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# Supervisors' Perceptions of Staff Development Needs of Urban Vocational Teachers

Patricia Tynes Tompkins  
*Old Dominion University*

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SUPERVISORS' PERCEPTIONS OF STAFF DEVELOPMENT NEEDS OF  
URBAN VOCATIONAL TEACHERS

by  
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## ABSTRACT

### SUPERVISORS' PERCEPTIONS OF STAFF DEVELOPMENT NEEDS OF URBAN VOCATIONAL TEACHERS

Patricia Tynes Tompkins  
Old Dominion University, 1987  
Director: Dr. John M. Ritz

The purpose of this study was to determine vocational supervisors' perceptions of staff development needs of urban vocational teachers. The population for this study consisted of the vocational education supervisors in the urban areas of Virginia with a population of 50,000 or more. The Delphi technique was employed to gather the data from the supervisors.

The first research goal of this study was to determine the most pressing staff development need of urban vocational teachers as perceived by their supervisors. The results showed that the supervisors perceived the most pressing staff development need to be "Projection of a positive image of vocational education programs; promotion of programs." This need received a mean score of 4.63 out of a possible five points.

The second research goal of this study was to determine additional staff development needs of urban vocational teachers as perceived by their supervisors.

"Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers" received the highest group mean score among additional staff development needs. The data indicated that the supervisors perceived improving the image of vocational education to be an important staff development need in that it was the most pressing staff development need as well as the need with the highest mean score among additional staff development needs. Clearly, this was an important finding.

The third research goal of this study was to determine how the supervisors believed their perceptions would differ from those of the teachers they supervise. In every instance, more of the supervisors agreed than disagreed that their teachers would believe each of the statements was a staff development need. This was an important aspect of the study since it revealed how the supervisors believed their perceptions would differ from those of the teachers they supervise.

These findings should be helpful to urban school systems in Virginia contemplating staff development activities for their vocational teachers. They would be beneficial in determining the content to be covered. The Department of Education should also find this information useful in planning staff development activities for urban vocational teachers.



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All of the sixty-three supervisors of vocational education who agreed to participate in this study completed the three rounds of the Delphi survey. The quality and quantity of their responses indicate a strong commitment to this research.

Dr. Joseph Ford, Mr. Fred Hadley, and Mr. David Netherton gave generously of their time in analyzing the data from the first round of the study. Their assistance is greatly appreciated.

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## CHAPTER I

### INTRODUCTION

Future scholars of the history of American education may someday view the status of staff development in the 1980s as dismal at best. School districts had allocated large sums of money for curriculum development, computers, new facilities, and athletics, but they had neglected to provide the necessary funds for maximizing the potential of teachers. As business, industry, and government were becoming more concerned with making the best possible use of their human resources and were conducting major educational operations, public school systems had not responded to the total staff development needs of their teachers.

Unlike many automated operations in business and industry, schools were heavily dependent upon human performance for nearly every aspect of their operation. As long as people made the crucial difference in the school operation, their in-service education was a vital concern. Even if a highly qualified, ideally competent staff were available, time would gradually erode that competence as conditions changed and old competencies became obsolete. Even if new knowledge could be gained from on-the-job experiences, staff

turnover and the need to speed learning processes for some would still demand in-service education.<sup>1</sup>

While as much as 80 percent of most school district budgets was allocated to personnel, inadequate funds were earmarked for in-service training and staff development activities. School systems would not let their equipment and buildings become obsolete and nonfunctional by failing to maintain them, but that was exactly what was often done with professional staffs.<sup>2</sup>

Leadership had long recognized the positive correlation between employee development and productivity. As a result, many state education departments had explored staff development programs or in-service experiences as vehicles for educational improvement. Van E. Cooley and Jay C. Thompson conducted a study in 1984 involving the chief education officer from each of the fifty states to assess state initiated activity in staff development. Their findings indicated that twenty-five states had mandated staff development programs for local school districts. These programs varied widely in terms of structure, financial support, and commitment to staff development. In some states where staff development programs were not mandated,

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<sup>1</sup> Ben M. Harris, Improving Staff Performance Through In-Service Education (Boston: Allyn and Bacon, Inc., 1980), p. 14.

<sup>2</sup> Fred H. Wood and Steven R. Thompson, "Guidelines for Better Staff Development," Educational Leadership 37 (February 1980):374.

officials reported that local education agencies had developed and utilized optional programs designed to improve staff and program effectiveness. Seventeen states were in the process of designing staff development programs.<sup>3</sup>

While this study pointed to the need for additional research regarding the impact of state staff development activities upon the local school districts, effectiveness of teachers, and student achievement, it revealed that staff development was a growth activity. Cooley and Thompson also found that staff development was a valuable tool to impact student achievement through increased teacher competence. The potential effectiveness of this effort could indeed foster educational improvement.<sup>4</sup>

Recent national and state plans for reforming public education have addressed the need to improve the quality of teachers. Julius Menacker, Emanuel Hurwitz, and Ward Weldon proposed to do this by making staff development mandatory for all teachers on a regular basis. This would require all teachers, not just pre-service certification candidates, to demonstrate mastery of their subject matter. According to these researchers, on-going staff development had the advantage of many immediate opportunities for applications

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<sup>3</sup>Van E. Cooley and Jay C. Thompson, "School Improvement and State Staff Development Programs: A National Research Summary," Educational Research Quarterly 10 (1985-1986):2-3.

<sup>4</sup>Ibid.

of new concepts. It offered an easy transfer of learning for teachers if it was designed to increase subject matter knowledge and if it encouraged its application in ways most beneficial to their students.<sup>5</sup>

Staff development was not without its problems. According to Fred H. Wood and Steven R. Thompson, these problems could be attributed to many things. First, there were the negative attitudes held by teachers toward in-service education. Some of the more commonly cited problems by teachers included poorly planned sessions, activities that were unrelated to their day-to-day situations, unclear objectives, lack of follow-up in the classroom, and lack of teacher and administrator involvement in the planning and implementation of the in-service programs.<sup>6</sup>

A second problem was also concerned with negative attitudes. Some administrators perceived teachers as disliking in-service training and professional growth. They believed teachers preferred to be directed and wanted to avoid responsibility for their in-service education. When this occurred, a self-fulfilling prophecy sometimes resulted as poorly planned in-service programs were conducted.<sup>7</sup>

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<sup>5</sup>Julius Menacker, Emanuel Hurwitz, and Ward Weldon, "Teacher Upgrading: Policy Alternatives," The Educational Forum 50 (Winter 1986):123-28.

<sup>6</sup>Wood and Thompson, "Guidelines for Better Staff Development," p. 375.

<sup>7</sup>Ibid.

A third problem was that staff development often had a district-wide focus. It was not related to the needs of teachers and administrators in their own schools. The opportunity for local staffs to plan together was not granted when staff development time was provided, even though there was increasing evidence that indicated the largest unit of successful change in education was the individual school, not the district.<sup>8</sup>

It was not surprising that staff development had a bad reputation among some educators. Many staff development programs appeared to be irrelevant and ineffective, a waste of time and money. Disjointed workshops and courses often focused on information dissemination instead of stressing the use of information or appropriate practice in the classroom. Seldom were these part of a comprehensive plan to achieve goals set by the school staff.<sup>9</sup>

In addition to programs for the academic disciplines, staff development for vocational teachers was also needed. This was because of the profound effect that technology had on the profession. The Teacher Education and Staff Development Committee of the American Vocational Association conducted a national survey in 1985 to identify the critical issues facing vocational teacher education. Teacher educators, counselors, administrators, and high

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<sup>8</sup> Ibid.

<sup>9</sup> Ibid., p. 374.



school teachers were asked to rank sixty-eight critical issues in vocational teacher education. "Keeping all vocational teachers technologically current" was rated as the third most important issue, preceded only by "Recruiting highly competent and committed persons" and "Support for teacher education--financial and human resources." Clearly, this illustrated the need for staff development for vocational teachers.<sup>10</sup>

The United States was in the midst of a great technological revolution. The industrial robots that were being employed in manufacturing had achieved encouraging results. The advances in computer technology and applications were resulting in major changes in information and communication processes. Significant advances in technology such as these created new demands on education.

Before the rate of technological change had accelerated to this level, the practices and policies of vocational education did not require constant reexamination and revision. The assumptions on which policies were based remained valid for a long time. Because of the changes resulting from the technological revolution, however, this was no longer true. Vocational educators had to be willing to reexamine their positions continually and to respect traditions only as long as they were compatible with the

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<sup>10</sup>Ronald D. Zellner and Linda H. Parrish, "Critical Issues in Vocational Teacher Education," Vocational Education Journal 61 (March 1986):39.

real needs of their students. To do this, vocational teachers needed to be informed continually about broad occupational changes and their implications. This involved more than simply discovering what new tools, materials, and processes were coming into use in particular trades or jobs. Teachers had to be aware of major social and economic trends, including the social, political, and economic forces that were shaping the occupational life of the nation. To keep abreast of these trends required more than just periodic studies or surveys of local conditions. It was necessary for teachers to tap a variety of sources of information, including agencies of government, business, industry, and education.<sup>11</sup>

#### Purpose of the Study

The purpose of this study was to determine vocational supervisors' perceptions of in-service needs of urban vocational teachers.

#### Research Goals

To accomplish the purpose of this study, the following questions were answered.

1. What, in the opinion of the vocational supervisors, was the most pressing staff development need of vocational teachers in urban areas?

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<sup>11</sup>Calfrey C. Calhoun and Alton V. Finch, Vocational Education: Concepts and Operations (Belmont, California: Wadsworth Publishing Company, 1982), p. 11.

2. What, in the opinion of the vocational supervisors, were additional staff development needs of vocational teachers in urban areas?

3. How did the supervisors believe their perceptions would differ from those of the teachers they supervise?

### Background and Significance

In the spring of 1986, during a telephone conversation with Dewey Oakley, Administrative Director of Vocational and Adult Education for the Commonwealth of Virginia, he stated that there was a need to improve staff development for vocational teachers. He added that he would like to see some effort directed toward this goal (appendix a). Although this was not a mandate, it was perceived by this author to be a very real need, since "Greatly strengthened in-service education may be the greatest aid in helping teachers meet the changing demands of the 1980s and 90s."<sup>12</sup>

Staff development has been a symbol of faith in the improvement of the individual teacher. Occasionally teachers, like employees in most organizations, performed below their potential. Effective staff development programs which were designed to help teachers reach their potential demonstrated a commitment to revitalize their professional growth.

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<sup>12</sup>Mary Beth Stine, "Preservice and Inservice Needs," Vocational Education Journal 61 (March 1986):38.

Research had suggested that adults who remain in a learning posture tend to learn more easily.<sup>13</sup> Requiring teachers to stay in a learning posture could stimulate them to seek additional education for professional growth. This was a very positive step toward helping teachers to perform near their optimal capacity.

While staff development will not solve all of education's problems, according to Ben M. Harris and Wailand Bessent, it was important for many reasons. Pre-service preparation of professional staff members was not always ideal and may have been primarily an introduction to professional preparation instead of professional preparation as such.<sup>14</sup>

College training was but an introduction to the world of teaching. In the time allotted pre-service training, only entry skills and knowledge could be developed. The competent teacher was developed over time with experience.<sup>15</sup>

In addition, social and educational changes made the existing professional practices obsolete and relatively

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<sup>13</sup> Leonard Nadler, Developing Human Resources (Austin, Texas: Learning Concepts, 1979), p. 264.

<sup>14</sup> Ben M. Harris and Wailand Bessent, In-Service Education: A Guide to Better Practice (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969), pp. 3-4.

<sup>15</sup> Lori Korinek, Rex Schmid, and Martha McAdams, "Inservice Types and Best Practices," Journal of Research and Development in Education 18 (1985):33.

ineffective in a short period of time. This applied to methods and techniques, tools, and substantive knowledge itself. Coordination and articulation of instructional practices required change in people. Even when each instructional staff member was functioning at a highly professional level, employing an optimum number of the most effective practices, such an instructional program was still relatively uncoordinated from subject to subject and poorly articulated from year to year.<sup>16</sup>

The accelerating acquisition of knowledge made some teaching strategies and tactics obsolete while creating a need for new ones. Teaching is a dynamic profession which required the individual to continually regenerate in order to be effective. Staff development is a medium for stimulating regeneration.<sup>17</sup>

Harris and Bessent further argued that morale could be stimulated and maintained through in-service education. This was a contribution to instruction in itself, even in the unlikely event that instructional improvement of any dynamic kind did not occur.<sup>18</sup>

Another strong advocate of staff development for

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<sup>16</sup> Harris and Bessent, In-Service Education: A Guide to Better Practice, pp. 3-4.

<sup>17</sup> Korinek, Schmid, and McAdams, "Inservice Types and Best Practices," p. 33.

<sup>18</sup> Harris and Bessent, In-Service Education: A Guide to Better Practice, pp. 3-4.

teachers was David W. Champagne of the University of Pittsburgh. He believed there were many reasons for a clear staff development, supervision, and evaluation program in schools. Because there was no more complicated, enervating, or frustrating job in the world than teaching, he believed most teachers needed help and encouragement. Staff development was an effective means to provide this encouragement. Regular staff development and supervision could help in identifying problems and needs of a whole school setting before they became crises.<sup>19</sup>

Due to economic and social conditions, teachers were likely to remain in their positions for quite a long time. We could no longer expect a large group of new employees to regularly replace the old ones and bring in new ideas. Development and supervisory programs had to perform this function.<sup>20</sup>

Additionally, the curriculum was constantly changing. New topics needed to be integrated into what was being taught. Different methods of instruction were being developed, tested, and proved useful for student learning. Changes such as these did not just happen; they needed to be formally planned. Staff development and supervision programs helped teachers to set clear expectations, plan

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<sup>19</sup>David W. Champagne, "Does Staff Development Do Any Good?" Educational Leadership 37 (February 1980):401.

<sup>20</sup>Ibid.

ways of reaching them, implement their plans, and evaluate the reality of their achievements. When supervisory programs focused on instruction of the students, there were demonstrable results in student learning.<sup>21</sup>

Clearly, there was a need for teacher renewal activities that would enhance the quality of teaching. Since a primary role of supervision was to provide the leadership necessary to promote a continuing climate of improvement, it was vital that supervisors be able to plan and conduct effective staff development programs. There were many types of models used in developing in-service education, but most of them included certain essential steps. The first of these was to determine the needs of the learners. This study was conducted to determine the supervisors' perceptions of the teachers' needs. The second step was to make a policy decision to initiate an in-service project. This included designing appropriate in-service activities, materials, and resources. The third step was to develop evaluative measures to assess in-service program objectives and related activities.<sup>22</sup>

In urban areas, teachers needed staff development to help them deal with the special demands that arose from minority and socially disadvantaged enrollments in the

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<sup>21</sup> Ibid.

<sup>22</sup> Jon Wiles and Joseph Bondi, Supervision A Guide to Practice (Columbus, Ohio: Charles E. Merrill Publishing Company, 1980), p. 107.

classroom. The influences of the depressed socio-economic environment of the urban schools had been called the major task of an effective staff development program. "Nowhere is the need for in-service as visible as it is in the schools which serve minority students," asserted William W. Wayson, professor of educational development at Ohio State University.<sup>23</sup>

Both students and parents in the urban community needed to be continually assured that teachers believed students could succeed. For teachers to develop optimism and confidence in their own ability to facilitate student success, there had to be an understanding that teaching competence was developmental. Continuing education to refine humanistic, subject matter, and professional skills was indispensable to teaching effectiveness.<sup>24</sup>

According to Robert N. Bush of Stanford University, the problems of the poor in our cities were sufficiently acute that teachers were needed who had an unusually high degree of competence in terms of these special problems. Staff development programs had to be aimed at working with different types of individuals, whether they were persons who had special needs in subject areas, or special problems

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<sup>23</sup> Daniel R. Davies and Catherine D. Armistead, In-Service Education (Arlington, Virginia: National School Public Relations Association, 1975), p. 49.

<sup>24</sup> Johanna K. Lemlech, Handbook for Successful Urban Teaching (New York: Harper & Row, Publishers, Inc., 1977), p. 143.



growing out of their impoverished environment in the cities. The disadvantaged portions of our society occasionally suffered because of the prejudice that existed among the more affluent elements of the community. Since society was concerned with remedying these basic ills of the underprivileged, it was necessary to devise staff development programs that would overcome the extensive prejudice that existed. The time had come to give up the ephemeral search for the best teacher and to begin tailoring staff development programs for the precise needs of specific individuals and groups of teachers.<sup>25</sup>

With all of the possible benefits of staff development, dissatisfaction among teachers was nevertheless widespread. Criticisms that programs were useless because they were too general or poorly timed were common. "Many in-service programs are similar to Blind-man's Bluff. They are developed without regard to research findings, assessment of program and individual goals, or established needs."<sup>26</sup>

It seems appropriate at this point to suggest several areas in which serious mistakes frequently occurred:

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<sup>25</sup>Louis J. Rubin, ed., Improving In-Service Education: Proposals and Procedures for Change (Boston: Allyn and Bacon, Inc., 1971), pp. 63-67.

<sup>26</sup>Jon C. Marshall and Sarah DeJarnette Caldwell, "How Valid Are Formal, Informal Needs Assessment Methods for Planning Staff Development Programs?" NASSP Bulletin 68 (November 1984):24.

1. Failure to relate staff development program plans to the genuine needs of participants
2. Failure to select appropriate activities for implementing program plans
3. Failure to implement staff development program activities with sufficient resources to assure effectiveness.<sup>27</sup>

This research should assist those in seeking a solution to the problem of not relating staff development program plans to the genuine needs of the vocational teachers in urban areas.

#### Delimitations of the Study

Although the information gained from this research may be applicable to vocational teachers in rural areas, it is expected that some of the staff development suggestions would address only those problems peculiar to urban schools. These could include meeting the needs of the disadvantaged, inner city students; understanding new technology and new career requirements; dealing with racism; and promoting understanding and cooperation among parents, teachers, and students.

The panel of experts for this study was comprised exclusively of vocational supervisors and directors of vocational education in urban areas. Therefore, the

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<sup>27</sup>Harris and Bessent, In-Service Education: A Guide to Better Practice, pp. 3-4.

opinions expressed reflected only those of the supervisors and directors of vocational education. Vocational teachers were not included in this study because research had shown that "Asking teachers what in-service they want may not produce an accurate assessment of needs."<sup>28</sup> As a basis for comparison, another researcher may elect to replicate this study substituting teachers for supervisors and directors of vocational education.

All of the participants in this study were employed in the twenty-five largest urban school systems of the Commonwealth of Virginia. Consequently, the opinions expressed reflected only those of the supervisors and directors of vocational education employed with Virginia school systems. Virginia was recognized as a leader nationally in vocational education according to Benjamin L. Baines, who was President of the National Association of Trade and Industrial Education State Supervisors in 1986.<sup>29</sup> Therefore, these opinions were expected to be highly regarded by supervisors and teachers in other states.

Vocational subjects were sufficiently different from other subjects to warrant different staff development activities. The materials and methods of instruction in

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<sup>28</sup>Linda L. Jones and Andrew E. Hayes, "How Valid Are Surveys of Teacher Needs?" Educational Leadership 37 (February 1980):390.

<sup>29</sup>Interview with Mr. Benjamin L. Baines, Associate Director of Trade and Industrial Education, Department of Education, Commonwealth of Virginia, 16 December 1986.

vocational education differed from those in academic education due to such factors as interest and purpose of the learner, the demands of the marketplace, standards of achievement and performance, the rapid technological changes that were constantly taking place, and the laboratory/equipment atmosphere in which vocational subjects were taught. The effects of technological change on vocational education were experienced more in urban areas than in rural areas. Therefore, staff development needs of urban vocational teachers were expected to present a challenge to the vocational supervisors who were charged with developing meaningful staff development programs.

#### Procedures

The first step toward improving staff development was the determination of needs. Much of the literature on staff development recommended a thorough assessment of teacher needs before any efforts begin. However, planners of staff development programs and persons conducting research on staff development may wrongly assume that statements of needs made by teachers were their needs rather than symptoms of needs that should be diagnosed more completely.

According to Linda L. Jones and Andrew E. Hayes, determining needs and securing statements from teachers about concerns or current problems were two distinctly different tasks. An administrator or supervisor charged

with the task of determining staff development needs of teachers must consider alternative methods such as observation, formal testing, and interviews. Their research suggested that teachers could express symptoms of their needs, but they may not be aware of their actual needs. Jones and Hayes recommended that the needs which teachers report to supervisors be analyzed by objective means to determine the underlying conditions that resulted in expression of the symptoms.<sup>30</sup>

David M. Memory stated that the person responsible for planning a staff development program should be aware of both student needs within a school or school district and needs and expressed wishes of teachers regarding the content area. However, formulating objectives for a staff development program was not merely a process of organizing the eagerly offered suggestions of students and teachers being served. In addition, where suggestions were offered, they were usually varied, and the task of achieving a consensus was rarely a simple and easy one. The supervisor must have an understanding of how dissimilar and even conflicting needs and wishes can be accommodated in a school-wide or district-wide program.<sup>31</sup> Undeniably, the quality of staff

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<sup>30</sup> Jones and Hayes, "How Valid Are Surveys of Teacher Needs?" pp. 390-92.

