75</td>
<td>44.9</td>
</tr>
<tr>
<td>21 +</td>
<td>53</td>
<td>31.7</td>
</tr>
<tr>
<td>Total</td>
<td>167</td>
<td>--</td>
</tr>
</tbody>
</table>

**Note.**

Mean | 16 | 18 | 5.5

Median | 17 | 19 | 3.0

Mode | 21 | 23 | 0
Table 5

Relationship Between Teachers' Service Area of Preparation and Assignment

<table>
<thead>
<tr>
<th>Area of Preparation</th>
<th>Present Teaching Assignment</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business education</td>
<td></td>
<td>58</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>86.6%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>6.0%</td>
<td></td>
<td></td>
<td></td>
<td>39.9%</td>
</tr>
<tr>
<td>2. Health occupations education</td>
<td></td>
<td>13</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>86.7%</td>
<td>13.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.9%</td>
</tr>
<tr>
<td>3. Industrial arts education</td>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>78.3%</td>
<td>21.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.7%</td>
</tr>
<tr>
<td>4. Marketing and distributive education</td>
<td></td>
<td>5</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29.4%</td>
<td>70.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.1%</td>
</tr>
<tr>
<td>5. Trade and industrial education</td>
<td></td>
<td>1</td>
<td>1</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.1%</td>
<td>7.1%</td>
<td>85.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.3%</td>
</tr>
<tr>
<td>6. Vocational home economics education</td>
<td></td>
<td>2</td>
<td></td>
<td>1</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.3%</td>
<td>4.2%</td>
<td>87.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.3%</td>
</tr>
<tr>
<td>7. Other</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.5%</td>
<td>12.5%</td>
<td>12.5%</td>
<td>12.5%</td>
<td>50.0%</td>
<td></td>
<td></td>
<td>4.8%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
<td>15</td>
<td>19</td>
<td>19</td>
<td>24</td>
<td>8</td>
<td></td>
<td>168</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38.1%</td>
<td>8.9%</td>
<td>11.3%</td>
<td>11.3%</td>
<td>14.3%</td>
<td>4.8%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Table 6

Number of Times Teachers Participated in Inservice Training Since Last Certification Issuance Date

<table>
<thead>
<tr>
<th>Number of Times Attended Inservice</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>1 - 2</td>
<td>78</td>
<td>46</td>
</tr>
<tr>
<td>3 - 7</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Missing</td>
<td>30</td>
<td>17.8</td>
</tr>
</tbody>
</table>

Note.

Mean 1.222

Standard deviation .922

Median 1.000

Mode 1.000
Table 7
How Far Teachers are Willing to Travel to Take Courses of Particular Interest to Them

<table>
<thead>
<tr>
<th>Miles</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 39</td>
<td>120</td>
<td>73</td>
</tr>
<tr>
<td>40 - 79</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>80 - 149</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>150 - 348</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>164</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note.
Mean 41.73
Standard deviation 67.6
Median 17
Mode 10
Table 8

<table>
<thead>
<tr>
<th>Time of the Year</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>55</td>
<td>34.3</td>
</tr>
<tr>
<td>Summer</td>
<td>43</td>
<td>26.9</td>
</tr>
<tr>
<td>Fall</td>
<td>42</td>
<td>26.2</td>
</tr>
<tr>
<td>Winter</td>
<td>20</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Note.

a Percentages based on 160 responses, some categories left unranked.
Table 9

Time of Day Teachers Prefer Inservice Training

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afternoon</td>
<td>59</td>
<td>34.9</td>
</tr>
<tr>
<td>Morning</td>
<td>52</td>
<td>30.8</td>
</tr>
<tr>
<td>Evening</td>
<td>17</td>
<td>10.1</td>
</tr>
<tr>
<td>Weekend</td>
<td>17</td>
<td>10.1</td>
</tr>
<tr>
<td>No preference</td>
<td>19</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Note.