<sup>31</sup> Mary Dunn Siedow, David M. Memory, and Page S. Bristow, Inservice Education for Content Area Teachers (Newark, Delaware: International Reading Association, 1985), p. 27.

development needed to be improved, and according to Jones, Hayes, and Memory, it should begin with the supervisors' assessment of teacher needs.

The Delphi technique was used to gather the data for this study. It was an approach intended to elicit and refine the opinions of a group of people. The panel of experts for this study consisted of the vocational supervisors from the urban areas of Virginia with a population of 50,000 or more.

Twenty-five urban areas of Virginia were included in this study. Each had a population of 50,000 or more as of July 1, 1983, as determined by the U. S. Department of Commerce, Bureau of the Census. All of the vocational supervisors from these urban areas were asked to serve on the panel. The supervisors represented agricultural education, business education, health occupations education, home economics education, marketing education, technology education, and trade and industrial education. In the areas where there were no vocational supervisors, the director of vocational education was asked to serve on the panel.

The data generated by this study were expected to be quite usable for assisting in the determination of staff development needs of urban vocational teachers. The State Department of Education in Virginia could use it for planning staff development activities. All of the service areas of vocational education were expected to benefit from

the results of this study. Local school systems throughout the state could use this information for teachers' in-service days. Colleges and universities, which provide staff development for teachers, could use the data for planning programs and activities. They could also incorporate the information in the pre-service curriculum for teachers.

### Definition of Terms

In-Service Education. Any planned program of learning opportunities afforded staff members of schools, colleges, or other educational institutions for purposes of improving the performance of the individual in already assigned positions.<sup>3 2</sup>

Staff Development. This term was used interchangeably with in-service education in this dissertation. However, staff development was viewed by some to have two aspects: staffing and training. Staffing meant assigning the best qualified person to a job, and training meant all of the planned activities for the instructional improvement of professional staff members.

Supervisor or Specialist Supervisor. This person had depth of preparation and experience in a particular subject area. He or she knew the subject area thoroughly, as well as the modern techniques and latest trends in

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<sup>3 2</sup>Harris, Improving Staff Performance Through In-Service Education, p. 21.

teaching.

Urban. The United States Bureau of the Census defined urban to be any settlement of 2,500 or more. Approximately 75 percent of the total United States population lived in urban areas.<sup>33</sup> For this study, the urban areas included have a population of 50,000 or more.

### Summary and Overview

The purpose of this study was to determine staff development needs of urban vocational teachers as perceived by their supervisors. The problem was addressed by answering the research goals of:

1. What, in the opinion of the vocational supervisors, was the most pressing staff development need of vocational teachers in urban areas?
2. What, in the opinion of the vocational supervisors, were additional staff development needs of vocational teachers in urban areas?
3. How did the supervisors believe their perceptions would differ from those of the teachers they supervise?

The Delphi technique was used in an attempt to reach a consensus of staff development needs of vocational teachers in urban areas. The information was organized in the remaining chapters of this dissertation as follows:

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<sup>33</sup>Alan S. Berger, The City (Dubuque, Iowa: Wm. C. Brown Company, 1978), pp. 191-95.



Chapter II presents a review of the literature relevant to staff development and vocational education within the concerns of this research.

Chapter III describes the methodology employed in gathering and analyzing the data for this study. A description of the population and procedures for conducting the Delphi study were included.

Chapter IV reports the data that were gathered for this study. The findings were presented and summarized.

Chapter V presents conclusions from an analysis of the data and drew recommendations based on the data gathered during this study.

## CHAPTER II

### REVIEW OF THE LITERATURE

Staff development was a subject of great interest as evidenced by the myriad of books and articles written about it. An Educational Resources Information Clearinghouse (ERIC) computer search conducted in 1980 resulted in the identification of 9,183 published and unpublished papers, studies, and articles which had the terms "in-service education," "staff development," or "staff improvement" in either their titles or descriptors. Between 1976 and September 1981, 6,151 articles alone appeared about those related topics.<sup>3 4</sup>

The review of the literature for this study focused on topics related to staff development. These included (1) definitions of staff development, (2) purposes of staff development, (3) history of staff development, (4) need for staff development, (5) issues of staff development, (6) teacher attitudes toward staff development, (7) supervisors' roles in staff development, and (8) the role of staff development in urban vocational education.

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<sup>3 4</sup>Donald C. Orlich, "Some Considerations for Effective In-Service Education," The Clearing House 56 (January 1983):197.

Defining Staff Development/In-Service Education

Although definitions of staff development and in-service education were included in the first chapter of this dissertation, they were not universally accepted definitions of these terms. There was no single agreed-upon definition of staff development. Numerous meanings of both staff development and in-service education have appeared throughout the literature.

Kimball Wiles and John T. Lovell described continuing staff development as an attempt to increase the competency of the present staff through courses, workshops, conferences, study groups, interschool visitations, lectures, television, and staff improvement days. They stated that programs of curriculum improvement also constituted in-service training because as teachers worked on identifying inadequacies in their programs or devising operational procedures, they were growing in both insight and teaching skill.<sup>35</sup>

Because every facet of a good teacher's knowledge, skills, personality, and interest were of professional value, each experience during his or her career could have been described as in-service training. Therefore, in-service training could include everything that happened to a teacher from the first day of teaching to the last day of

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<sup>35</sup>Kimball Wiles and John T. Lovell, Supervision for Better Schools, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975), pp. 160, 218.

teaching if it contributed either directly or indirectly to the way in which professional duties were executed. In this regard, the Department of Education and Science in the United Kingdom (1970) defined in-service training as "Any activity which a teacher undertakes, after he has begun to teach, which is concerned with his professional work."<sup>36</sup>

Because of administrative convenience, narrower definitions have often been adopted. In 1965, the United States Department of Health, Education, and Welfare described in-service training as:

A program of systematised activities promoted or directed by the school system, or approved by the school system, that contributes to the professional or occupational growth and competence of staff members during the time of their service to the school system.<sup>37</sup>

According to Ben M. Harris, in-service education was to the school operation what good eating habits and a balanced diet were to human growth and vitality. Without substantial continuing growth in competence in faculty serving in elementary and secondary schools, the entire concept of accountability had little meaning. The heavy reliance upon people to perform nearly all tasks required for building and maintaining quality educational programs was a reality that could not be treated lightly. It was this reality that gave in-service education both its

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<sup>36</sup>Euan S. Henderson, The Evaluation of In-Service Teacher Training, (London: Croom Helm, Ltd., 1978), p. 11.

<sup>37</sup>Ibid.

importance and its urgency. Harris believed that in-service education was the most important developmental task to which the schools and colleges of the nation must attend in the 1980s.<sup>38</sup>

From another viewpoint, in-service education was seen by Leonard C. Burrello and Tim Orbaugh as a social investment. They believed that well-conceived and well-executed staff development provided developmental capital that increased faculty contributions and productivity over time. They said that, as an organizational tool, in-service education increased the relevance and effectiveness of education for all students.<sup>39</sup>

Sylvia Auton, Linton Deck, and Albert Edgemon surveyed the secondary school teachers in the Fairfax County (Virginia) Public Schools to determine their preferences concerning staff development. According to them, staff development, in-service education, professional improvement, skill enhancement--all were labels for a variety of activities and programs that schools and school systems undertook as means of organizational improvement.<sup>40</sup>

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<sup>38</sup> Harris, Improving Staff Performance Through In-Service Education, pp. 13-15.

<sup>39</sup> Leonard C. Burrello and Tim Orbaugh, "Reducing the Discrepancy Between the Known and the Unknown in In-Service Education," Phi Delta Kappan 63 (February 1982):386.

<sup>40</sup> Sylvia Auton, Linton Deck, and Albert Edgemon, "Staff Development for Secondary School Teachers," NASSP Bulletin 66 (September 1982):116.

As has been illustrated, staff development was a slippery concept, according to Leonard J. Solo. Because everything in a school was interrelated and connected, like the threads of a woven fabric, he argued that everything that staff, principals, parents, and students did could be considered occasions for teachers' continued learning for their staff development. The school had to become a place for the personal and professional growth of the adults who worked there in order for them to achieve their primary purpose of helping students learn.<sup>41</sup>

#### Purposes of Staff Development

Based on Kenneth Howey's review of the literature, staff development had six purposes: (1) continuing pedagogical development, (2) continuing understanding and discovery of self, (3) continuing cognitive development, (4) continuing theoretical development, (5) continuing professional development, and (6) continuing career development.<sup>42</sup> An explanation of these follows.

Pedagogical Development. Pedagogical development activities focused on teaching in specific curriculum areas, on generic instructional tactics such as those concerned with classroom management or presentation skills, and on

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<sup>41</sup>Leonard J. Solo, "School Site Staff Development," Education and Urban Society 17 (May 1985):333-34.

<sup>42</sup>Kenneth R. Howey, "Six Major Functions of Staff Development: An Expanded Imperative," Journal of Teacher Education 36 (January/February 1985):59.

organizational functioning that involved groups of diverse teachers. Some examples of key pedagogical functions included teacher diagnosis and evaluation, instructional decision making and planning, classroom organization and management, and the effects of differential teacher expectations on pupils. Howey acknowledged the obvious importance and centrality of improved classroom practice and suggested improved pedagogy as the ultimate priority for staff development.<sup>43</sup>

Understanding and Discovery of Self. Teachers needed to be as expert as possible in understanding human development. Yet, adult development received minimal attention in programs of staff development and was rarely used as a means of better self-understanding. More attention should have been given to understanding oneself because of the highly interpersonal nature of teaching and the tendency to view teachers instrumentally rather than personally. This was also important because, over time, teachers experienced a growing physiological contrast between themselves and their students. Indeed, teaching may very well have exaggerated and exacerbated problems associated with aging. A better understanding of the universality of these changes and how to accommodate them would have been especially helpful to many teachers.<sup>44</sup>

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<sup>43</sup> Ibid.

<sup>44</sup> Ibid., pp. 59-60.

Cognitive Development. Research had shown that differences in cognitive and interpersonal development affected the way teachers learned in staff development activities and interacted with students in their classrooms. It was found that teachers with high conceptual levels were more reflective in their teaching styles and more helpful to students in evaluating information and generating hypotheses than teachers with low conceptual levels. As a result, staff development interventions were beginning to be tested and designed to promote cognitive development in teachers. These staff development schemes were evolving from prior studies of the use of differentiated curricula with young children and adolescents having different stage characteristics. Staff development designs needed to take into account developmental differences and to promote complex functioning and interpersonal sensitivity, when possible and appropriate.<sup>45</sup>

Theoretical Development. Howey believed that if teachers could clarify and systematize their beliefs, they would become more adept in interpreting classroom behavior and more capable of devising strategies. Studies of teacher planning for instruction indicated that they selected activities largely to keep students engaged, not to test beliefs or examine options. Yet, theory development or theory testing as a goal of staff development was rare.

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<sup>45</sup>Ibid., p. 60



The emphasis was much more on the "how" of pedagogy than the "when," "why," or "what if." This nonreflective, nonexploratory posture of teachers could have contributed to questionable practice and certainly did contribute to the prevalent pedestrian image of teachers.<sup>46</sup>

Professional Development. Professionals have been characterized by the ability to make informed judgments and to perform important tasks in complex environments. A knowledge base was essential to professional status because it determined both the scope and nature of professional preparation and the competence to perform professional functions. Obviously, not all members of a profession contribute directly to the professional knowledge base. Generally, certain members of a profession engaged in research and development to expand and refine knowledge, and there was no major difference in status between the producers and consumers of research and development within the profession. Teachers, however, rarely engaged in research and development that contributed to their knowledge base. Thus, there was a need for the research function to become more important in the continuing development of teachers.<sup>47</sup>

Career Development. The careers of many teachers could be enhanced in two fundamental ways. Differentiated, realistic, and complementary roles could be created for

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<sup>46</sup> Ibid., pp 60-61.

<sup>47</sup> Ibid., p. 61.

elementary teachers. More viable hierarchical leadership roles that would allow teachers to maintain some instructional responsibilities could be developed for all teachers. The belief was that the future would place even greater demands upon schools and teachers. One response was to move toward more differentiated and collaborative teacher roles. Such a change had obvious implications for the initial and continuing preparation of teachers. As part of the growing trend toward the placement of senior teachers in leadership roles, staff development programs should offer specialized training in leadership roles. Such training should include inquiry into what was known about how teachers learned and developed, inquiry into how schools and classroom affected the learning and development of teachers, and inquiry into what was known about the organization, management, and delivery of in-service teacher education.<sup>48</sup>

#### History of Staff Development

Staff development for school teachers has a long history in American education. Teacher institutes can be traced back to the last century, and the taking of courses for professional improvement was a way of life for many classroom teachers.<sup>49</sup> However, instead of a history characterized by steady progress based on advances in

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<sup>48</sup>Ibid., pp. 61-62.

<sup>49</sup>Louis J. Rubin, ed., The In-Service Education of Teachers (Boston: Allyn and Bacon, Inc., 1978), p. 58.

knowledge and understanding, it is one of disorder, conflict, and criticism. Almost every major work on the topic of staff development has emphasized the failings of these early efforts.<sup>50</sup>

During the mid-nineteenth century, teachers were employed who had little or no preparation. They were given much advice by influential laymen in the community about how to maintain order in the school, but most laymen did not consider themselves sufficiently competent to advise on how to teach children reading, writing, and arithmetic. Teachers had to learn these matters in other ways. Typically, teachers depended upon institutes of two or three days' duration and courses in the evening to furnish in-service education. The purpose of these institutes was largely remedial.<sup>51</sup>

A century ago, the curriculum and teaching were viewed as relatively stable. However, this did not mean that in-service education was offered only to those beginning their teaching careers. The ideal teacher at that time was thought to be one who was always gaining new understanding of the old content.<sup>52</sup>

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<sup>50</sup>Thomas R. Guskey, "Staff Development and the Process of Teacher Change," Educational Researcher 15 (May 1986):5.

<sup>51</sup>Rubin, Improving In-Service Education: Proposals and Procedures for Change, pp. 5-6.

<sup>52</sup>Ibid., p. 7.

The Land Grant College Act of 1862 was the forerunner of the idea that American educational institutions should be expected to respond to the realities of social change. These new land grant colleges faced difficult problems in meeting their mandate, but their success gave rise to the development of the doctrine that education must and can change to meet the changing needs of a modern society.<sup>53</sup>

Between 1880 and World War I, the summer courses in the normal schools were strategically the most important agencies of in-service education in America. These summer programs in the normal schools were more cosmopolitan than the county teachers' institutes, and they brought a wider range of specialists with more training. However, they still gave primary emphasis to the acquisition of knowledge and skills thought to be important in teaching. The traditional notion of content persisted.<sup>54</sup>

At this time American schools were experiencing new problems as a result of the heavy immigration into the United States from Europe. Children who spoke little or no English came to school with attitudes, habits, and values very different than those which had been taken for granted by the schools in the past. These changes forced many teachers to reexamine the assumptions upon which their

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<sup>53</sup>Ibid., pp. 7-8.

<sup>54</sup>Ibid., p. 8.

practices had been based, and it stimulated the addition of new topics for consideration during in-service programs. The in-service education programs of institutes and summer sessions were the chief means for helping teachers to deal with the changes in society.<sup>55</sup>

After World War I and until the Great Depression of the 1930s, in-service education was greatly affected by the establishment of quantitative standards for teaching certificates. At that time, educators believed that the quality of teaching in the American public schools could be improved by requiring all teachers to have a bachelor's degree. Since over half of the teachers had only two years of college, a tremendous investment in time of in-service courses was required that would count on the credentials toward the bachelor's degree. Hence, during this period, in-service programs were not aimed at helping teachers solve new problems, but rather at filling gaps in college degree requirements.<sup>56</sup>

The Great Depression brought new problems and added new tasks for in-service education. Young people could no longer drop out of school and get jobs because of the high rate of unemployment, and yet they found the high school curriculum irrelevant to their purposes and out of touch with contemporary society. This lack of interest in school

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<sup>55</sup>Ibid., pp. 8-10.

<sup>56</sup>Ibid., p. 10.

and low morale prompted educational leaders to reexamine the high school curriculum and procedures and to try out new ideas. By 1939, colleges of teacher education became involved in pre-service and in-service education which dealt with new educational programs of the schools designed to reach all high school students. The American Council on Education established the Commission on Teacher Education and helped a selected group of colleges and universities to develop new programs of teacher education and new ways of working with schools and teachers.<sup>57</sup>

The differentiating characteristics of in-service education during this period arose from the concern of developing curricula and educational procedures that would better serve youth under the conditions of the times. These activities were exciting and afforded new insights into the role of education in the development of youth and in the maintenance and improvement of modern society.<sup>58</sup>

World War II, which was followed by a sharp increase in the birth rate, created conditions in which there was an acute shortage of teachers. In-service education during this period responded by offering courses that would enable teachers to fill the gaps in meeting certification requirements. From the early sixties to the seventies, in-service education or staff development focused on solving the

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<sup>57</sup> Ibid., pp. 10-11.

<sup>58</sup> Ibid., pp. 11-12.

problems of desegregation and the efforts to educate disadvantaged children.<sup>59</sup>

One of the outstanding efforts in recent history on behalf of in-service training was the Education Professions Development Act (EDPA) of 1964. This seemed to many to represent a commitment at the national level to support personnel development, to reduce fragmentation of efforts, and to view the improvement of education process as one of building staff capabilities at all levels in all programs. Unfortunately, neither the legislative nor the executive branches of government supported this legislation. This was due, in part, to a reduction of funds coupled with a steady retreat from bold plans such as this one. The EPDA expired several years later.<sup>60</sup>

In more recent years, advances in research on effective schools and the variables that contributed to instructional effectiveness have increased attention on the need for high quality staff development programs. However, relatively few such programs were forthcoming.<sup>61</sup>

According to Dr. William W. Wilen and Dr. Richard Kindsvatter, who were both conducting field research, staff development had held second-class status as a concern of

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<sup>59</sup> Ibid., p. 13.

<sup>60</sup> Harris, Improving Staff Performance Through In-Service Education, p. 31.

<sup>61</sup> Guskey, "Staff Development and the Process of Teacher Change," p. 5.

educators. It was relegated to this status by other more pressing considerations, such as preparing enough teachers to teach a burgeoning student population, launching widespread curriculum reform, dealing with growing militance and political awareness within the profession, and attempting to solve the problems of urban education, to cite just a few. As conditions of society and education changed, there also followed a change in the awareness and priorities of educators. A surge of interest in in-service education subsequently occurred.<sup>62</sup>

In 1983, Kenneth R. Howey and J. C. Vaughan described the current practice of staff development as:

. . .a potentially well-supported (in terms of resources) enterprise that is fragmented, not frequently engaged in on a continuing basis by practitioners, not regarded very highly as it is practiced, and rarely assessed in terms of teacher behavior and student learning outcomes.<sup>63</sup>

The mid-1980s was a era of reform in American education. Curriculum change and implementation, teacher quality and effectiveness, accountability, and social responsiveness and responsibility were some of the key terms frequently used by both professionals and lay persons. An increasingly multiethnic, multilingual, and globally

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<sup>62</sup>William W. Wilen and Richard Kindsvatter, "Implications of Research for Effective In-Service Education," The Clearing House 51 (April 1978):392.

<sup>63</sup>G. A. Griffin, ed., Staff Development. Eighty-second Yearbook of the National Society for the Study of Education, (Chicago: University of Chicago Press, 1983), p. 97.



interdependent society was placing demands on the educational infrastructure at the same time as the information age was replacing the industrial age as a metaphor for the economic future. The capacity of the educational establishment to respond to these forces would determine in large part the quality of life in the United States as the 21st century unfolded.

In light of these conditions, Nancy Rennau Tumposky examined staff development via in-service education in relation to curriculum implementation. According to Tumposky, curriculum implementation often failed because those providing staff development, at the behest of curriculum policy-makers, saw it primarily as a technical service, rather than as a learning experience for all the participants. What seemed rational from the curriculum developer's point of view was not necessarily so from the teacher's point of view. Providers of staff development who were interested in efficiency may have elected to concentrate on skills training through demonstration and practice, without giving adequate attention to the conceptual underpinnings of a given innovation. Such emphasis was especially likely when teachers were perceived as essentially malleable and uniform in teaching orientation.<sup>64</sup>

The existing state of affairs strongly underscored

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<sup>64</sup>Nancy Rennau Tumposky, "Staff Development and Curriculum Implementation," The Educational Forum 51 (Winter 1987):186-89.

the need for improved staff development. The list of problems requiring solutions was impressive. There has been a profound lack of continuity between pre-service and in-service learning. Many current practices suffered from a conspicuous lack of precision. Very little has been done in the way of anticipating the kinds of teachers that will be required as school and societal change follow their inexorable course.<sup>65</sup>

The historical legacy of in-service education has been characterized by randomness and fragmentation, by programs that deferred more to expediency than to need, and by methodologies that have been largely atheoretical. It was unfair to imply that all in-service education was defective, or that excellent teaching did not, in many instances, exist. It was legitimate to note, however, that the machinery for sustaining the professional development of educators was in need of an overhaul.<sup>66</sup>

#### Need for Staff Development

Margaret G. Labat believed staff development for teachers was essential if schools were to keep pace with the rapid changes taking place in our society and thus maintain

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<sup>65</sup> Rubin, The In-Service Education of Teachers, p. 8.

<sup>66</sup> Ibid., pp. 8-9.

themselves as contributing institutions.<sup>67</sup> The majority of those who completed teacher education programs were teachers in name alone. The license to teach provided through a process of credentialing gave no assurance of expertise, nor should that have been our expectation, for expertise was within the domain of experience rather than the novice.<sup>68</sup>

Educators used the granting of a bachelor's degree as the decision point for including or excluding candidates from the teaching profession. Essentially, educators were affirming that those who entered the profession had developed all attributes and skills necessary to function as successful teachers. In most other professions, the neophyte was not seen as having the same skills, knowledge, or abilities as the master. While the novice may have had to meet certain criteria for admittance, there was no expectation that upon entering the profession he or she had acquired all attributes needed to function successfully.<sup>69</sup>

Michael D. Davis and Esther Zaret believed beginning teachers should be viewed the way other beginning

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<sup>67</sup> Charles W. Beegle and Roy A. Edlefelt, eds., Staff Development: Staff Liberation (Washington, D.C.: Association for Supervision and Curriculum Development, 1977), p. 15.

<sup>68</sup> Edward L. Miller, "Teacher Education: Pre-Service and In-Service," The Clearing House 56 (1983):365.

<sup>69</sup> Michael D. Davis and Esther Zaret, "Needed in Teacher Education: A Developmental Model for Evaluation of Teachers, Preservice to Inservice," Journal of Teacher Education 35 (September-October 1984):22.

professionals were viewed. Teachers should have been on a continuum of professional development that spanned a period of years. Beginning teachers should have been expected to possess a wide variety of skills, but they should not have been expected to function as master teachers. A systematic program consisting of support, guidance, and instruction was needed to foster true professional growth.<sup>70</sup>

Preparation for a teaching career included spending about four years at a training institution where the prospective teacher received a sampling of accumulated knowledge, some ideas about the theory of education, and a few prescriptions regarding the art and science of teaching. Even if this preparation were adequate, the training became antiquated in the space of a very short time. Obsolescence commenced the day after the teacher concluded formal training.<sup>71</sup>

In addition to the lack of adequate preparation at the undergraduate level and obsolescence of knowledge, there were other reasons for supporting a sustained program of staff development or in-service education. There was much to suggest that teachers were more responsive to professional training after they were employed rather than before.<sup>72</sup>

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<sup>70</sup> Ibid.

<sup>71</sup> Rubin, The In-Service Education of Teachers, p. 5.

<sup>72</sup> Ibid., pp. 5-6.

### Issues of Staff Development

In the 1980s, increasing numbers of staff development positions were being funded, and more staff development requirements were being written into law. Many critical issues arose as staff development programs became mature and gained more attention. Among these were teachers' and administrators' perceptions of the primary purpose of staff development, training of staff developers, and evaluation of staff development programs.<sup>73</sup>

Teachers' and administrators' perceptions of the primary purpose of staff development were affected by changing certification requirements, newly instituted teacher evaluation programs, implementation of career ladder plans, and various advancements in programs and technology. Since many states required prospective teachers to pass a written test before receiving full certification, many staff development programs provided remedial activities that assisted participants in the development of minimal skill competencies. Career ladders were being implemented in several locations for the purpose of rewarding quality performance and providing incentives for the continued growth and development of all teachers. The advances in the use of instructional technology was another factor influencing staff development. The challenge was to keep

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<sup>73</sup> Carlene Murphy and Joseph A. Murphy, "Emerging Issues in Staff Development," Journal of Staff Development 7 (Spring 1986):92.

teachers and administrators abreast of newly developed equipment, materials, and techniques.<sup>74</sup>

A second issue dealt with training staff developers. Many practitioners were in their third, fourth, or fifth career position, coming to staff development from a variety of other responsibilities. Unfortunately, it appeared that most staff developers were self-taught. In many states, the credential required for a director of staff development was no different from that required to be a principal, a curriculum coordinator, or an instructional supervisor.<sup>75</sup>

The third issue addressed the evaluation of staff development programs. There were many questions concerning the basis for evaluation of staff development, such as content and processes, changes in teacher and administrator behavior, and pupil growth and achievement. Also, the various methods of evaluation had to be considered.<sup>76</sup>

Jackson F. Lee and K. Wayne Pruitt believed that if staff development efforts were to fulfill the recognized need for improved training, planners must go beyond the traditional one day "shot-in-the arm" approach to a more systematic, long-term approach which emphasized individualized teacher growth and development. They further

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<sup>74</sup>Ibid., pp. 92-93.

<sup>75</sup>Ibid., pp. 93-94.

<sup>76</sup>Ibid., p. 95.

emphasized that any individualized approach to staff development should also recognize that most teachers undergo stages of professional maturation. James R. Spivey's Model of Professional Growth, (table 1), which outlines these stages, showed how individualized programs of staff development could be structured for teachers.<sup>77</sup>

In the first stage of this model, teachers were characterized as being idealistic about the goals and successes of education. These teachers were usually young, but those who entered the profession later in life could also be operating in this stage. These teachers wanted to learn survival skills. They tended to compensate for their lack of experience with enthusiasm.<sup>78</sup>

Stage II teachers were acutely aware of the low social status and monetary deficiencies of their chosen profession. These teachers compensated for their limited status by expanding their horizons within and/or outside of teaching. They also sought to increase professional competence through increased academic preparation.<sup>79</sup>

The teachers who were in the third stage were more secure in their feelings of personal worth. These feelings often stemmed from a backlog of success and positive

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<sup>77</sup>Jackson F. Lee and K. Wayne Pruitt, "Staff Development: An Individualized Developmental Model," Kappa Delta Pi Record 19 (Winter 1983):51.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid.

TABLE 1

SPIVEY MODEL OF PROFESSIONAL GROWTH<sup>80</sup>

Characteristics	Stages of Development		
	I	II	III
Age of Maturity	Youth	Mature	Not An Important Factor
Primary source of teaching satisfaction	Performing for students	Study of and promoting of academic discipline	Self-pride in a job well done as confirmed by students and peers
Major asset as reported by self	Rapport with students	Knowledge of his particular academic discipline	Ability to design learning experiences which pay off for a wide range of student abilities
Most important learning outcomes	Emphasis on the affective domain	Emphasis on the cognitive domain	Higher order cognitive and affective outcomes
How colleagues see him	Idealist, naive, irresponsible, vocal	Knowledgeable, responsible, likeable, solid citizen	Professional, self-confident, solid citizen

<sup>80</sup> Ibid., p. 52.



feedback from peers, students, and community. They were more able to go beyond teaching just the basic skills and content to stressing applications and affective outcomes.<sup>81</sup>

Lee and Pruitt offered two caveats to this three-stage model. Age and the number of years of experience could be positively related to transition from one stage to another, but the relationship was not necessarily causative. Also, this model was appropriate for those who developed more or less "normally." Although most teachers who failed to grow found teaching so unrewarding that a change in career resulted, some did remain in teaching and resigned themselves to mere survival. It was questionable that staff development efforts would have a significant impact on many of these individuals.<sup>82</sup>

Using Spivey's Model of Professional Growth, Lee and Pruitt developed a model which showed a priority for experiences at each stage of development (table 2). The number in each cell represented the relative emphasis for a given experience at a given stage--one represented the highest priority and three indicated the lowest priority.<sup>83</sup>

At the first stage of their model, teachers were most interested in "learning the ropes and rules." Instructional methods and classroom management skills were vitally

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<sup>81</sup> Ibid., p. 51.

<sup>82</sup> Ibid., pp. 51-52.

<sup>83</sup> Ibid., p. 52.

		Stages of Development		
		Youth	Mature	Not An Important Factor
		I	II	III
Essential Experiences	Personal Development	2	1	2
	Theory and Content	1	2 or 3	3
	Skills and Application	1	2	3

<sup>84</sup> Ibid., p. 53.

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Teachers in the second stage should have been given more opportunity to view teaching as a career and should have been encouraged to realize the importance of personal and academic growth. After the enthusiasm had diminished, opportunity to share the frustrations and disillusionment was essential if teachers were to remain in a healthy developmental pattern. These teachers should have been given an opportunity to explore a variety of new teaching techniques which would improve instruction. Also at this stage, the teachers may have wished to begin again--picking up where they left off in undergraduate school--to explore theory and content.<sup>86</sup>

Stage III teachers and those headed for this stage felt like professionals and took pride in their accomplishments. These teachers sought growth through increased subject matter competence and peer status. It was expected that personal growth would have continued right up to retirement, but it did not need to be pursued with the same vigor as before. One of the possibilities for personal growth was in providing teachers in the first two stages with supportive assistance.<sup>87</sup>

At each stage of development, teachers should have had a core of activities available which would have increased the possibility of continued growth. It was beyond

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<sup>86</sup> Ibid.

<sup>87</sup> Ibid., pp. 52-53.

the possibility and desirability of most staff development programs to designate teachers as belonging to one stage or another and then prescribing appropriate activities. These stages did suggest the need for a variety of experiences which would have provided each teacher with some activity that was significant. This model showed that personal development would have been offered on a continuing basis and would have been recommended to all participants.<sup>88</sup>

The Lee and Pruitt Model coincided with various proposals for professional development. For example, the National Staff Development Council offered the following guidelines for establishing an effective staff development program:

1. An effective staff development program "supports each individual's personal self-improvement efforts within the context of organizational goal-setting and appraisal."
2. An effective staff development program "utilizes superior teachers with specific skills to work with peers."
3. An effective staff development program "builds on the idea that substantial change usually results from involvement with a new idea or skill over a long enough period of time to insure relative permanence."
4. An effective staff development program "models

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<sup>88</sup> Ibid.

the kind of behavior which is desired as a result of participation in the activity."<sup>89</sup>

### Teacher Attitudes Toward Staff Development

A study of the perceived staff development needs of public school teachers and administrators was conducted by Robert F. Schambier. This study examined the perceptions of 400 teachers and 400 administrators across the state of New Hampshire. The purpose of this study was to examine whether differences existed between teachers' and administrators' perceptions of the staff development program in their school district. The two respondent groups' perceptions of present versus desired practices were assessed by using a specially designed Likert-type instrument. Data from this instrument allowed the researcher to investigate four general aspects of staff development: program goals, needs assessment procedures, anticipated outcomes, and administrative procedures.<sup>90</sup>

This study revealed that teachers and administrators in New Hampshire shared similar perceptions about desired practice. Both groups were largely in agreement with the conceptual frameworks of their district plans. Both groups also agreed that the practices in their

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<sup>89</sup>National Staff Development Council, The Developer (Oxford, Ohio: July, 1987), pp. 3-4.

<sup>90</sup>Robert F. Schambier, "Staff Development Revisited: Beyond the Carrot or the Stick," American Secondary Education 15 (1986):15.

respective districts fell short of expectations, with teachers generally more critical than administrators. Among administrators, the directors and secondary principals or assistant principals showed themselves the least satisfied subgroups with existing needs assessment practices. The administrators' perceptions pertained directly to district attempts to fulfill their own in-service needs instead of those of their staffs.<sup>91</sup>

The most critical subgroup of current practices were secondary teachers. Their perceived dissatisfactions centered on accountability, evaluation procedures, and the ability of district-level staff development programs to produce positive change. A tally of open-question responses to the survey revealed that some respondents were uncertain as to their district's level of commitment to staff development. This pointed toward a presumption that not all districts within the state of New Hampshire were equally committed to professional growth.<sup>92</sup>

This survey also revealed that both teachers and administrators disagreed overall with existing and desired practices in staff development administrative procedures. Specifically, these procedures included approval of individual activities, assessment of outcomes, and district

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<sup>91</sup>Ibid., pp. 15-16.

<sup>92</sup>Ibid., p. 16.

validation of professional growth.<sup>93</sup>

The perceptions of the respondents suggested that practices in many local programs in the state of New Hampshire did not measure up to expectations. Many staff development efforts were perceived as too elemental for a large number of experienced personnel. Some programs, lacking follow-up activities, contributed little toward strengthening educators for the reality of the workplace. Respondents felt that districts did not sufficiently motivate personnel to practice what they discovered through staff development. Consequently, their sense of achievement in the long run was not commensurate with efforts invested in training.<sup>94</sup>

Other findings suggested that planners should consider real educational needs versus client interests. Clients generally responded best to conditions that allowed them the greatest freedom of choice, as in the staff development components of their programs. They were less inclined to agree with conditions that favored district needs, as in in-service activities. In striving to improve instructional and administrative performance, staff development planners should attempt to distinguish more clearly between needs and client interests.<sup>95</sup>

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<sup>93</sup> Ibid.

<sup>94</sup> Ibid.

<sup>95</sup> Ibid.

Jack L. Brimm and Daniel J. Tollett conducted a statewide research study of in-service education in Tennessee. They identified the different types of in-service education programs throughout the state and ascertained teacher attitudes toward these in-service education programs. Their discussion focused upon the latter area of concern.<sup>96</sup>

An overwhelming majority of teachers preferred some sort of individualized in-service education program. Seventy-six percent of the respondents felt that attendance at system-wide in-service activities was desirable and should be required of all teachers. Classroom teachers felt strongly (90 percent) that one of the primary purposes of in-service programs should be to help the teacher upgrade his or her classroom performance. Sixty-three percent of the teachers agreed with the statement that, "Most teachers do not like to attend in-service activities."<sup>97</sup>

This study substantiated the notion that in-service programs were poorly planned, inadequately executed, and lacking in proper evaluative procedures. Too often, in-service programs suffered more from a lack of direction than from a lack of financial support or time for execution. Seldom was our understanding of learning applied to

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<sup>96</sup>Jack L. Brimm and Daniel J. Tollett, "How Do Teachers Feel About In-Service Education?" Educational Leadership 31 (March 1974):522-23.

<sup>97</sup>Ibid., pp. 523-24.



in-service education. Those who planned in-service education programs continued to rely on traditional activities, such as faculty meetings, courses at the university, system-wide meetings, and regional and state-wide meetings. Teachers seriously questioned the relationship between these activities and the improvement of classroom performance.<sup>98</sup>

The 1985 Educator Opinion Poll which was conducted by Educational Research Service was directed to public school teachers. The survey instrument included questions eliciting the opinions of teachers, in addition to items about their status and experiences. Educational Research Service randomly selected by computer one of every 700 teachers from the total of 2.1 million public school teachers grades K-12 in the United States. Forty-five percent, or 1,346 teachers responded to the survey. One of the questions the Educator Opinion Poll asked teachers was about the quality of professional development opportunities currently available to them, as well as soliciting the teachers' assessment of areas in which additional training would be helpful.<sup>99</sup>

Teachers were asked, "To what extent have recent professional development opportunities available to you in your school or school district helped you to improve your

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<sup>98</sup> Ibid., pp. 524-25.

<sup>99</sup> Nancy Protheroe, Educator Opinion Poll (Arlington, Virginia: Educational Research Service, Inc., 1985), pp. 1-3.

teaching skills?" Approximately two-thirds of the teachers expressed mixed emotions about the value of professional development opportunities available in their school districts. An additional 14.2 percent considered them to be "right on target," while 12.3 percent regarded them as a waste of time and effort. Teachers who were undecided about their career plans were slightly more negative than the career teachers about career development opportunities, although the percentage judging them to be a waste of time and effort was low (19.5 percent).<sup>100</sup>

Teachers were asked which areas best characterized their personal need for professional development opportunities. Ranked first on the list of needed skills was "use of computers" which was judged to be a high need area by 46.7 percent of the respondents. Ranked as the next three areas were "helping the slow learner" (24.6 percent), "helping the gifted learner" (24.4 percent), and "influencing school and district policy" (24.2 percent).<sup>101</sup> It should be noted again that these were the expressed needs of a random sample of all teachers grades K-12, not specific subject areas such as vocational education.

#### Role of Supervisors in Staff Development

The need to provide meaningful professional

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<sup>100</sup> Ibid., p.50.

<sup>101</sup> Ibid., p. 51.

development for teachers in schools was one of the most pressing and persistent problems confronting educational supervisors. Some educators believed the emphasis needed to be moved away from formal activities, or those activities that focused only obliquely on current practice and were general and theoretical in scope, to functional activities which related directly to the specific and immediate needs of teachers in their involvement in classroom and school activities. However, the success of the functional activities, which aimed to individualize the approach to in-service education, rested upon recognition of the fact that teachers were generally not skilled in the technique of guided self-analysis. Considerable difficulty was experienced by teachers in attempting to isolate worthwhile problem areas in their own classroom teaching which required further analysis and attention.<sup>102</sup>

Most specialists in supervision agreed that staff development or in-service education was a function of supervision. As an in-service leader, the supervisor's job was to jar teachers' complacency and create dissatisfactions with the status quo. It was also the supervisor's job to stimulate teachers to want to find new and better ways of accomplishing their instructional duties and improving the curriculum. The supervisor had the

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<sup>102</sup>W. John Smyth, "Clinical Supervision: A Reality-Centered Mode of Inservice Education," Educational Technology 20 (March 1980):31.

responsibility for identifying teachers' in-service needs through surveys, requests from teachers, and observation. The supervisor planned, set into operation, and evaluated in-service programs. The supervisor developed the master plan for staff development, made its components known, and facilitated its use. The supervisor recorded the teachers' participation and success in in-service activities.<sup>103</sup>

School systems varied widely in respect to both the quantity and quality of their in-service programs. Some in-service programs operated on a casual, informal, trouble-shooting basis while others offered highly structured, planned programs in addition to the informal unstructured type. Factors that appeared to make the difference in respect to quantity and quality of in-service opportunities were motivational level of the teachers, leadership from administrators and supervisors, and financial resources. Where teachers accepted the need and desirability of continuing their professional education, in-service programs thrived. Where administrators and supervisors took an active role in promoting and planning in-service opportunities, and where funds were available, teacher participation in in-service training was higher.<sup>104</sup>

Further supporting the administrators' and

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<sup>103</sup> Peter F. Oliva, Supervision for Today's Schools (New York: Longman, Inc., 1984), pp. 351-52.

<sup>104</sup> Ibid., p. 357.

supervisors' roles in in-service education, John N. Mangieri and Richard E. Kemper suggested that an in-service program would be successful only if appropriate, responsible personnel were properly involved in the planning and implementation of such programs. They believed administrators must play a central role in in-service programs if they were to be successful.<sup>105</sup>

It appeared, at least on the surface, that involving school administrators in in-service programs would be logical and desirable. Many teachers, however, were not enthusiastic about including administrators in any substantial way in the planning and implementation of a program designed to improve teaching. This position was due in part to the reward system that has developed in many school districts. That is, the administrator was the one who had the status, power, and prestige in education. When this situation was true, or perceived to be true, the administrator's role in in-service programs was difficult. However, active participation by school administrators was essential to the success of an in-service education program. By virtue of their positions, administrators had the potential for affecting change through their leadership. This was particularly true of in-service programs.<sup>106</sup>

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<sup>105</sup> John N. Mangieri and Richard E. Kemper, "Administrators: The Keys to Successful Inservice Programs," NASSP Bulletin 67 (March 1983):26.

<sup>106</sup> Ibid., pp. 29-30.

According to Robert J. Alfonso, Gerald Firth, and Richard Neville, the skills of instructional supervision have remained remarkably undefined and random. Yet, they were charged with a multitude of essential tasks, the most sweeping of which was their responsibility for improving instruction. They were expected to be instructional experts, diagnosticians, curriculum developers, instructional planners, problem solvers, innovators, clinical observation specialists, and managers of the processes of teaching and learning. No single skill or limited set of skills could make supervision effective. Instructional supervision required a wide array of behaviors, demonstrated in a highly complex, human organization, and undergirded by essential concepts and knowledge. A mix of human, technical, and managerial skills was the key to supervisory competence.<sup>107</sup>

An example of a human skill was generating goal commitments. Instructional supervisors must be able to translate or interpret organizational goals in such a way as to cause teachers to be committed to them.<sup>108</sup>

An example of a managerial skill was needs assessment. It was helping teachers identify what they believe to be ideal and then collecting data about how conditions

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<sup>107</sup>Robert J. Alfonso, Gerald Firth, and Richard Neville, "The Supervisory Skill Mix," Educational Leadership 41 (April 1984):16-17.