*a Percentages based on 160 responses, some categories left unranked.*
Table 10

Instructional Methods Teachers Prefer for Classes

<table>
<thead>
<tr>
<th>Instructional Method</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No preference</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Individual activity</td>
<td>56</td>
<td>33.1</td>
</tr>
<tr>
<td>Group activity</td>
<td>110</td>
<td>65.1</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Table 11

Teachers' Preference of Formats for Inservice Training

<table>
<thead>
<tr>
<th>Formats</th>
<th>Not Important %</th>
<th>Somewhat Important %</th>
<th>Important %</th>
<th>Very Important %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive format, 6 hours per day for 1 week</td>
<td>21.3</td>
<td>16.6</td>
<td>17.8</td>
<td>34.3</td>
</tr>
<tr>
<td>Intensive format, 3 hours per day for 2 weeks</td>
<td>11.2</td>
<td>17.8</td>
<td>41.4</td>
<td>21.9</td>
</tr>
<tr>
<td>1, 3-hour period a week for 10 weeks</td>
<td>29.6</td>
<td>22.5</td>
<td>23.1</td>
<td>10.7</td>
</tr>
<tr>
<td>3, 1-hour periods weekly for 10 weeks</td>
<td>42.0</td>
<td>17.8</td>
<td>18.3</td>
<td>8.3</td>
</tr>
<tr>
<td>1, 6-hour period a month for 5 months</td>
<td>41.4</td>
<td>15.4</td>
<td>13.6</td>
<td>8.9</td>
</tr>
<tr>
<td>1, 6-hour period a week for 5 weeks</td>
<td>36.7</td>
<td>16.6</td>
<td>21.3</td>
<td>6.5</td>
</tr>
<tr>
<td>1, 5 hour period a week for 6 weeks</td>
<td>38.5</td>
<td>23.1</td>
<td>15.6</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Note.

Based on 169 respondents, Perc. doesn't add to 100 due to non-response or no opinion.
<table>
<thead>
<tr>
<th>Methods</th>
<th>Not Important %</th>
<th>Somewhat Important %</th>
<th>Important %</th>
<th>Very Important %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry training</td>
<td>5.9</td>
<td>8.3</td>
<td>27.8</td>
<td>52.1</td>
</tr>
<tr>
<td>University or college courses</td>
<td>5.9</td>
<td>14.8</td>
<td>26.0</td>
<td>46.7</td>
</tr>
<tr>
<td>Workshops</td>
<td>3.0</td>
<td>17.2</td>
<td>36.7</td>
<td>37.9</td>
</tr>
<tr>
<td>Self-study materials</td>
<td>13.0</td>
<td>26.0</td>
<td>31.4</td>
<td>15.4</td>
</tr>
</tbody>
</table>

Note.

a Based on 169 respondents, perc. doesn't add to 100 due to non-response or no opinion.
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The two page vita has been removed from the scanned document.  Page 2 of 2
Employing a survey method, this study examined the perceptions held by teachers and administrators on inservice strategies in selected schools within the Washington, District of Columbia public schools system. In order to ferret out these perceptions, the following major questions were raised: (a) what are the demographic characteristics of the teachers? (b) what are teachers' reasons for pursuing inservice training? (c) which factors and formats were perceived to be convenient and preferred by teachers? (d) how often did teachers participate in inservice training? (e) what are the similarities and differences of the perceptions of teachers and administrators on the importance of inservice training for teachers? The substantive findings after a survey questionnaire was administered are: (a) The average age of the teachers was
45 years and the percentage for the females was twice greater than that for the males. Over three-quarters of the teachers had a masters' degree and above. Almost 45% of the teachers had taught between 11 to 20 years, and about 85% of them were teaching in their area of preparation. (b) The most important reason for teachers' pursuit of inservice training was training toward certification, and their least important reason was training for inservice credit. (c) About 73% of the teachers were willing to travel only shorter distances to take their inservice training courses. A great number of them preferred Spring for their training and about one-third of them preferred afternoon training sessions. Over two-thirds of the teachers preferred group activities as forms of instruction and about 34% of them preferred an intensified format. More than half (52%) of the teachers chose industry training as a method of delivery. (d) Teachers did not participate frequently (on average 1 program per year) in inservice training programs. (e) A significant relationship indicated some differences between teachers and administrators' perceptions on inservice training. However, in general, all were seen as important by over half of the respondents. Discovering needs of students and instructional and student records management were similar between the two groups. Discovering needs of students was clearly the most important, with 88% of the teachers and 100% of the administrators rating this
topic as the most important. Although even the least important in the list, fiscal policies of the total institution, was rated as important by 51% of the teachers and 65% of the administrators.