<sup>108</sup>Ibid., p. 17.

really were. Needs assessment can be a valuable contribution to a change effort and an appropriate precursor to planning and staff development.<sup>109</sup>

One technical skill was the ability to use a classroom observation system. A wide range of observation systems were available, and a supervisor should be competent in several of them. The purpose of this skill was to better analyze and understand the process of instruction as it was expressed in a given context or class. It was directly related to the craft of teaching, took place on-site, and was a clear example of a technical skill not generally found in other professions.<sup>110</sup>

Hilary Rodham Clinton, who was Chair of the Arkansas Education Standards Committee, believed in-service education programs should address both the needs that educators themselves express and needs as identified by others. The question about who should define needs was a variation of the old "chicken and egg" problem. Teachers often did not know what they did not know, and so had difficulty articulating what their needs might be. Clinton was confident that educators understood many of their needs and could design programs that addressed those needs. But she also believed that certain deficiencies or problems within a district may not have been well perceived by

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<sup>109</sup> Ibid., p. 18.

<sup>110</sup> Ibid.

educators themselves and may have best been articulated by persons other than teachers. For example, teachers may have perceived that they needed training in techniques of classroom management or discipline, but they may not have perceived that enhanced collegiality within the teaching corps and improved lines of communication between teachers and administrators would have assisted them in enforcing school discipline policies.<sup>111</sup>

Clearly, a prime role of the supervisor was to provide the leadership necessary to promote a continuing climate of improvement. To carry out this role, supervisors had to be able to plan and conduct effective in-service programs.<sup>112</sup>

#### Staff Development for Vocational Education

Vocational education faces a unique challenge in the years ahead--a challenge rooted in the social and economic welfare of the people. In the contemporary social scene with its large city problems, the ghettos, school dropouts, and a variety of disadvantaged groups, the need for vocational education stands out clearly.<sup>113</sup>

In the early 1980s, there were approximately 15

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<sup>111</sup>Hilary Rodham Clinton, "Teacher Education: Of the People, by the People, and for the People," Journal of Teacher Education 36 (January-February 1985):48.

<sup>112</sup>Wiles and Bondi, Supervision A Guide to Practice, p. 134.

<sup>113</sup>Advisory Council on Vocational Education, Vocational Education: The Bridge Between Man and His Work, U. S. Department of Health, Education, and Welfare, Office of Education (Washington, DC: Government Printing Office, 1968), p. v.



million secondary students in the United States, of which ten million were taking at least one vocational course. In spite of a decline in secondary enrollment, more students than ever were enrolled in vocational education at the high school level. This increased enrollment indicated broad support for secondary vocational education programs.<sup>114</sup>

Vocational education was important because at least twenty-five percent of the students dropped out of the educational system prior to high school graduation. Fifty percent of those who did graduate never furthered their education beyond the high school level. Thus, the secondary school was the only place where at least half of the youth in America ever had an opportunity to acquire occupational skills. Vocational education in the high school setting had a bright and viable future. Secondary vocational education programs could provide a partial solution to high school dropouts because these programs provided the ideal training ground for basic, entry-level skills. Follow-up studies for the years 1975-1981 in the Jefferson District, which was one of the five largest school districts in Louisiana, indicated that vocational programs in the high schools were effective at educating the 79 to 85 percent of the students who were permanently employed after

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<sup>114</sup>Rosalie I. Tull, "Vocational Education--Does It Belong in the High School Curriculum?" American Secondary Education 13 (1984):26.

graduation.<sup>115</sup>

Vocational teachers needed help in developing the skills necessary to cope with a changing educational climate. It was not uncommon for recent graduates starting their careers to encounter many difficulties and discouragements as a result of their prior preparation and orientation to teaching. They felt that the total "real picture" for vocational education had not been presented in their pre-service training.<sup>116</sup>

To find out more about what it would take to complete that picture, Mary Beth Stine, a teacher of almost three decades and a supervisor of student teachers, talked at length with both new and veteran teachers, individuals from teacher training institutions, and administrators who worked closely with vocational teachers. Based on these discussions, she found the four most important unmet pre-service and in-service needs appeared to be in the areas of marketing or image building; working with advisory committees; integrating academics into vocational programs; and classroom management. A discussion of these follows.<sup>117</sup>

Marketing or Image Building. To attract and retain students, a vocational teacher had to project a sincere and positive image that bespoke an unfaltering belief in the

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<sup>115</sup> Ibid., pp. 26-27.

<sup>116</sup> Stine, "Preservice and Inservice Needs," p. 37.

<sup>117</sup> Ibid.

importance of training for life. For this reason, in-service and pre-service marketing training should include some exposure to the philosophy that formed a foundation for vocational education. Additionally, the art of persuading public officials was another marketing skill that needed to be taught in pre-service and in-service programs. Vocational teachers needed to learn how to educate public officials with logical support for vocational education. Image building included the teacher's relationships with administrators, principals, superintendents, parents, and the community as a whole. Vocational student organizations were also a very important part of image building. Unfortunately, many beginning teachers were not prepared by the teacher training institutions in the handling of such groups. Such preparation was indispensable because the leadership that students gained in vocational student organizations showed in every public appearance they made.<sup>118</sup>

Advisory Committees. Effective advisory committees were essential not only to image building but also to the total success of vocational education programs. Beginning teachers, as well as veterans, were somewhat lacking in the skills involved in organizing and utilizing these committees. This was mainly because many teacher training institutions have overlooked this necessary complement to

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<sup>118</sup> Ibid., pp. 37-38.

vocational instruction. This needed to change according to Stine. Teachers at all levels of experience should receive detailed assistance in how to use advisory committees to help their programs.<sup>119</sup>

Integrating Academics into Vocational Programs.

Many states were allowing quality vocational education classes to be accepted for the math or science requirements in the high school curriculum. This was an excellent way to increase enrollments in vocational classes, but getting those courses accepted by the school boards or state departments was a challenge. In-service education could help vocational teachers prepare course outlines and content which could meet the math and science requirements in specific areas.<sup>120</sup>

Classroom Management. While marketing and integrating academics were relatively new teacher training needs brought about by the changing times, classroom management was one pre-service and in-service need that was virtually timeless. All too frequently new teachers entered their classrooms with no idea of what really awaited them. Time management was important for all teachers, but especially to beginning vocational teachers, who had to organize both in-class and out-of-class presentations and visits. Stine recommended that teacher education

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<sup>119</sup> Ibid., p. 38.

<sup>120</sup> Ibid.

institutions take the necessary actions to better prepare both veterans and newcomers to vocational classroom teaching.<sup>121</sup>

As a supervisor of vocational education, Stine has identified the four most important pre-service and in-service needs of vocational teachers. Since one of the functions of vocational supervisors was to evaluate and train vocational teachers for program changes, this study was conducted to determine the supervisors' perceptions of the urban vocational teachers' staff development needs.

Although identifying vocational teachers' staff development needs by their supervisors was not a new idea, employing the Delphi technique to reach a consensus on staff development needs as perceived by their supervisors had not been done before in Virginia. Simply surveying teachers and supervisors had been done many times.

The most common needs assessment methodology was a topical survey in which respondents indicated their preferred in-service topics, usually in the spring for the forthcoming academic year. While these surveys could provide some useful information, they frequently had the shortcomings of measuring interests rather than needs and ignoring the question of how teachers best learn. Curiously, research had shown that teachers who characterized themselves as being very involved in developing their

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<sup>121</sup> Ibid.

in-service programs seemed dissatisfied with the content of their programs.<sup>122</sup>

### Staff Development Needs of Urban Educators

Our society was becoming increasingly urbanized. In the late 1970s, there were over 200 school systems which existed within metropolitan areas with populations in excess of 100,000 people. The educational process which took place within the urban area was vastly different than that which took place in the non-urban portions of the United States. The urban environment typically provided a composite picture of society at large. Students were products of families from a variety of socioeconomic, ethnic, and racial backgrounds, very unlike the typically one-dimensional representation in non-urban areas.<sup>123</sup>

Teachers who expected to function effectively in the urban environment had to be familiar with that environment. They had to not only understand the educational process, but also had to be intimately aware of the factors affecting the urban community.<sup>124</sup>

Such concerns as those of racial prejudice, economic

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<sup>122</sup> Thomas L. Swenson, "The State-of-the-Art in In-Service Education and Staff Development in K-12 Schools," Journal of Research and Development in Education 15 (1981):3-4.

<sup>123</sup> Dennis C. Rittenmeyer and Annabel L. Sacks, eds., A Resource Manual for Urban Teachers (Raleigh, NC: Contemporary Publishing Company, Inc., 1978), p. 1.

<sup>124</sup> Ibid.

deprivation, and poor housing were manifested within the schools in the form of behavior problems, declining test scores, vandalism, and violence. Any teacher who expected to be effective in an urban school must have understood the special problems confronting the students and their parents in that environment.<sup>125</sup>

Education in urban schools was rapidly becoming more sophisticated. Theory and practice were converging. Those who administered and conducted urban educational programs for our school-age population had to have an ever-deepening knowledge and understanding of the art and science of their calling. Competence and quality among urban educators was more easily discernable than ever before.<sup>126</sup>

To be a successful teacher in the urban environment, it was necessary to begin with proper and adequate tools. One of these, often overlooked by professional educators, was the continuing search to learn more in order to do a better job. Most urban school districts offered a wide variety of choices designed to improve oneself. Teachers could take advantage of these opportunities available to them in order to eliminate any deficiencies that might exist.<sup>127</sup>

Teaching in an urban society meant much more than

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<sup>125</sup> Ibid.

<sup>126</sup> Ibid., p. 16.

<sup>127</sup> Ibid., p. 17

simply giving instruction. Indeed, many of the urban teacher's functions went far beyond the traditional book-learning offered by most teacher preparation programs. Urban school teaching meant that teachers would need to understand the nature of urban children--how they learn and develop, and how they could be related to as individuals and groups. Urban school teaching also meant that teachers would need to understand the society in which the child was learning and the culture that set the task and the context of education.<sup>128</sup>

In many instances, middle-class teachers and urban parents dealing with the same problems formed different cultural perspectives. A teacher with an understanding of the urban culture would be better equipped to carry on with the business of teaching. School for many urban children was one of the few positive experiences in their lives. Teachers must learn how to relate urban children to their urban environment, thus making positive experiences for them rewarding as well.<sup>129</sup>

Consequently, it was important for supervisors to identify the staff development needs of urban vocational teachers. These needs had to be addressed in order to enhance the quality of teaching in urban schools. This was essential because many of those who taught in an urban

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<sup>128</sup> Ibid., p. 120.

<sup>129</sup> Ibid., pp. 121-22.



environment were unfamiliar with the urban problems prior to their teaching experiences. It could make the difference in the success or failure of many of these teachers.

### Summary

Staff development or in-service education for public school teachers has long been viewed as a means of insuring that faculty members were kept up-to-date, and effectively utilizing the latest changes in education. Exposure to new knowledge, teaching methodologies, and curriculum innovations through in-service education had been considered the most expedient way of disseminating such content ideas to public school teachers at large. In spite of these lofty ideals, in-service education programs in most school districts have failed to accomplish these intended goals.<sup>130</sup>

A review of the literature revealed that identifying appropriate topics for staff development programs has been a perplexing problem. While a variety of methods have been used to determine the needs of teachers, too frequently these methods have resulted in client interests rather than genuine needs. The purpose of this research was to determine the staff development needs of urban vocational teachers as perceived by their supervisors. It was

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<sup>130</sup> Lloyd P. Campbell, "Teacher In-Service Description and Prescription," American Secondary Education 12 (Spring 1981):19.

believed that by obtaining a consensus of staff development needs, those problems which were peculiar to vocational teachers in urban areas would be identified and subsequently addressed.

## CHAPTER III

### RESEARCH METHODOLOGY AND PROCEDURES

The purpose of this chapter was to present a discussion of the research methodology and procedures that were used in this study. Included in this discussion were the following topics: (1) population, (2) data gathering techniques, (3) instruments, (4) data analysis, (5) summary.

#### Population

The panel of experts for this study were the vocational education supervisors in the urban areas of Virginia with a population of 50,000 or more as determined by estimates of the population of Virginia counties and cities as of July 1, 1983 by the United States Department of Commerce, Bureau of the Census. These supervisors represented agricultural education, business education, health occupations education, home economics education, marketing education, technology education, and trade and industrial education. In those areas where there were no vocational education supervisors, the directors of vocational education were asked to serve on the panel. The names of these supervisors and directors were obtained from

a variety of sources including The Virginia Educational Directory for the 1985-86 School Year, The 1985-86 Directory of Virginia Vocational Home Economics Education Personnel, The 1985 Virginia Industrial Arts Directory, lists of supervisors and directors of vocational education which were supplied by Associate Directors of Vocational Education and/or their secretaries for the Commonwealth of Virginia, and telephone calls to local school systems in these urban areas.

There were eighty-five vocational supervisors and directors of vocational education in the twenty-five urban school districts of Virginia with a population of 50,000 or more. Table 3 shows these counties and cities in the Commonwealth of Virginia.

#### Data Gathering Technique

The purpose of this study was to determine vocational supervisors' perceptions of in-service needs of urban vocational teachers. Such a task could have been accomplished in an infinite number of ways. This author chose to employ the Delphi technique to gather the information from a panel of experts comprised of vocational supervisors who were employed in urban school systems throughout Virginia.

Delphi is a technique that makes use of the opinion of experts for forecasting future events. The Delphi method was developed by Norman Dalkey and Olaf Helmer at the RAND Corporation in California in the early 1950s. In

TABLE 3

VIRGINIA SCHOOL DISTRICTS WITH A  
POPULATION OF 50,000 OR MORE<sup>1 3 1</sup>

Counties	Population	Cities	Population
Albemarle	58,200	Alexandria	105,100
Arlington	153,800	Chesapeake	121,800
Augusta	54,000	Hampton	126,000
Chesterfield	154,800	Lynchburg	67,300
Fairfax	650,900	Newport News	153,400
Hanover	51,300	Norfolk	278,800
Henrico	188,700	Portsmouth	106,800
Henry	58,100	Richmond	220,100
Loudon	60,300	Roanoke	100,400
Montgomery	64,800	Virginia Beach	295,400
Pittsylvania	66,300		
Prince William	159,000		
Roanoke	73,400		
Rockingham	52,900		
Tazewell	52,000		

forecasting future developments for use in long-range  
planning, Dalkey posited three possible sources of

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<sup>1 3 1</sup>U.S. Department of Commerce, Bureau of the  
Census, Local Population Estimates, Estimates of the  
Population of Virginia Counties and Metropolitan Areas:  
July 1, 1981, 1982, and 1983, Series P-26, No. 83-46-C,  
Issued July 1985, pp. 4-5.

predictions: At one extreme was knowledge, at the other extreme was speculation, and in between was opinion. Knowledge was substantiated by solid evidence, speculation by no evidence, and opinion by some evidence. Where knowledge was absent, as it may well be in forecasting the future, the Delphi method sought to elicit the opinion of experts and to reach a consensus about some future probability.<sup>132</sup>

Like the first notable RAND Corporation Delphi study, the objective of this study was to obtain the most reliable consensus of a group of vocational supervisors through a series of intensive questionnaires interspersed with controlled opinion feedback.

In the experiments conducted at RAND, it was found that, in face-to-face discussions involving opinion, the results of group discussions were often less accurate than the average of individual opinions reached without discussion. In face-to-face discussions, certain biasing effects were often present. These were:

1. The Influence of Dominant Individuals. Often the person who talked the most had the greatest influence, even though he or she may not have been the most knowledgeable member of the group.

2. Noise. This referred to interchanges made for

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<sup>132</sup>Russell G. Fischer, "The Delphi Method: A Description, Review, and Criticism," The Journal of Academic Librarianship 4 (May 1987):64.

maintaining the group rather than for problem solving.

3. Group Pressure for Conformity. Some individuals may have conformed to majority opinion even though they may have been more knowledgeable than more vociferous group members.<sup>133</sup>

The Delphi method was developed to avoid these undesirable effects of face-to-face communication. In the Delphi method, direct debate was replaced by a carefully designed program of sequential individual interrogations (which were best conducted by questionnaires) interspersed with information and opinion feedback derived by computed consensus from earlier parts of the program. These interrogations were usually conducted over three rounds, and the basic characteristics of the method were:

1. Anonymity. This was achieved by using questionnaires to gather opinion, and it reduced the effect of dominant individuals.

2. Controlled Opinion Feedback. This consisted of returning group opinions to participants in the form of statistical summaries for use in the next round.

3. Statistical Group Response. This referred to the statistical score computed from the responses received for each item. It was useful for overcoming group pressure for conformity.<sup>134</sup>

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<sup>133</sup> Ibid., pp. 64-65.

<sup>134</sup> Ibid., p. 65.

For this study, a letter explaining this research and the Delphi technique, along with an invitation to participate on the panel, was sent to all of the 85 vocational supervisors in the urban areas of Virginia (appendix b). Delphi was not so well known that this researcher could be confident that the supervisors selected were familiar with or had even heard of it. Even if they had been aware of it, they may have had only a distorted picture of what was involved and what would be expected of them. It was especially important that they understand the iterative nature of the sequence. Several studies employing the Delphi technique had encountered problems because some of the panelists did not understand the purpose of the successive questionnaires.<sup>135</sup>

An open-ended questionnaire (appendix c) soliciting the supervisors' perceptions of staff development needs of vocational teachers was also included in this first mailing. If the offer were accepted, the panelist completed the questionnaire and returned it to the researcher. Those who did not return the questionnaire by the deadline were contacted again to determine their willingness to participate in the study.

After initial perceptions were obtained from the panel, a second questionnaire was developed. The goal of

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<sup>135</sup> Joseph P. Martino, Technological Forecasting for Decision Making (New York: Elsevier Science Publishing Co., Inc., 1983), p. 30.



the second round was to provide feedback to the panel members and to ask them to consider their own responses in comparison with the responses of the others. A five-point Likert-type scale which ranged from Strongly Agree to Strongly Disagree was used for this purpose.

For the third round, the statements along with the mean scores for each were returned to the panel members. This questionnaire differed from the second round in that it reported both the group consensus and the individual panelist's prior rating for each item. These values showed each supervisor how the panel responded as a group and where their own opinions were in reference to those of the group. Panelists were asked to reassess their responses to the second round in light of the additional information concerning group feeling. Although the supervisors were not required to change their ratings of the statements in the third round, for all items where a supervisor wished to remain outside the consensus, they were asked to state their reason for so doing.

Finally, in the third round, the supervisors were asked if they believed their teachers would agree that each of the forty-two statements was indeed a staff development need. They were to respond with a Yes or No answer to each statement.

The third questionnaire was the final round for this study. The literature supported the use of three

rounds in a Delphi study. Pallante suggested that usually no need existed for proceeding beyond the third round.<sup>136</sup> Cyphert and Gant concluded that one could seriously question the need for going beyond the third questionnaire.<sup>137</sup>

### Instruments

A different instrument was used in each of the three rounds of the study. All of the participants received the same instrument at the same time.

The first instrument (appendix c) was an open-ended questionnaire soliciting the supervisors' perceptions of staff development needs of urban vocational teachers. Only two questions were asked of the panelists since each required considerable thought. The two questions asked were:

1. What, in your opinion, is the most pressing staff development/in-service need of the vocational teachers you supervise?
2. What, in your opinion, are other staff development/in-service needs of the vocational teachers you supervise? Please list three or more.

Following the recommendations of Joseph Martino,

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<sup>136</sup>James J. Pallante, "The Delphi Technique for Forecasting and Goal Setting," NASSP Bulletin 60 (March 1976):88.

<sup>137</sup>Frederick R. Cyphert and Walter L. Gant, "The Delphi Technique: A Tool for Collecting Opinions in Teacher Education," The Journal of Teacher Education 21 (Fall 1970):423.

the format of the questionnaire was designed to help rather than hinder the panelist. There was ample space on the questionnaire for the supervisors to write in their comments. It was designed for the convenience of the panelists.<sup>138</sup>

The second instrument (appendix d) contained a list of statements which corresponded to the first question and a list of statements which corresponded to the second question. It also included a Likert-type scale with a five-point grid for rating each of the statements on a high-low continuum.

The third instrument (appendix e) contained the same statements as round two, together with the five-point grid for rating each on a high-low continuum. However, it differed from the second instrument in that it included information obtained from the second round along with an additional question for the supervisors to answer. This query was located in the last column of the instrument, and it called for a Yes or No answer to the following: Will your teachers agree that this is a need?

These instruments were designed to obtain the information necessary to accomplish the aim of this study. It was essential that each panelist complete all three of the questionnaires since each had a different goal.

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<sup>138</sup> Martino, Technological Forecasting for Decision Making, pp. 30-31.

### Data Analysis

Since this was a three-round study, data were collected and tabulated on three separate occasions. Each of the rounds had a different purpose.

The first round of the study yielded a large number of diverse responses to the two open-ended questions. It was necessary to reduce this large number of responses to a manageable number of statements. This was a critical step since, in the process of combining individual responses into a limited number of categories, the researcher had the opportunity to introduce considerable bias.

To minimize this danger, a committee was appointed to analyze the data. This committee consisted of Dr. Joseph Ford, the vocational guidance counselor at Western Branch High School in Chesapeake, Virginia; Mr. Fred Hadley, of Norfolk, Virginia, an author and consultant in vocational education; and Mr. David Netherton, an instructor in vocational education at Old Dominion University in Norfolk, Virginia. After completing the analysis of data independently, they met to develop a consensus of consolidated items from the first round of responses.

In the second round, the panelists' ratings for each of these statements were tabulated. A mean score for each of the statements was determined. The ratings and mean scores were based on the five-point Likert-type scale which accompanied these statements.

The data from the third round were tabulated to determine the final mean scores for each of the statements. The statements pertaining to the two questions on the original round were considered separately in order to determine a consensus on the most pressing staff development need of urban vocational teachers as well as additional staff development needs of urban vocational teachers.

The statement with the highest mean score in response to the first question represented the most pressing staff development need of urban vocational teachers as perceived by their supervisors. Likewise, the statements with mean scores of 4.0 or greater represented the most important additional staff development needs of urban vocational teachers since the number 4 represented agreement on the five-point agreement continuum.

The last round of the study had an additional question which called for the supervisors to respond with a Yes or a No beside each statement. They were asked if they thought their teachers would believe that each of the statements was a staff development need. The number of affirmative and negative replies was tabulated for each of the statements.

#### Summary

The Delphi technique was used to gather the data for this study. It required a great deal more thinking and

involvement on the part of the panelists than some other types of questionnaires. In addition, it afforded each of the supervisors the opportunity to reflect on the opinions of other vocational supervisors while they were developing their own opinions and thoughts.

In the next chapter, the data that were gathered from this three-round study are presented and summarized. This includes the mean scores for each of the statements for both the second and third rounds of the study as well as the affirmative and negative replies to the final question.

Chapter V presents conclusions from an analysis of this data. Also, a model is proposed for meeting staff development needs of urban vocational teachers. The model synthesizes the supervisors' perceptions of staff development needs, including recommended offerings, content, and delivery techniques.

## CHAPTER IV

### FINDINGS

The data that were collected for this study were presented and summarized in this chapter. Three research questions regarding staff development needs of urban vocational teachers were addressed by obtaining judgmental data from vocational supervisors in a three-round Delphi survey. Included in this discussion were the following topics: (1) respondents, (2) round one, (3) round two, (4) round three, (5) summary.

#### Respondents

The population for this study consisted of sixty-three local supervisors and directors of vocational education in the urban areas of Virginia with a population of 50,000 or more. The panel included three supervisors of agricultural education, fourteen supervisors of business education, five supervisors of health occupations education, ten supervisors of home economics education, nine supervisors of marketing education, eight supervisors of technology education, four supervisors of trade and industrial education, and ten supervisors or directors of vocational education. A complete list of these supervisors

appears in appendix f.

### Round One

On January 12, 1987, the first questionnaire was mailed to eighty-five supervisors of vocational education in the Commonwealth of Virginia. Sixty-three of the surveys were returned, which was 74 percent of those mailed.

The goals of the first round of this three-round Delphi study were to identify Delphi participants and to initiate the process to determine the most pressing staff development need as well as additional staff development needs of urban vocational teachers as perceived by their supervisors. This was accomplished with an open-ended instrument which contained the following two questions:

1. What, in your opinion, is the most pressing staff development/in-service need of the vocational teachers you supervise?

2. What, in your opinion, are other staff development/in-service needs of the vocational teachers you supervise? Please list three or more.

There were eighty responses to the first question. Some of the supervisors listed more than one need in response to this question. In such cases, there was no way of determining which of these was most important. Therefore, all of the responses to this question were considered as most pressing needs.

The supervisors listed a total of 220 responses to



the second question, with the number of replies from each supervisor ranging from two to eight. All of the responses to this question were considered to be additional staff development needs of urban vocational teachers.

A total of 300 answers (appendix g) needed to be processed and returned to the panel for the second round. An ad hoc committee was appointed for this purpose in order to eliminate bias on the part of the researcher. Prior to their meeting, Dr. Joseph Ford, Mr. Fred Hadley, and Mr. David Netherton were each given a list of all of the 300 responses received by the researcher. They were asked to analyze the data independently.

Following the recommendation of Somers, Baker, and Isbell, the researcher typed all of the responses and then cut them apart for sorting and grouping. When the committee met, this simplified the process of generating major categories from the responses. All of the responses were categorized appropriately by the committee. Within each major category, similar ideas were combined and subsequently rewritten to achieve a homogeneous group of statements which represented every idea produced by the panel in the first round.<sup>139</sup>

The responses to the two questions were considered separately. Fourteen statements pertaining to the first

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<sup>139</sup>Ken Somers, Gus Baker, and Clint Isbell, "How to Use the Delphi Technique to Forecast Training Needs," Performance and Instruction Journal 23 (May 1984):28.

question and twenty-eight statements pertaining to the second question were compiled by the committee. Every effort was made to ensure that all of the opinions of the panelists be included in these statements. Otherwise, the credibility of this researcher would have been compromised. The list below includes the most pressing staff development needs.

1. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.
2. Updating the vocational education teachers in new technology and equipment.
3. Computer training and software applications for all curriculum areas.
4. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.
5. Projection of a positive image of vocational education programs; promotion of programs.
6. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.
7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.
8. Philosophy of vocational education and the development of a better work ethic.
9. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.
10. Motivating, challenging, and retaining students.
11. Help teachers raise their expectations of the

programs and of themselves as professionals.

12. Classroom and laboratory management.
13. Understanding the requirements of the Hazard Communication Standard.
14. Using Competency-Based Education.

The list below includes the additional staff development needs.

1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.
2. Effective managerial skills, including classroom and laboratory management, instructional management, time management, and recordkeeping/clerical skills.
3. Effectively working with special students such as handicapped, disadvantaged, gifted and talented, and adults.
4. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.
5. Technology update, including using the latest state-of-the-art equipment.
6. Teaching methodology including creativity and innovative teaching strategies.
7. Subject update, including trends and actual work experience in industry.
8. Developing a working knowledge of computers and their use in the classroom.
9. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.
10. Interfacing of disciplines, including basic skill development.
11. Planning student clubs and activities that attract and appeal to today's students.
12. Professionalism, including training in preparation

for career advancement.

13. Understanding school law, legal issues, and certificate renewal requirements that affect vocational education.

14. Competency-Based Education--documenting student competencies and showing students where they are.

15. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.

16. Understanding individual needs and learning styles of students.

17. Time and stress management.

18. Test validity--planning evaluation instruments which measure the accomplishments of the objective.

19. Developing laboratory safety awareness.

20. Grooming and interview principles.

21. Evaluation of vocational teachers, including methods, strategies, and appearance.

22. Communication with students, teachers, guidance counselors, and principals.

23. Developing a functional philosophy of vocational education.

24. Motivation, including counseling for vocational careers in the lower grades.

25. Familiarize the vocational teachers with the concepts of the middle school.

26. Convince the teacher training institutions to change their curriculum to reflect new technology.

27. Student follow up after leaving vocational programs.

28. Making the transition from industrial arts to technology education.

These forty-two statements were used in the succeeding rounds of this study. No changes were made in the

wording of the statements.

### Round Two

The round one statements were rank ordered according to the number of supervisors' responses and returned to the sixty-three panel members on March 23, 1987, for their consideration in the second round. Each panelist's survey was marked to indicate the statements which represented the ideas he or she generated in the first round.

The goal of this round was to provide feedback to the panel members and to ask them to consider their own responses in comparison with the responses of the others. Panelists were encouraged to differentiate among the statements using the following five-point Likert-type scale:

- SA - Strongly Agree
- A - Agree
- U - Undecided
- D - Disagree
- SD - Strongly Disagree

All sixty-three of the panelists returned the surveys from the second round of the Delphi. The data were tabulated by the researcher with the following numerical values:

- 5 - Strongly Agree
- 4 - Agree
- 3 - Undecided
- 2 - Disagree
- 1 - Strongly Disagree

Using these numerical values which corresponded to the agreement continuum, a mean score for each staff development need was determined. These scores were rounded

to the nearest hundredth in order to distinguish the extent of agreement or disagreement among the staff development needs. These needs, along with their mean scores, appear in tables 4 and 5.

TABLE 4

GROUP MEAN SCORES OF MOST PRESSING  
STAFF DEVELOPMENT NEEDS  
(Derived from Round Two)

Most Pressing Staff Development Need	Mean
1. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.	4.44
2. Updating the vocational education teachers in new technology and equipment.	4.44
3. Computer training and software applications for all curriculum areas.	4.22
4. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.	4.52
5. Projection of a positive image of vocational education programs; promotion of programs.	4.51
6. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	3.89
7. Subject matter updates specific to each vocational program area, including current trends and certificate requirements.	4.21
8. Philosophy of vocational education and the development of a better work ethic.	3.73

TABLE 4--Continued

Most Pressing Staff Development Need	Mean
9. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.	4.08
10. Motivating, challenging, and retaining students.	4.44
11. Help teachers raise their expectations of the programs and of themselves as professionals.	4.20
12. Classroom and laboratory management.	3.97
13. Understanding the requirements of the Hazard Communication Standard.	3.34
14. Using Competency-Based Education.	3.98

TABLE 5

GROUP MEAN SCORES OF ADDITIONAL  
STAFF DEVELOPMENT NEEDS  
(Derived from Round Two)

Additional Staff Development Needs	Mean
1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.	4.76
2. Effective managerial skills, including classroom and laboratory management, time management, and recordkeeping/clerical skills.	4.19
3. Effectively working with special students such as handicapped, disadvantaged, gifted and	

TABLE 5--Continued

Additional Staff Development Needs	Mean
talented, and adults.	4.29
4. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.	4.17
5. Technology update, including using the latest state-of-the-art equipment.	4.29
6. Teaching methodology including creativity and innovative teaching strategies.	4.30
7. Subject update, including trends and actual work experience in industry.	4.38
8. Developing a working knowledge of computers and their use in the classroom.	4.24
9. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.	4.14
10. Interfacing of disciplines, including basic skill development.	4.16
11. Planning student clubs and activities that attract and appeal to today's students.	4.02
12. Professionalism, including training in preparation for career advancement.	3.73
13. Understanding school law, legal issues, and certificate renewal requirements that affect vocational education.	3.87
14. Competency-Based Education--documenting student competencies and showing students where they are.	4.10
15. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	3.81
16. Understanding individual needs and	



TABLE 5--Continued

Additional Staff Development Needs	Mean
learning styles of students.	4.25
17. Time and stress management.	3.83
18. Test validity--planning evaluation instruments which measure the accomplishments of the objective.	4.02
19. Developing laboratory safety awareness.	3.95
20. Grooming and interview principles.	3.40
21. Evaluation of vocational teachers, including methods, strategies, and appearance.	3.73
22. Communication with students, teachers, guidance counselors, and principals.	4.10
23. Developing a functional philosophy of vocational education.	3.68
24. Motivation, including counseling for vocational careers in the lower grades.	3.95
25. Familiarize the vocational teacher with the concepts of the middle school.	3.65
26. Convince the teacher training institutions to change their curriculum to reflect new technology.	4.10
27. Student follow up after leaving vocational programs.	4.09
28. Making the transition from industrial arts to technology education.	3.39

The mean scores for the staff development needs ranged from 4.76 to 3.34 in this round. For the most pressing need, the panelists assigned the highest score to

"Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers." For the additional needs, the panelists assigned the highest score to "Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers."

### Round Three

On May 15, 1987, the panelists were given the feedback from the second round which included the group mean scores for all of the statements along with their prior ratings. They were asked to reassess their own positions based on the group's responses. Further, those whose position varied significantly from the group mean were asked to provide a very brief rationale to support their divergent views. Panelists were reminded that the responses to each question were to be considered separately in order that a consensus might be reached on the most pressing staff development need as well as on additional staff development needs.

When all of the questionnaires from the third round were returned, the panelists' ratings of the statements were tabulated using mean scores. Of the forty-two statements, only three of the mean scores (7 percent) remained unchanged during the third round, while thirty-nine of the mean scores (93 percent) either increased or decreased. Of

those which did change, thirty-two (76 percent) decreased, and seven (17 percent) increased in value. Table 6 illustrates the changes that occurred in the mean scores of the most pressing staff development needs during the third round of this study. The needs were rank ordered from the highest to the lowest mean score.

TABLE 6

GROUP MEAN SCORES OF MOST PRESSING STAFF  
DEVELOPMENT NEEDS AND THEIR INCREASE  
OR DECREASE IN VALUE FROM THE  
SECOND ROUND  
(Derived from Round Three)

Most Pressing Staff Development Needs	Group Mean	Increase or Decrease
1. Projection of a positive image of vocational education programs; promotion of programs.	4.63	+.12
2. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.	4.51	+.07
3. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.	4.48	-.04
4. Updating the vocational education teachers in new technology and equipment.	4.46	+.02
5. Motivating, challenging,		

Table 6--Continued

Most Pressing Staff Development Needs	Group Mean	Increase or Decrease
and retaining students.	4.44	unchanged
6. Computer training and software applications for all curriculum areas.	4.14	-.08
7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.	4.13	-.08
8. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.	4.13	+.05
9. Help teachers raise their expectations of the program and of themselves as professionals.	4.11	-.09
10. Classroom and laboratory management.	4.02	+.05
11. Philosophy of vocational education and the development of a better work ethic.	3.73	unchanged
12. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	3.66	-.23
13. Using Competency-Based Education.	3.66	-.32
14. Understanding the requirements of the Hazard Communication Standard.	3.31	-.03

It should be noted that the order of these needs in table 6 reflected the values of the final mean scores. They were listed in descending order with the highest score appearing first on the list.

Table 7 illustrates the changes that occurred in the mean scores of additional staff development needs during the third round of this study. These needs were also listed in descending order with the highest score appearing first on the list.

TABLE 7

GROUP MEAN SCORES OF ADDITIONAL STAFF  
DEVELOPMENT NEEDS AND THEIR INCREASE  
OR DECREASE IN VALUE FROM  
THE SECOND ROUND  
(Derived from Round Three)

Additional Staff Development Needs	Group Mean	Increase or Decrease
1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.	4.76	unchanged
2. Subject update, including trends and actual work experience in industry.	4.37	-.01
3. Technology update, including using the latest state-of-the-art equipment.	4.30	+.01
4. Teaching methodology, including creativity and innovative		

TABLE 7--Continued

Additional Staff Development Needs	Group Mean	Increase or Decrease
teaching strategies.	4.22	-.08
5. Effectively working with special students, such as handicapped, disadvantaged, gifted and talented, and adults.	4.21	-.08
6. Understanding individual needs and learning styles of students.	4.14	-.11
7. Effective managerial skills, including classroom and laboratory management, time management, and recordkeeping/clerical skills.	4.13	-.06
8. Developing a working knowledge of computers and their use in the classroom.	4.13	-.11
9. Interfacing of disciplines, including basic skill development.	4.13	-.03
10. Communication with students, teachers, guidance counselors, and principals.	4.11	+.01
11. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.	4.05	-.09
12. Convince the teacher training institutions to change their curriculum to reflect new technology.	3.95	-.15
13. Student follow up after leaving vocational programs.	3.95	-.14
14. Test validity--planning evaluation instruments which measure the accomplishments of the objective.	3.94	-.08

TABLE 7--Continued

Additional Staff Development Needs	Group Mean	Increase or Decrease
15. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.	3.91	-.26
16. Competency-Based Education--documenting student competencies and showing students where they are.	3.90	-.20
17. Planning student clubs and activities that attract and appeal to today's students.	3.89	-.13
18. Developing laboratory safety awareness.	3.84	-.11
19. Motivation, including counseling for vocational careers in the lower grades.	3.79	-.16
20. Understanding school law, legal issues, and certificate renewal requirements that affect vocational education.	3.67	-.20
21. Time and stress management.	3.62	-.21
22. Evaluation of vocational teachers, including methods, strategies, and appearance.	3.56	-.17
23. Familiarize the vocational teacher with the concepts of the middle school.	3.56	-.09
24. Professionalism, including training in preparation for career advancement.	3.51	-.22
25. Developing a functional philosophy of vocational education.	3.43	-.25
26. Providing techniques in the		

TABLE 7--Continued

Additional Staff Development Needs	Group Mean	Increase or Decrease
coordination of students while working on the job. This includes the development of training plans for students.	3.42	-.39
27. Grooming and interview principles.	3.24	-.16
28. Making the transition from industrial arts to technology education.	3.10	-.29

For the third round, the panelists were asked to provide a very brief rationale if their positions varied significantly from the group mean. The rationales which supported the divergent views appear in appendix h of this report.

Finally, the panelists were asked to answer with a Yes or a No if they thought their teachers would believe that each of the statements was a staff development need. While there was no option for answering with an Uncertain or Undecided, some of the participants did reply in this way. Additionally, some of the participants either inadvertently or purposely omitted a response to certain statements. Their Undecided response or lack of a response was included in an Undecided or No Reply category when the results were tabulated. Table 8 illustrates the responses



to this question which appeared only in the third round of this study. This table illustrated how many supervisors agreed, disagreed, or were uncertain as to whether their teachers would consider each of the statements to be a staff development need. It also included percentages which were rounded to the nearest whole number.

TABLE 8

SUPERVISORS WHO AGREE, DISAGREE, OR ARE UNCERTAIN  
AS TO WHETHER THEIR TEACHERS WOULD CONSIDER  
EACH OF THE STATEMENTS TO BE A STAFF  
DEVELOPMENT NEED

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(Key: Yes, Y; No, N; Undecided or No Reply, U)

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Most Pressing Staff Development Needs	Y	%	N	%	U	%
<hr/>						
1. Projection of a positive image of vocational education programs; promotion of programs.	56	89	7	11	0	0
2. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.	52	83	11	17	0	0
3. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.	56	89	6	10	1	2
4. Updating the vocational education teachers in new technology and equipment.	60	95	3	5	0	0
5. Motivating, challenging, and						

TABLE 8--Continued

Most Pressing Staff Development Needs	Y	%	N	%	U	%
retaining students.	59	94	3	5	1	2
6. Computer training and software applications for all curriculum areas.	59	94	1	2	3	5
7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.	50	79	13	21	0	0
8. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.	50	79	12	19	1	2
9. Help teachers raise their expectations of the programs and of themselves as professionals.	42	67	19	30	2	3
10. Classroom and laboratory management.	48	76	14	22	1	2
11. Philosophy of vocational education and the development of a better work ethic.	40	63	21	33	2	3
12. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	37	59	23	37	3	5
13. Using Competency-Based Education.	37	59	23	37	3	5
14. Understanding the requirements of the Hazard Communication Standard.	36	57	22	35	5	8

TABLE 8--Continued

Additional Staff Development Needs	Y	%	N	%	U	%
1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.	61	97	2	3	0	0
2. Subject update, including trends and actual work experience.	54	86	7	11	2	3
3. Technology update, including using the latest state-of-the-art equipment.	59	94	4	6	0	0
4. Teaching methodology including creativity and innovative teaching strategies.	50	79	12	19	1	2
5. Effectively working with special students such as handicapped, disadvantaged, gifted and talented, and adults.	53	84	8	13	2	3
6. Understanding individual needs and learning styles of students.	51	81	11	17	1	2
7. Effective managerial skills, including classroom and laboratory management, time management, and recordkeeping/clerical skills.	52	83	10	16	1	2
8. Developing a working knowledge of computers and their use in the classroom.	57	90	4	6	2	3
9. Interfacing of disciplines, including basic skill development.	45	71	16	25	2	3
10. Communication with students, teachers, guidance counselors, and principals.	48	76	14	22	1	2
11. Using community resources, such as public speakers, advisory councils, and business people to						

TABLE 8--Continued

Additional Staff Development Needs	Y	%	N	%	U	%
develop stronger programs.	52	83	10	16	1	2
12. Convince the teacher training institutions to change their curriculum to reflect new technology.	48	76	14	22	1	2
13. Student follow up after leaving vocational programs.	46	73	15	24	2	3
14. Test validity--planning evaluation instruments which measure the accomplishments of the objective.	42	67	19	30	2	3
15. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.	51	81	11	17	1	2
16. Competency-Based Education--documenting student competencies and showing students where they are.	43	68	18	29	2	3
17. Planning student clubs and activities that attract and appeal to today's students.	36	57	25	40	2	3
18. Developing laboratory safety awareness.	43	68	19	30	1	2
19. Motivation, including counseling for vocational careers in the lower grades.	48	76	14	22	1	2
20. Understanding school law, legal issues, and certificate renewal requirements that affect vocational education.	47	75	15	24	1	2
21. Time and stress management.	43	68	17	27	3	5
22. Evaluation of vocational teachers, including methods, strategies, and appearance.	36	57	25	40	2	3
23. Familiarize the vocational						

TABLE 8--Continued

Additional Staff Development Needs	Y	%	N	%	U	%
teacher with the concepts of the middle school.	39	62	23	37	1	2
24. Professionalism, including training in preparation for career advancement.	35	56	26	41	2	3
25. Developing a functional philosophy of vocational education.	32	51	27	43	4	6
26. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	40	63	19	30	4	6
27. Grooming and interview principles.	35	56	26	41	2	3
28. Making the transition from industrial arts to technology education.	38	60	22	35	3	5

In general, the higher the mean score, the greater the number of supervisors who believed their teachers would agree that the statements were indeed staff development needs. This can be seen by comparing the number of affirmative replies with the position of the staff development need in the list. For example, in the Additional Needs category, the first need listed had the highest mean score among these statements, and ninety-seven percent of the supervisors believed their teachers would perceive this as a staff development need.

### Summary

In this study, a consensus on the most pressing staff development need of urban vocational teachers as well as on additional staff development needs of urban vocational teachers was achieved. The Delphi technique was employed to avoid the biasing effects of face-to-face discussions such as group pressure for conformity.

The procedure began with an open-ended questionnaire which identified participants and solicited their opinions as to the most pressing staff development need as well as additional staff development needs of urban vocational teachers. These responses were summarized and returned to the panelists for their consideration using a five-point Likert-type scale. The results of this round were tabulated and returned to the panelists for the third and final round. The panelists, with the knowledge of how others responded in the second round, were once again asked to evaluate each of the staff development needs. During this round, the panelists were asked to provide a very brief rationale if their opinions varied significantly from the group mean.

Finally, in the third round, the supervisors were asked to answer with a Yes or a No if they thought their teachers would believe that each of the statements was a staff development need. No attempt was made to reach a consensus on this section of the study.

The data that were gathered for this study were presented and summarized in this chapter. Mean scores for each of the staff development needs for both the second and third rounds of the study were tabulated. After the second and third rounds, the staff development needs were rank ordered according to these scores. The affirmative and negative replies to the final question were also included to illustrate how many supervisors believed their teachers would perceive the statements to be staff development needs.

In the final chapter of this study, a summary of the research is presented, and conclusions are drawn from an analysis of these data. A model based on the findings of this study is proposed for meeting staff development needs of urban vocational teachers. It includes recommended offerings, content, and delivery techniques.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem of this study was to determine vocational supervisors' perceptions of staff development needs of urban vocational teachers. The foregoing chapters of this study included the information gathered for the purpose of achieving this goal. Included in this chapter were the following topics: (1) summary, (2) conclusions, (3) recommendations.

#### Summary

Historically, meeting the staff development needs of urban vocational teachers has been a challenge to the vocational supervisors who were charged with developing meaningful staff development or in-service programs. The first step toward improving staff development for vocational teachers should be the determination of needs. According to research cited in earlier chapters of this study, it should begin with the supervisors' assessment of teacher needs. This study was undertaken to determine urban vocational teachers' staff development needs as perceived by their supervisors.

To accomplish the aim of this study, the following



questions were answered:

1. What, in the opinion of the vocational supervisors, was the most pressing staff development need of vocational teachers in urban areas?

2. What, in the opinion of the vocational supervisors, were additional staff development needs of vocational teachers in urban areas?

3. How did the supervisors believe their perceptions would differ from those of the teachers they supervise?

The population for this study consisted of the vocational education supervisors in the urban areas of Virginia with a population of 50,000 or more. These supervisors represented agricultural education, business education, health occupations education, home economics education, marketing education, technology education, and trade and industrial education. In those urban areas of 50,000 or more where there were no vocational education supervisors, the directors of vocational education were asked to serve on the panel.

There were eighty-five vocational supervisors and directors of vocational education in the twenty-five urban school districts of Virginia with a population of 50,000 or more. Sixty-three of these (74 percent) agreed to participate in the study. All of those who agreed to participate in the study completed the three rounds of the survey (100

percent).

The Delphi technique was employed to gather the data from a panel of experts comprised of vocational supervisors who were employed in urban schools systems throughout Virginia. The objective of this study was to obtain the most reliable consensus of a group of vocational supervisors through a series of three questionnaires interspersed with controlled opinion feedback.

A letter explaining this research and the Delphi technique, along with an invitation to participate on the panel, was sent to all of the eighty-five vocational supervisors in the urban school districts of Virginia. An open-ended questionnaire soliciting the supervisors' perceptions of staff development needs of vocational teachers was also included in this first mailing. If the offer was accepted, the panelist completed the questionnaire and returned it to the researcher. Those who did not return the questionnaire by the deadline were contacted again to determine their willingness to participate in the study.

After initial perceptions were obtained from sixty-three supervisors, a second questionnaire was developed. The goal of the second round was to provide feedback to the panel members and to ask them to consider their own responses in comparison with the responses of the other panelists. A five-point Likert-type scale which ranged from Strongly Agree to Strongly Disagree was used for this

purpose.

For the third round, the statements along with the mean scores for each were returned to the panelists. This questionnaire differed from the second round in that it reported both the group consensus and the individual panelist's prior rating for each item. These values showed the supervisors how the panel responded as a group and where their own opinions were in reference to those of the group. Each panelist was asked to reassess his or her responses to the second round in light of the additional information concerning group feeling. For all items where supervisors wished to remain outside the consensus, they were asked to state their reason for so doing.

Also in the third round, the supervisors were asked if they believed their teachers would agree that each of the statements was indeed a staff development need. They were to respond with a Yes or a No answer to each statement.

A different instrument was used in each of the three rounds of the study. All of the participants received the same instrument for each round.

The first instrument was an open-ended questionnaire soliciting the supervisors' perceptions of the most pressing staff development need of urban vocational teachers as well as additional staff development needs of urban vocational teachers. Only two questions were asked

since each required considerable thought.

The second instrument contained fourteen statements which corresponded to the first question and twenty-eight statements which corresponded to the second question. These statements were rank ordered according to the number of supervisors who identified them as needs. It also included a Likert-type scale with a five-point grid for rating each of the statements on a high-low continuum.

The third instrument contained the same statements which appeared in the same order as round two, together with the five-point grid for rating each on a high-low continuum. It differed from the second instrument in two ways: It included information obtained from the second round along with an additional question for the supervisors to answer. This question asked the supervisors if they believed their teachers would agree that each of the statements was a staff development need.

Because of the design of this study, the data were gathered and tabulated at the end of each round. Each of the rounds had a different purpose.

The first round of the study yielded a large number of diverse responses to the two open-ended questions. In order to reduce this large number of responses to a manageable number of statements for the subsequent rounds, a committee was appointed to analyze the data. Dr. Joseph Ford, Mr. Fred Hadley, and Mr. David Netherton met to

develop a consensus of consolidated items from the first round of responses. Fourteen statements which corresponded to the first question and twenty-eight statements which corresponded to the second question resulted from their analysis of the data.

In the second round, the panelists' ratings for each of these statements were tabulated. A mean score for each of the statements was determined. The ratings and mean scores were based on the five-point Likert-type scale which accompanied these statements.

The data from the third round were tabulated to determine the final mean scores for each of the statements. The statements pertaining to the two questions on the original round were considered separately in order to determine a consensus on the most pressing staff development need of urban vocational teachers as well as additional staff development needs of urban vocational teachers.

The statement with the highest mean score in response to the first question represented the most pressing staff development need of urban vocational teachers as perceived by their supervisors. The statements with the highest mean scores in response to the second question represented the most important additional staff development needs of urban vocational teachers as perceived by their supervisors.

The third question which appeared on the last questionnaire called for the supervisors to respond with a Yes or a No beside each statement. They were asked if they thought their teachers would believe that each of the statements was a staff development need. The number of affirmative and negative replies was tabulated for each of the statements.

### Conclusions

The first research goal of this study was to determine the most pressing staff development need of urban vocational teachers as perceived by their supervisors. The results showed that the supervisors perceived the most pressing staff development need to be "Projection of a positive image of vocational education programs; promotion of programs." This need received a mean score of 4.63 which was the highest group mean score of all the most pressing staff development needs.

Of the thirteen remaining most pressing staff development needs, nine received a mean score of 4 or greater. Since a score of 4 represented agreement, it could be said that the supervisors believed these staff development needs were very important. The following most pressing staff development needs received a mean score of 4 or greater:

1. Projection of a positive image of vocational education programs; promotion of programs.

2. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.

3. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.

4. Updating the vocational education teachers in new technology and equipment.

5. Motivating, challenging, and retaining students.

6. Computer training and software applications for all curriculum areas.

7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.

8. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.

9. Help teachers raise their expectations of the programs and of themselves as professionals.

10. Classroom and laboratory management.

The second research goal of this study was to determine additional staff development needs of urban vocational teachers as perceived by their supervisors. Eleven of the additional staff development needs received scores of 4 or greater. Again, since a score of 4 represented agreement, it could be said that the supervisors believed these were important additional staff development needs of urban vocational teachers. The following were additional staff development needs which received a mean score of 4 or greater:

1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.
2. Subject update, including trends and actual work experience in industry.
3. Technology update, including using the latest state-of-the-art equipment.
4. Teaching methodology, including creativity and innovative teaching strategies.
5. Effectively working with special students, such as handicapped, disadvantaged, gifted and talented, and adults.
6. Understanding individual needs and learning styles of students.
7. Effective managerial skills, including classroom and laboratory management, time management, and record-keeping/clerical skills.
8. Developing a working knowledge of computers and their use in the classroom.
9. Interfacing of disciplines, including basic skill development.
10. Communication with students, teachers, guidance counselors, and principals.
11. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.

It should be noted that the order of the needs listed reflected the values of the final mean scores. They were listed in descending order with the need given the highest mean score appearing first.

The data indicated that the supervisors perceived improving the image of vocational education to be an important staff development need in that it was the most pressing staff development need as well as the need with the



highest mean score among additional staff development needs. Clearly, this was an important finding.

Interestingly, many of the most pressing staff development needs which received a mean score of 4 or greater corresponded to the additional staff development needs which received mean scores of 4 or greater. The following table illustrates the similarities in these needs.

TABLE 9

SIMILARITIES BETWEEN MOST PRESSING STAFF  
DEVELOPMENT NEEDS AND ADDITIONAL STAFF  
DEVELOPMENT NEEDS WHICH RECEIVED A  
MEAN SCORE OF 4 OR GREATER

Most Pressing Needs	Additional Needs
1. Projection of a positive image of vocational education programs; promotion of programs.	1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.
2. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.	4. Teaching methodology including creativity and innovative teaching strategies.
3. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.	6. Understanding individual needs and learning styles of students.

TABLE 9--Continued

Most Pressing Needs	Additional Needs
4. Updating the vocational education teachers in new technology and equipment.	3. Technology update, including using the latest state-of-the-art equipment.
5. Motivating, challenging, and retaining students.	
6. Computer training and software applications for all curriculum areas.	8. Developing a working knowledge of computers and their use in the classroom.
7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.	2. Subject update, including trends and actual work experience.
8. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.	5. Effectively working with special students such as handicapped, disadvantaged, gifted and talented, and adults.
9. Help teachers raise their expectations of the programs and of themselves as professionals.	
10. Classroom and laboratory management.	7. Effective managerial skills, including classroom and laboratory management, time management, and recordkeeping/clerical skills.
	9. Interfacing of disciplines, including basic skill development.
	10. Communication with students, teachers, guidance counselors, and principals.

TABLE 9--Continued

Most Pressing Needs	Additional Needs
	11. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.

The third research goal of this study was to determine how the supervisors believed their perceptions would differ from those of the teachers they supervise.

In every instance, more of the supervisors agreed than disagreed that their teachers would believe each of the statements was a staff development need. For the most pressing staff development need, fifty-six supervisors (89 percent) responded with a Yes, and seven supervisors (11 percent) responded with a No. In the additional needs category, sixty-one of the supervisors (97 percent) responded with a Yes and only two (3 percent) responded with a No when asked if they believe their teachers would consider the statement concerned with improving the image of vocational education a staff development need. This was an important aspect of the study since it revealed how the supervisors believed their perceptions would differ from those of the teachers they supervise.

Of the eleven additional staff development needs which received a mean score of 4 or greater, the number of

supervisors who believed their teachers would consider the statements to be staff development needs ranged from 76 percent to 97 percent. The statement with the highest percentage of agreement was "Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers." Seventy-six percent of the supervisors believed their teachers would perceive "Communication with students, teachers, guidance counselors, and principals" as a staff development need.

Although these findings can not be generalized to urban schools systems throughout the United States, these opinions were nevertheless expected to be highly regarded by vocational supervisors and teachers in other states. Additionally, since vocational subjects were sufficiently different from other subjects to warrant different staff development activities, these findings can not be generalized to other subject areas.

However, these findings and conclusions should be helpful to urban school systems in Virginia contemplating staff development activities for their vocational teachers. It would be beneficial in determining the content to be covered. The Department of Education should also find this information useful in planning staff development activities for urban vocational teachers. Colleges and universities would be able to address teachers' needs by providing

relevant courses for those who are interested in either renewing their certificates or taking courses for advancement in their careers.

### Recommendations

The following recommendations were made for further study, research, and action:

1. The information gathered in this study should prove useful at the state level in planning staff development activities. In-service meetings and workshops should be provided for teachers which include information to meet the staff development needs of urban vocational teachers as perceived by their supervisors. This should provide a starting point for planners of staff development programs at both the state and local levels. Every effort should be made to meet these needs.

2. Colleges and universities which provide staff development/in-service programs for vocational teachers should use the information when planning curricula. They should also incorporate this information into their pre-service programs at the undergraduate level.

3. Additional research should be undertaken to determine staff development needs of urban vocational teachers. Follow-up studies using teachers rather than supervisors should be done to provide a comparison of perceptions.

4. The most pressing staff development need and

all of the other staff development needs which received a mean score of 4 or greater should be given priority when designing staff development or in-service activities for teachers.

The model that follows was developed for this purpose. It includes both the staff development needs which received a mean score of 4 or greater and some suggested implementation strategies. Since the vocational teachers are all adult learners, a body of fairly reliable knowledge about adult learning should be applied to staff development programs.

Adults bring a great deal of life experience into the classroom. This can be an invaluable asset to be acknowledged, tapped, and used. Adults can learn much from dialogue with respected peers and colleagues.<sup>140</sup> Those who plan staff development programs should be aware of this and provide opportunities for such dialogue in the workshops and courses suggested below.

Needs	Implementation Strategies
1. Projection of a positive image	Two-hour workshop or one-day workshop
2. Marketing vocational education	Two-hour workshop
3. Subject matter update	Semester course or two-hour workshop

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<sup>140</sup>Ron Zemke and Susam Zemke, "30 Things We Know for Sure About Adult Learning," Training/HRD 18 (June 1981):52.

4. Technology update	Two-hour workshop or semester course
5. Teaching methodology	Semester course
6. Working with special populations	Two-hour workshop or semester course
7. Individual learning styles	One-day workshop
8. Managerial skills	One-day workshop or semester course
9. Computer applications	One-day workshop or semester course
10. Basic skill development	One-day workshop
11. Improved communication	Two-hour workshop
12. Using community resources	One-day workshop

Fig. 1. Staff development model for urban vocational education.

The following are selected examples of how the aforementioned model might be implemented. Indeed, there are many other possibilities.

#### Sample Two-Hour In-Service Meetings

If a two-hour in-service meeting were offered to urban vocational teachers, it could cover the most pressing staff development need as well as the additional staff development need with the highest group mean score since they were essentially the same. The most pressing staff development need was "Projection of a positive image of vocational education programs; promotion of programs." The additional staff development need with the highest group

mean score was "Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers." The following information could be included in such a two-hour in-service:

### Public Relations for Vocational Education

- I. Creating an Image
  - A. How your program is viewed by:
    - 1. Other teachers
    - 2. Administrators
    - 3. Students
    - 4. Parents
    - 5. Guidance counselors
  - B. Why they hold these images
    - 1. Attitudes projected by you--the teacher
    - 2. Attitudes projected by others
  - C. In schools where positive image exists, it is because of the attitudes of the teachers
    - 1. Latest content
    - 2. Meaningful instructional strategies
    - 3. Challenging student activities
  - D. Showcase your program--public relations--and continue to improve attitudes and image
- II. Organizing a Public Relations Program
  - A. To make public relations successful, a plan is needed
  - B. Plan for the remainder of this year, but get a year's plan prior to the start of school--Write it down!
  - C. Have at least one public relations activity a month
  - D. Use the media--this gets quick responses!
  - E. Might add or emphasize
    - 1. In-school open house
    - 2. Change of courses
    - 3. Change lab signs
    - 4. Visit guidance--show changes
    - 5. Show principals
    - 6. Use display cases--trophies, etc.
    - 7. Lunch-time displays
- III. Recruitment
  - A. Get house in order
  - B. Develop a recruitment plan
  - C. Visit schools



- 1. Elementary
- 2. Junior High
- D. Challenge academic students

Another two-hour in-service might include subject and technology updates for vocational teachers since these needs ranked high on both lists. Such in-service programs would have to be grouped according to subjects since business education would differ considerably from technology education in subject material. Supervisors may wish to provide this information to their respective teachers or they may bring in resource people from the community. Such an in-service might include the following:

#### Subject and Technology Update for Vocational Teachers

- I. Subject Update
  - A. Explain why vocational educators must maintain a close relationship with the business community to ensure that changes are reflected in the curriculum
  - B. Explain how a needs assessment can be developed and administered to the business community for the purpose of planning curriculum
  - C. Review recent professional journals to determine the latest findings and trends in subject areas
- II. Technology Update
  - A. Identify the new technology in the different vocational education fields
    - 1. Discuss the cost
    - 2. Discuss the advantages and disadvantages
    - 3. Inform teachers where it is being used in the community
    - 4. If possible, demonstrate the equipment for the teachers
    - 5. Provide literature
  - B. Discuss the effects of new technology on each of the vocational education fields
    - 1. Curriculum
    - 2. Employment trends

A third two-hour in-service could address special

needs students. Special education teachers and other resource people who work with special needs students may be brought in to discuss effective instructional approaches for classes composed of diverse populations such as culturally disadvantaged, handicapped, adults, and gifted and talented. They would be able to offer suggestions on how to accommodate these special students' needs in all of the vocational classes. The following information could be included in such a two-hour in-service:

#### Vocational Education for Students with Special Needs

- I. Understanding the Special Needs of Vocational Education Students
  - A. Disabled
    1. Physical
    2. Mental
  - B. Poverty
  - C. Culturally deprived
  - D. Socially maladjusted
  - E. Educationally deprived
  - F. Adults
- II. Using Job Samples to Evaluate Potential for Specific Jobs Within the Community
  - A. Actual job
  - B. Job simulation
- III. Using Work Samples
  - A. Selecting the appropriate work sample or test
  - B. Understanding how to interpret them
- IV. Using Job Placement to Help Students Become Employed
  - A. Requires knowledge of the job requirements and job market
  - B. Requires knowledge of student's capabilities and preferences

Ideally, all of the most pressing staff development needs and additional staff development needs with a mean score of 4 or greater should be addressed at some point

during in-service time provided by the school systems. However, due to time constraints, this is not probable. Perhaps the teachers could select from among them their preferences as a starting point.

#### Workshops

Again, those planning one- or two-day workshops should consider the findings of this study when determining the content and activities to be included. Rather than condensing the most pressing staff development need and the additional staff development need with the highest group mean score into just a two-hour session, more time can be devoted to in-depth study of image and promotion of vocational education programs.

The Public Relations Checklist for Vocational Education, developed by Calfrey C. Calhoun of the University of Georgia and Alton V. Finch of the University of Mississippi, was designed so that vocational educators at any level may use it to evaluate their public relations activities against those that are recommended by researchers as being effective. This could be administered to vocational teachers during a one-day workshop to provide a basis for an effective evaluation of techniques used for public relations purposes in the area of vocational education. This checklist suggests how schools can develop, implement, and evaluate a program of public relations. The ultimate objective is the improvement of

vocational education through the cultivation of a pattern of highly recommended activities and media, designed to increase public confidence and support for the program. Such activities should result in better performance of vocational teachers by improving cooperation between the various vocational programs and their internal publics including school administrators, teachers, and guidance personnnel, and their external publics including parents, the community, businesses, post-high school vocational and technical schools, and colleges and universities.<sup>141</sup>

#### Sample One-Day Workshop on Public Relations

- I. Administer Public Relations Checklist for Vocational Education
  - A. Teachers should respond for their own schools
  - B. Assign a numerical value to each possible response
  - C. Rank the items on a scale from most effective to least effective
- II. Identify Local Schools That Have Excellent Vocational Education Programs to Determine Whether the Checklist Activities Are Used in These Schools
- III. Solving the Identified Problems in the Public Relations Programs in Vocational Education
  - A. Brainstorming sessions
  - B. Lectures
  - C. Case Studies

"Computer training and software applications for all curriculum areas" ranked number six in the Most Pressing Staff Development Needs category, and a similar need ranked number eight in the Additional Staff

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<sup>141</sup> Calhoun and Finch, Vocational Education: Concepts and Operations, pp. 260-71.

Development Needs category. Indeed, there are still teachers who possess little or no knowledge of computers. A one-day workshop to address this need for those vocational teachers should be a high priority. This could be done by a supervisor, a colleague who is knowledgeable about computers, or a consultant in the computer industry. An example of a one-day workshop on computer literacy follows:

#### Sample One-Day Workshop on Computer Literacy

- I. Introduction to Computers
  - A. Monitor
  - B. Keyboard
    - 1. Typewriter keys
    - 2. Function keys
    - 3. Numeric keys
  - C. Disks
  - D. Printers
- II. How to Use the Computer
  - A. Starting up the computer
  - B. Loading a program
  - C. Work through the samples
  - D. Exiting the program
- III. Software Applications for Vocational Education
  - A. Word processing
  - B. Grade sheets
  - C. Newsletters
  - D. Graphics
- IV. Practice Session

The other staff development needs which received a mean score of 4 or greater in this Delphi study should not be overlooked when considering programs for workshops. Several of these could be incorporated into workshops for vocational teachers. An example of how this could be done follows:

## Sample Two-Day Workshop

## DAY 1

- I. Subject Update
  - A. Trends and opportunities for actual work experience in industry
  - B. Factors influencing program planning
    - 1. Needs assessment from local business community
    - 2. Local advisory committees
    - 3. Occupational analyses
- II. Technology Update
  - A. The latest state-of-the-art equipment
  - B. New programs that can be used in vocational education
  - C. Obtaining new equipment and/or software for use in the classroom

## DAY 2

- III. Teaching Methodology
  - A. Creative and innovative teaching strategies
  - B. Understanding individual needs and learning styles of students
  - C. Understanding and employing a variety of methods for individualizing instruction in vocational education
    - 1. Programmed instruction
    - 2. Contract activity packages
    - 3. Small-group instructional techniques

The possibilities for incorporating these staff development needs into workshops are endless. Selecting topics from among the needs and providing appropriate learning activities is a much better approach than just choosing topics of interest based on informal assessments.

## Sample Credited Courses

Teachers, because they are required to periodically renew their certificates, look for courses which are interesting and relevant to their profession. Certainly, a course based on the supervisors' perceptions of staff

development needs of urban vocational teachers would help teachers deal effectively with problems in vocational education in urban schools. Colleges and universities interested in offering such a course should study these needs and determine which to include in a one-semester course for vocational teachers. A syllabus for such a course might include the following:

Meeting the Staff Development Needs of  
Urban Vocational Teachers

A. Catalog Description

Meeting the Staff Development Needs of Urban  
Vocational Teachers

This course has two main emphases: (1) the staff development needs of urban vocational teachers as perceived by their supervisors, and (2) addressing the staff development needs of urban vocational teachers.

B. Justification

This course was designed to meet the staff development needs of urban vocational teachers as perceived by their supervisors. Many agree that staff development for teachers needs improvement, and the first step should be to identify the needs of the teachers to be served. Having done this, the next step should be to address these needs, and this is the primary purpose of the course.

C. Educational Objectives

The major educational objectives to be achieved in this course are:

1. Understanding how to improve the image of vocational education.
2. Marketing vocational education programs to students, parents, the community, and school administrators.
3. Organizing instructional material, development of lesson plans, and effective presentation of material to

classes.

4. Subject update.
5. Technology update.
6. Effectively working with special students in vocational classes.
7. Computer training and software applications for all curriculum areas.
8. Curriculum development and planning to meet future needs.
9. Motivating, challenging, and retaining students.
10. Classroom and laboratory management.
11. Understanding individual needs and learning styles of students.

#### D. Textbooks and References

Calhoun, Calfrey C. and Alton V. Finch, Vocational Education: Concepts and Operations. Belmont: Wadsworth Publishing Company, 1982.

Dunn, Rita and Kenneth Dunn, Teaching Students Through Their Individual Learning Styles. Reston: Reston Publishing Company, 1978.

Zais, Robert. Curriculum Principles and Foundations. New York: Harper & Row, Publishers, 1976.

Another credited course for vocational teachers could be offered for technology update. The following syllabus could be used for such a course.

#### Topics: Technical Update

##### A. Catalog Description

This course is designed to up-date technical educators' knowledge of the changing technologies and skills being applied in contemporary business and industry. Activities will relate to applying this new knowledge in the classroom.

##### B. Course Competencies



As a result of this course and its activities, the learner should:

1. Develop an awareness of the changes in industrial and business practices in the local region.
2. List and describe new technologies that are being used in local businesses and industry.
3. Describe new job opportunities that will emerge in the local region.
4. Become aware of educational resources available to aid in implementing new technologies into the classroom.
5. Plan for the inclusion of new technologies and skills into educational programs.

C. Course Requirements

1. Participate in all business and industrial visits (15 percent).
2. Annotate five (5) professional journal articles on contemporary approaches to teaching new technology. Use format specified by the instructor (25 percent).
3. Write or contact educational vendors to collect information on new equipment, audio-visuals, and textbooks. This literature should focus on new technologies (10 percent).
4. Prepare a book report on a contemporary educational textbook (25 percent).
5. Identify five (5) new technologies you wish to include in your curriculum. Describe in one page what each is and how you plan to incorporate it into your curriculum (25 percent).

Note: All written work must be composed and printed on a microcomputer.

While the aforementioned workshops and courses enable the vocational teachers to interact with one another, there are other factors to be considered when planning staff development activities for adults. Among these is

accessibility. Some of the two-hour workshops could be videotaped for viewing by the teachers at their convenience. This could be done on either the local level or the state level. Perhaps one of the colleges or universities in Virginia would be interested in preparing a series of video tapes on the staff development needs of urban vocational teachers as identified by their supervisors.

In addition to making the instruction more accessible, video tapes provide an alternative to the classroom. Adults have something real to lose in a classroom setting. Self-esteem and ego are on the line when they are asked to risk trying a new behavior in front of peers and colleagues. Negative experiences in traditional education, feelings about authority, and the preoccupation with events outside the classroom all affect in-class experience. These and other influencing factors are carried into class with the learners as surely as are their gold pens and lined yellow pads.<sup>142</sup>

Study of the adult as a special species of learner is indeed a relatively new phenomenon. For now we must recognize that adults want their learning to be problem-centered, personalized, and accepting of their need for self-direction and personal responsibility.<sup>143</sup>

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<sup>142</sup> Zemke and Zemke, "30 Things We Know for Sure About Adult Learning," p. 52.

<sup>143</sup> Ibid.

Having determined the staff development needs of urban vocational teachers, every effort should be made to address them. They should be reviewed by department chairpersons, supervisors, state department personnel, and colleges and universities to facilitate planning and implementation. Consideration should be given first to those staff development needs with the highest group mean scores. Input from the vocational teachers would be valuable when prioritizing needs with similar scores or when a comparison is desirable.

In addition to staff development for vocational teachers, we need to look at other areas for assistance in improving vocational education. Some of these would be administrative support, state and local support in developing curricula, and appropriate counseling. Although staff development can aid in keeping vocational teachers technologically current, it is vital that financial, administrative, and policy support be in place.

To improve vocational education, the staff development needs of vocational teachers need to be continually monitored and addressed. If this is done, students would develop occupational skills, become more employable, and become better informed and active citizens in their communities.

APPENDIX A

LETTER FROM DEWEY OAKLEY, JR.

ADMINISTRATIVE DIRECTOR OF VOCATIONAL AND ADULT EDUCATION



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF EDUCATION

P.O. BOX 60  
RICHMOND 23216-2060

January 6, 1987

Ms. Patricia T. Tompkins  
3908 Oak Drive East  
Chesapeake, VA 23321

Dear Ms. Tompkins:

I was pleased to learn that you will attempt to determine perceived staff development needs for vocational education teachers as your dissertation topic.

Staff development for vocational education teachers is a growing need because of new technology and changing job skill requirements. Your idea of determining what directors and supervisors of vocational education teachers believe to be the most important staff development needs is a good approach. I believe your findings will be very helpful to the State as we attempt to direct scarce resources to the most important needs.

Let me know if we can be of assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dewey T. Oakley, Jr.", written over the typed name.

Dewey T. Oakley, Jr.  
Administrative Director  
Vocational & Adult Education

/rs

APPENDIX B

LETTER EXPLAINING THE RESEARCH AND THE DELPHI TECHNIQUE  
SENT TO ALL VOCATIONAL SUPERVISORS IN THE  
URBAN AREAS OF VIRGINIA

January 12, 1987

Mr. John Doe  
Supervisor of Marketing Education  
Urban City Schools  
100 Urban Drive  
Urban, VA 23456

Dear Mr. Doe:

I am a doctoral student at Old Dominion University in Norfolk, Virginia. Currently, I am working on a research project on staff development for vocational education. I expect to earn the Doctor of Philosophy degree in Urban Services with a concentration in Vocational Education this year.

Last spring, during a conversation with Mr. Dewey Oakley, Director of Vocational Education for the Commonwealth of Virginia, he stated that there is a need to improve staff development for vocational teachers in Virginia. He added that he would like to see some effort directed toward this goal.

The first step toward improving staff development is the determination of needs. Research has shown that improving staff development should begin with the supervisors' assessment of teacher needs. What I am attempting to do is to determine the staff development needs of vocational teachers as perceived by their vocational supervisors. As a vocational supervisor, your opinions and comments are very beneficial for this study. Your ideas can bring to light those areas in which you feel teachers need assistance. If you are willing to participate, please fill out the enclosed brief questionnaire and return it to me by January 23, 1987. The entire research process will require little of your time.

The method that will be used to collect these opinions is called the Delphi technique. Though the participants never meet face-to-face, their opinions are collated and refined in a series of successive questionnaires. Feedback on the opinions of all participants is provided, thus enabling individuals to reevaluate their responses on particular issues if they wish to do so.

Mr. John Doe

2

The procedure is as follows:

1. The first questionnaire, which is included with this letter, calls for a brief list of what you consider to be the most pressing staff development or in-service needs of your vocational teachers.
2. On your second mailing, you will receive a copy of a collated list of responses. You will be asked to rate each item by its importance as a staff development need.
3. The third and final mailing is expected to report on the consensus, if any, on the items rated. You may then be asked to revise your opinions or to specify reasons for remaining outside the consensus.

A copy of the final report will be sent to all participants. Although your name appears on the questionnaire, your responses will be kept confidential. I need to identify your opinions for future mailing and data analysis.

Realizing the demands already placed on your time, I have attempted to make this survey as concise as possible. Will you please take just a few minutes to complete the questionnaire and return it to me by January 23, 1987.

Thank you for your professionalism, concern, and time.

Sincerely,

Patricia Tynes Tompkins

Enclosures



APPENDIX C

OPEN-ENDED QUESTIONNAIRE SOLICITING SUPERVISORS'  
PERCEPTIONS OF STAFF DEVELOPMENT NEEDS OF  
URBAN VOCATIONAL TEACHERS

## STAFF DEVELOPMENT NEEDS OF URBAN VOCATIONAL TEACHERS

Purpose: The purpose of this study is to identify the staff development needs of vocational teachers as perceived by their vocational supervisors. The Delphi technique is being used to achieve this purpose.

Directions: Read the two questions below and answer with short, concise statements. Please return it in the self-addressed, stamped envelope by January 23, 1987.

Questions:

1. What, in your opinion, is the most pressing staff development/in-service need of the vocational teachers you supervise?

2. What, in your opinion, are other staff development/in-service needs of the vocational teachers you supervise? Please list three or more.

Patricia T. Tompkins, 3908 Oak Dr. E., Chesapeake, VA 23321

APPENDIX D

ROUND TWO QUESTIONNAIRE AND ACCOMPANYING LETTER

March 23, 1987

Mr. John Doe  
Supervisor of Marketing Education  
Urban City Schools  
100 Urban Drive  
Urban, VA 23456

Dear Mr. Doe:

Thank you for agreeing to participate in my dissertation research and providing your perceptions of staff development needs of vocational teachers. The quality and quantity of the responses received indicate a strong interest in this topic by directors and supervisors of vocational education in the urban areas of Virginia.

The first round was designed to elicit individual judgments from each of the panel of experts selected for this study. Since there were so many responses to be returned for your consideration, it was necessary to reduce this number into groups of similar ideas. I enlisted the help of a special committee to achieve a homogeneous group of statements which represent every idea generated by the panel in the first round.

When the second round is returned, the data will be tabulated. For the final round, you will be given the scores obtained for each of the categories and asked where your own opinions lie in reference to those of the group. It is hoped that a consensus will be reached at the end of the third round.

Please complete this round as soon as possible and return it to me by April 3, 1987.

Sincerely,

Patricia Tynes Tompkins

Enclosures

THE DEVELOPMENT OF A CONSENSUS ON  
STAFF DEVELOPMENT NEEDS OF URBAN VOCATIONAL TEACHERS

Purpose: The purpose of this study is to identify the staff development needs of urban vocational teachers as perceived by their vocational supervisors. The Delphi technique is being used to achieve this purpose.

The goal of this round is to provide the feedback from the first round to all of the panel members and to ask them to consider their own responses in comparison with the responses of the others.

Directions: All of the staff development needs expressed by the supervisors in the first round have been categorized. The responses to the first question are Most Pressing Needs, and the responses to the second question are Additional Needs. You are asked to consider the responses to each of these two questions separately.

Please read all of the categories of staff development needs of vocational teachers and indicate the extent of your agreement or disagreement with each. You are encouraged to differentiate among them using the following rating scale:

SA = Strongly Agree  
A = Agree  
U = Undecided  
D = Disagree  
SD = Strongly Disagree

The statements which include your opinions are indicated by a check mark. After reading all of the other statements, you may wish to change your mind.

Most Pressing Staff Development Needs

1. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.

SA   A   U   D   SD

2. Updating the vocational education teachers in new technology and equipment.

SA   A   U   D   SD

3. Computer training and software applications for all curriculum areas.	SA	A	U	D	SD
4. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.	SA	A	U	D	SD
5. Projections of a positive image of vocational education programs; promotion of programs.	SA	A	U	D	SD
6. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	SA	A	U	D	SD
7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.	SA	A	U	D	SD
8. Philosophy of vocational education and the development of a better work ethic.	SA	A	U	D	SD
9. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.	SA	A	U	D	SD
10. Motivating, challenging, and retaining students.	SA	A	U	D	SD
11. Help teachers raise their expectations of the programs and of themselves as professionals.	SA	A	U	D	SD
12. Classroom and laboratory management.	SA	A	U	D	SD
13. Understanding the requirements of the Hazard Communication Standard.	SA	A	U	D	SD
14. Using Competency-Based Education.	SA	A	U	D	SD

Additional Staff Development Needs

- |  |    |   |   |   |    |
|--|----|---|---|---|----|
| 1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.     | SA | A | U | D | SD |
| 2. Effective managerial skills, including classroom and laboratory management, instructional management, time management, and recordkeeping/clerical skills. | SA | A | U | D | SD |
| 3. Effectively working with special students such as handicapped, disadvantaged, gifted and talented, and adults.  | SA | A | U | D | SD |
| 4. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.                                | SA | A | U | D | SD |
| 5. Technololgy update, including using the latest state-of-the-art equipment.  | SA | A | U | D | SD |
| 6. Teaching methodology including creativity and innovative teaching strategies.   | SA | A | U | D | SD |
| 7. Subject update, including trends and actual work experience in industry.  | SA | A | U | D | SD |
| 8. Developing a working knowledge of computers and their use in the classroom.   | SA | A | U | D | SD |
| 9. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.                                  | SA | A | U | D | SD |
| 10. Interfacing of disciplines, including basic skill development.   | SA | A | U | D | SD |
| 11. Planning student clubs and activities that attract and appeal to today's students.   | SA | A | U | D | SD |

12. Professionalism, including training in preparation for career advancement.	SA	A	U	D	SD
13. Understanding school law, legal issues, and certificate renewal requirements that affect vocational education.	SA	A	U	D	SD
14. Competency-Based Education--documenting student competencies and showing students where they are.	SA	A	U	D	SD
15. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.	SA	A	U	D	SD
16. Understanding individual needs and learning styles of students.	SA	A	U	D	SD
17. Time and stress management.	SA	A	U	D	SD
18. Test validity--planning evaluation instruments which measure the accomplishments of the objective.	SA	A	U	D	SD
19. Developing laboratory safety awareness.	SA	A	U	D	SD
20. Grooming and interview principles.	SA	A	U	D	SD
21. Evaluation of vocational teachers, including methods, strategies, and appearance.	SA	A	U	D	SD
22. Communication with students, teachers, guidance counselors, and principals.	SA	A	U	D	SD
23. Developing a functional philosophy of vocational education.	SA	A	U	D	SD
24. Motivation, including counseling for vocational careers in the lower grades.	SA	A	U	D	SD
25. Familiarize the vocational teacher with the concepts of the middle school.	SA	A	U	D	SD
26. Convince the teacher training					



institutions to change their curriculum  
to reflect new technology.

SA A U D SD

27. Student follow up after leaving  
vocational programs.

SA A U D SD

28. Making the transition from  
industrial arts to technology  
education.

SA A U D SD

THANK YOU

Patricia Tynes Tompkins  
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(804) 484-1819

APPENDIX E

ROUND THREE QUESTIONNAIRE AND ACCOMPANYING LETTER

May 15, 1987

Mr. John Doe  
Supervisor of Marketing Education  
Urban City Schools  
100 Urban Drive  
Urban, VA 23456

Dear Mr. Doe:

Welcome to the third and final round of this Delphi research. I sincerely appreciate your time and interest in participating in the three-round survey concerning staff development needs of urban vocational teachers.

For this round, the statements are being returned to you for your consideration. This questionnaire differs from the second round in that it reports both the group consensus and your prior rating for each item. These values are based on the Likert-type scale which ranges from Strongly Agree (5) to Strongly Disagree (1). You are asked to reassess your position in light of the additional information concerning group feeling. Please use all of the ratings on the scale. For those items where you wish to remain outside the consensus, you are asked to state very briefly your reason for so doing. Remember, some staff development needs should be more important than others. You may wish to reconsider your responses to reflect this.

Finally, please indicate by a Yes or a No if you believe your teachers would agree that each of these statements is a staff development need of urban vocational teachers.

Your willingness to share your thoughts and your promptness in this process is greatly appreciated. Please return this last round by May 27, 1987.

Sincerely,

Patricia Tynes Tompkins

THE DEVELOPMENT OF A CONSENSUS ON  
STAFF DEVELOPMENT NEEDS OF URBAN VOCATIONAL TEACHERS

Purpose: The purpose of this study is to identify the staff development needs of urban vocational teachers as perceived by their vocational supervisors. The Delphi technique is being used to achieve this purpose.

The goals of this round are (1) to provide the feedback from the second round which includes both the group consensus and each panelist's rating for the statements and to ask the panelists to reassess their own positions in comparison with the group's responses, and (2) to ask the panelists if they believe their teachers would agree that each of these statements is indeed a staff development need.

Directions: This final questionnaire contains the mean scores for each of the statements and your prior ratings. You are asked to examine the data and to reassess your position based on the group's responses. Please fill in all reassessment boxes; you may continue to use your prior rating if it accurately reflects your opinion.

The mean scores and your ratings for each of the statements were determined by using the following rating scale:

- 5 = Strongly Agree (SA)
- 4 = Agree (A)
- 3 = Undecided (U)
- 2 = Disagree (D)
- 1 = Strongly Disagree (SD)

This instrument calls for your selection of one of these agreement levels for each statement based on your own values and a knowledge of the group consensus.

Since all of the statements are of considerable importance, it is essential that you discriminate between them. Your responses should cover the complete range of the scale from the highest to the lowest.

Please feel free to change any of your opinions during this round. If your personal positions varies significantly from the group mean, please provide a very brief rationale to support your divergent view.

In reviewing these statements, please be reminded that the responses to each question should be considered separately in order that a consensus may be reached on the Most Pressing Staff Development Need as well as on

## Additional Staff Development Needs.

Finally, you are asked to answer with a YES or a NO if you think your teachers would believe that each of the statements is a staff development need.

Since I would like to have the results of this study by May 27, 1987, I urgently request that your response be forwarded as promptly as possible. Your participation in this study is sincerely appreciated.

I shall be pleased to send you a summary of the consensus data derived from this round of the Delphi study. A space for this request has been provided at the end of this instrument.

THANK YOU!

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KEY: Strongly Agree 5, Agree 4, Undecided 3, Disagree 2, Strongly Disagree 1

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Most Pressing Staff Development Needs

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Needs	Your Prior Rating	Group Mean	Your Reassess- ment	Will Your Teachers Agree That This Is a Need (Y or N)
EXAMPLE: This research study is important to vocational education staff development.	4	4.79	5	Y

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1. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.

4.44

Needs	Your Prior Rating	Group Mean	Your Reassess- ment	Will Your Teachers Agree That This Is a Need (Y or N)
2. Updating the vocational teachers in new technology and equipment.		4.44		
3. Computer training and software applications for all curriculum areas.		4.22		
4. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.		4.52		
5. Projection of a positive image of vocational education programs; promotion of programs.		4.51		
6. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.		3.89		
7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.		4.21		
8. Philosophy of vocational education and the development of a better work ethic.		3.73		
9. Developing and managing effective instructional approaches for classes composed of diverse populations, such as				

Needs	Your Prior Rating	Group Mean	Your Reassess- ment	Will Your Teachers Agree That This Is a Need (Y or N)
foreign born, disadvan- taged, handicapped, gifted and talented, adults, etc.		4.08		
10. Motivating, challeng- ing and retaining students.		4.44		
11. Help teachers raise their expectations of them- selves as professionals.		4.20		
12. Classroom and labora- tory management.		3.97		
13. Understanding the re- quirements of the Hazard Communication Standard.		3.34		
14. Using Competency- Based Education.		3.98		

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Most Pressing Staff Development Needs

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1. Marketing vocational programs to students, par- ents, the community, and school administrators; im- proving the image of voca- tional classes and teach- ers.	4.76
2. Effective managerial skills, including classroom and laboratory management, and recordkeeping/clerical skills.	4.19
3. Effectively working with special students, such as handicapped, disadvan- taged, gifted and talented, and adults.	4.29

Needs	Your Prior Rating	Group Mean	Your Reassess- ment	Will Your Teachers Agree That This Is a Need (Y or N)
4. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.		4.17		
5. Technology update, including using the latest state-of-the-art equipment.		4.29		
6. Teaching methodology including creativity and innovative teaching strategies.		4.30		
7. Subject update, including trends and actual work experience in industry.		4.38		
8. Developing a working knowledge of computers and their use in the classroom.		4.24		
9. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.		4.14		
10. Interfacing of disciplines, including basic skill development.		4.16		
11. Planning student clubs and activities that attract and appeal to today's students.		4.01		
12. Professionalism, including training in preparation for career advancement.		3.73		



Needs	Your Prior Rating	Group Mean	Your Reassess- ment	Will Your Teachers Agree That This Is a Need (Y or N)
13. Understanding school law, legal issues, and certificate requirements that affect vocational education.		3.87		
14. Competency-Based Education--documenting student competencies and showing students where they are.		4.10		
15. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.		3.81		
16. Understanding individual needs and learning styles of students.		4.25		
17. Time and stress management.		3.83		
18. Test validity--planning evaluation instruments which measure the accomplishments of the objective.		4.02		
19. Developing laboratory safety awareness.		3.95		
20. Grooming and interview principles.		3.40		
21. Evaluation of vocational teachers, including methods, strategies, and appearance.		3.73		
22. Communication with				

Needs	Your Prior Rating	Group Mean	Your Reassess- ment	Will Your Teachers Agree That This Is a Need (Y or N)
students, teachers, guid- ance counselors, and principals.		4.10		
23. Developing a func- tional philosophy of voca- tional education.		3.68		
24. Motivation, including counseling for vocational careers in the lower grades.		3.95		
25. Familiarize the voca- tional teachers with the concepts of the middle school.		3.65		
26. Convince the teacher training institutions to change their curriculum to reflect new technology.		4.10		
27. Student follow up after leaving vocational programs.		4.09		
28. Making the transition from industrial arts to technology education.		3.39		

Would you like to receive a summary of the consensus data  
derived from this round of the Delphi study?

Yes \_\_\_\_\_

No \_\_\_\_\_

PLEASE RETURN BY MAY 27, 1987. THANK YOU.

Patricia Tynes Tompkins  
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APPENDIX F

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APPENDIX G

RESPONSES RECEIVED FROM THE FIRST ROUND  
OF THE DELPHI SURVEY

Most Pressing Staff Development Needs

1. Direction - Vocational teachers need to know what we are about and where we are going.
2. Organization of instructional material, the development of lesson plans, and effective presentation of the material to their classes (Madeline Hunter types of training).
3. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, and gifted and talented.
4. Understanding the requirements of the Hazard Communication Standard.
5. Effective training in new technology areas such as Robotics, CAD/CAM Systems, Biotechnology, composites, artificial intelligence, automated manufacturing, micro-electronics, etc.
6. Train teachers in new methods of presenting content other than by the project method.
7. Application of math and science to the technology education content areas.
8. Image, self-esteem of self and programs.
9. Realization that teachers are representatives of program and total school--not vocational education.
10. Train teachers as coordinators.
11. Training on new equipment.
12. Keeping current with trends in marketing.
13. Employing methodology appropriate to teaching concepts, skills, and attitudes to be internalized.
14. Computer training and software applications for all curriculum areas.
15. Update of skills, particularly computer related.
16. Philosophy of business education.
17. How to implement CAI.

18. How to motivate for health careers and retain.
19. Technology updates are needed for vocational educators, especially business educators.
20. Program promotion.
21. Updating the vocational education teachers in the exploding technical knowledge for his/her program area.
22. Use of CBE.
23. The use of the computer and its impact on all aspects of our society.
24. Continuous updating of current technology in the industry for which they are training students.
25. Computers and computer systems, including hardware and software, and word-processing programs such as Office Writer and Word Perfect.
26. Technical update.
27. Working with disadvantaged and handicapped students.
28. Marketing their programs.
29. High-quality technical update programs.
30. Preparation of a local competency-based curriculum guide for each course, using local job market information as well as the wide variety of curriculum materials available to teachers.
31. Updating curriculum with current content information using the competency-based format approach.
32. Updating skills to integrate microcomputer in business classes as an instructional tool.
33. Organization and classroom/laboratory management.
34. Use of innovative and exciting teaching methods.
35. Promotion of in-school program.
36. Basic computer concepts.
37. Using computers in each subject area of Business Education.

38. Business Law Seminars with professional court aids, lawyers, and judges.
39. Typewriting, shorthand, and notehand teaching methods.
40. Accounting curriculum using computers.
41. Coordination of Cooperative Office Education techniques.
42. Keeping up to date with technology and technological advances.
43. Computer assisted instruction.
44. Help teachers raise their expectations of themselves as professionals.
45. Improvement of instructional management and delivery skills.
46. Projection of a positive image of vocational programs.
47. Release time to participate in industry-sponsored activities that are related to the subject area(s) taught.
48. Keeping trade and industrial instructors current in their respective trades.
49. Teachers need to review the critical elements that make a teacher a truly "master" teacher.
50. New technologies.
51. Teachers need to know how to change educational programs to meet future needs.
52. Working effectively with both highly motivated students and those with a low self-esteem who have yet discovered their interest.
53. Upgrading skills and learning the use of new technology and how it can be used in the vocational classroom.
54. Techniques for teaching in a high tech society.
55. Current trends encompassing high tech equipment and impact on the family.

56. Have the health care specialist become certified in teaching competencies.

57. Mini-workshops on the job, using the new technology and being involved in changing job skill.

58. Psychology of learning and learning styles in combination with teaching techniques.

59. The development of a better work ethic.

60. To develop an understanding that the majority of students are not gifted toward academics, and they should be challenged to get the best from the students enrolled in their teaching area.

61. The development and utilization of training plans by both industry and teachers for student growth.

62. How to integrate technology into industrial arts.

63. Techniques of coordination.

64. Subject matter updates specific to each vocational program area.

65. For the teachers to understand and accept the transition of Industrial Arts to Technology Education.

66. The providing of good instructional materials/information for the entire 50-minute instructional period with content that is current, timely, appropriate, job related, practical, and meaningful.

67. For vocational teachers to be continually informed of new developments, technology, research, etc., occurring in the field they are teaching.

68. To assist vocational teachers to individualize the instruction to meet the specific needs of students with training plans, etc.

69. How to teach special education students enrolled in vocational education.

70. Implementing new teaching skills using the new technology.

71. Investigate approaches for integrating basic skills with vocational education programs.

72. Time for curriculum development and planning.



- 73. Time management--classroom and teacher.
- 74. Motivating and challenging students.
- 75. Helping students to master critical thinking skills.
- 76. Instructional delivery.
- 77. Marketing business education.
- 78. Use of the computer in the classroom.
- 79. New teaching strategies in the classroom.
- 80. Technology update.

#### Additional Staff Development Needs

- 1. Contemporary course offering.
- 2. Developing contemporary courses and in-servicing teachers on these courses.
- 3. Documenting student competencies and showing students where they are.
- 4. Effective teaching.
- 5. Proper balance of classroom and laboratory experience to students.
- 6. Record keeping and documentation to student achievements.
- 7. Articulation of vocational instructional material with academic areas.
- 8. Instructional technology literacy.
- 9. Developing a functional philosophy of vocational/technical education as an integral part of the total educational program.
- 10. Maintaining flexibility in adapting programs to meet current needs of students.
- 11. Marketing programs to students, parents, the community, and school administrators.
- 12. Making the transition from industrial arts to

technology education.

13. Continuing CBE curriculum development.
14. Understanding legal issues affecting vocational teachers.
15. Involve many teachers in the development of the curriculum for the 21st century.
16. Convince the teacher training institutions to change their curriculum to reflect new technology content areas as teachers teach how they are taught.
17. How to easily incorporate the use of computers in all technology education courses.
18. Focus content areas on technological literacy, technology systems and concepts, skill development, applications of technology and the impacts of technology.
19. Basic skill development support through vocational education.
20. Personal/social development of students.
21. Technical update.
22. Marketing of vocational programs in the schools and to the community.
23. How the impact of technology on vocational programs is forcing us to change our programs.
24. Procedures for responding to legislation affecting vocational education.
25. Field trips to show how equipment is being used in the community.
26. Help in preparing units of instruction.
27. Panel of businessmen to come in and discuss their expectations of employees.
28. Need help in handling stress.
29. Becoming knowledgeable about many industry areas in marketing cluster.
30. Understanding the "stresses" affecting today's students.

31. Becoming knowledgeable about computer usage in marketing education.
32. Polishing instructional skills.
33. Planning DECA activities that attract and appeal to today's students.
34. Effectively working with special students.
35. Test validity--planning evaluation instruments which measure the accomplishments of the objectives.
36. Effective managerial skills--with reference to coordinating classroom management, instructional management and recordkeeping/clerical skills--the ability to put it all together consistently and efficiently--putting into practice in the classroom the concepts and skills which they are teaching.
37. Professionalism--commitment to the profession.
38. Business visitations to see current equipment being used.
39. Periodic updates of employment needs and trends in local geographic area.
40. Methods and ideas for program promotion and student recruitment.
41. Test item development.
42. Evaluation of teacher methods.
43. Methods for working with low achievers.
44. Innovative teaching strategies.
45. Health care trends.
46. Clinical update in nursing specialty area.
47. How to counsel for health careers in the elementary schools.
48. How to teach students who can not read or write.
49. How to address vocational PR.
50. What are legal implications for vocational teachers.

51. Professionalism--need to participate in professional activities beyond the normal school day.
52. Creativity--need new ways to do things--remove the "RC" resistance to change factor.
53. How to incorporate the computer into all their instruction.
54. Strategies for working with handicapped student in the vocational education classroom and laboratory situation.
55. Familiarize the concepts of the middle school to the vocational education teacher.
56. Develop a working knowledge of computers and their use in the classroom.
57. Teaching methods.
58. Classroom/lab management.
59. The ability to "sell" programs of instruction to students and the community in an environment of declining enrollments.
60. Development of ways to involve parents into programs of instruction in a more meaningful way than now generally done.
61. Development of methods to more actively involve business and industry into the instructional process.
62. Motivational programs which will excite and inspire the more experienced teachers as a means of combatting teacher burn-out.
63. Administration/supervisory training in preparation for career advancement.
64. Communication--with students and other teachers.
65. Understanding the psychology of learning-teaching behavior in today's students.
66. Technology skills that will be necessary in the future and how they relate to business education courses today.
67. Computers.

68. Time and stress management.
69. Developing realistic expectations of students.
70. Marketing vocational education.
71. Developing and teaching technology units into the curriculum.
72. Updating technical content.
73. Working with mainstreamed special needs students.
74. Marketing themselves as essential, dynamic educators.
75. Integrating youth group component into the classroom.
76. Techniques for getting Virginia to accept certain vocational courses for required credit (i.e. math, science, health).
77. Techniques for moving Virginia to require human relations/child development/parenting class for graduation.
78. Update teachers on the latest equipment and methods of business and industry.
79. Teachers should be permitted to use industry operated update programs for certificate renewal without going through some university.
80. Training in evaluation of software.
81. Time for practice in the use of software.
82. In-service time for teachers to meet together to exchange ideas and information.
83. Infusing/identifying basic skills of reading, writing, communication, and math into curriculum.
84. Providing current teaching techniques to infuse basic skills into classroom instruction.
85. Using the computer for administrative and instructional activities.
86. Working with the special education student.

87. Developing strategies for marketing business education program.
88. Update skills for teaching typewriting.
89. Assistance in working with special needs students.
90. Developing strategies for working with different learning styles.
91. Update skills for teaching electronic transcription.
92. Update skills for teaching communications.
93. Developing and implementing public relations programs.
94. Cooperative method of instruction for students.
95. Developing laboratory safety awareness.
96. Recruitment of students.
97. Occupational update in a variety of areas.
98. Revitalizing your youth organization.
99. Use of curriculum update.
100. Grooming.
101. Interview principles.
102. Evaluating training stations.
103. Using public speakers.
104. Using community resources.
105. Computer assisted instruction.
106. Skill upgrading.
107. History and philosophy--taught by a historian--we seem to have forgotten what we are about and for.
108. Working with business/industry through internships.
109. Program planning in Vocational/Technical Education to keep pace with current trends and technology.

110. Marketing Vocational/Technical Education.
111. Better use of a variety of instructional techniques to accommodate different learning styles.
112. Better management skills for coordinating a wide variety of activities.
113. Better management of lab facilities and accurate competency record keeping.
114. Curriculum development techniques.
115. Program promotion activities.
116. Classroom management techniques.
117. Better understanding of the different learning styles of students.
118. How to integrate math and reading skills into content areas.
119. The importance of teaching "why" as well as "how" in teaching skills.
120. Safety in the work place.
121. Innovative teaching techniques.
122. Better ways to market the program.
123. Helping teachers to prepare for the changes in vocational education.
124. Integration of math and science into what we teach.
125. Computer literacy of teachers.
126. Introduce new technologies to teachers.
127. Laboratory or shop safety.
128. Computer networking.
129. Farm management.
130. New technologies in the animal industry.
131. Working with the disadvantaged and handicapped.

132. Expanding cooperative education programs.
133. Improving program image and increasing FFA membership.
134. Using advisory councils.
135. Planning and recordkeeping.
136. Program public relations techniques.
137. Organizing and maintaining good vocational student organization activities as co-curricula projects.
138. Techniques in promoting a program to students, parents, and the community.
139. Developing school or program and business and industry contacts and how to most effectively use the support, personnel, etc. to develop stronger programs.
140. Current principles of teaching teenagers exposed to television, videos, etc. and the lack of parental guidance.
141. Classroom management to accomplish all relevant tasks.
142. Job skills for the 90's.
143. The disadvantaged/special education student in vocational education programs.
144. Systematic evaluation.
145. Upgrading technical skills.
146. Competency update.
147. Curriculum update.
148. How to adjust current teaching methods to budget cut.
149. Teaching problem students.
150. Time on tasks.
151. Motivation for learning.
152. Shop management.



153. Competency-Based Instruction.
154. Myers-Briggs Inventory.
155. Working with exceptional students.
156. Preventing teacher burn out.
157. Helping teachers to enjoy a teaching career.
158. Ameliorating the misconception about agriculture instruction to the public.
159. In the "mainstreaming" of students into "regular" vocational courses, what level of "competency" should the student achieve in order to successfully complete the course?
160. What is the vocational teacher's responsibility in developing IEP's--how, when, etc?
161. Student follow-up after leaving school or vocational programs.
162. Laboratory management techniques.
163. Laboratory maintenance procedures.
164. Public relations and recruitment techniques.
165. Actual work experience in the marketing field.
166. Methods training.
167. Time management and planning.
168. Test making.
169. Recordkeeping.
170. Workshops in various areas of effective instruction such as classroom time management, lab management, developing effective tests, and CBE recordkeeping.
171. Working with student organizations.
172. Effective coop programs specific to each program area.
173. Working with adult learners.
174. Special needs learner in the regular classroom.

175. To be up to date in computer use.
176. To become aware that a good problem solving class can be taught in a regular classroom by using toys and not thousands of dollars of equipment.
177. To have the teachers teach today's technology and not what was taught in the 1950's.
178. The development of training plans for cooperative students.
179. To provide techniques in the coordination of students while working on the job.
180. Additional in-service for staff on Competency-Based Education.
181. The interrelationship of vocational teachers with the other school personnel--guidance, principals, teachers, etc.
182. The involvement of business, industry, and lay people in the community to become knowledgeable of the program.
183. How to use advisory committee members more effectively in vocational education programs.
184. Development of skills in using latest state-of-the-art equipment.
185. Selection and use of computer software.
186. How to incorporate "basic skills" into everyday classroom instruction.
187. Training using new technology.
188. Implementing new technology skills into the curriculum.
189. Working with students who have language difficulties or other learning problems.
190. Program promotions and recruitment.
191. Textbook and other instructional material selection.
192. Classroom management.

193. Keeping current with professional concerns.
194. Resource/time management.
195. Creativity in the classroom.
196. Selling home economics in the world of technology.
197. The change of teaching techniques from the past to the present and future--some of the teachers' techniques are still outdated.
198. Positive communication skills for effective classroom management.
199. Improving your professional image.
200. Effective implementation of competency-based education.
201. Effective use of class time.
202. Effective planning.
203. Class management.
204. Preparing responsive programs to changing times.
205. Entrepreneurship.
206. Technological update.
207. Trends in business education.
208. Vocational teachers' liability in vocational laboratories.
209. Teaching disadvantaged students.
210. Importance of vocational clubs.
211. The ability of teachers to improve the image of vocational classes.
212. Competency objectives in affective domain.
213. Clinical skills in newer technology.
214. Using computers for instructional management.
215. Teachers need to work on the update of the curriculum guide.

216. Closer supervision of teaching strategies.

217. Teachers should be reminded of the image they present--weight, appearance, etc.

218. Teachers need to integrate more math and science into the curriculum.

219. Identify innovative ways to merge career education into the curriculum.

220. Provide aids to assist with special education students.

APPENDIX H

RATIONALES SUPPORTING DIVERGENT VIEWS OF  
SUPERVISORS WHO REMAINED OUTSIDE THE CONSENSUS

Staff Development Needs and the Accompanying Statements  
Which Supported Supervisors' Divergent Views

Most Pressing Staff Development Needs

1. Organization of instructional material, development of lesson plans, and effective presentation of material to classes using innovative and exciting teaching methods. This includes the psychology of learning and learning styles.

"In Newport News, this is an ongoing staff development program."

"Because this is what teaching is about."

2. Updating the vocational education teachers in new technology and equipment.

"New technology is a high interest area for teachers and administrators. I feel that teachers keep up to date with new technology through the various program area conferences. If and when the new technology is placed in one of our local programs, then more in-service will be needed."

3. Computer training and software applications for all curriculum areas.

"If money is available and the vocational director thinks it to be necessary."

"Most Va. teachers do not have the training in this."

"Hanover teachers have had many local opportunities for computer in-service. Interested teachers have received training."

"Teachers have had in our setting."

4. Curriculum development and planning to meet future needs, including the application of basic skills, math and science, and computers.

5. Projection of a positive image of vocational education programs; promotion of programs.

"Will not need to project an image. If we have good programs, the image and enrollment will be there."

"This has been identified by Va. teachers as a real need."

6. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.

"The coop method of instruction will only increase i.e. this will be a teacher need."

"Tech. Ed. background."

"ME Cooperative Education."

"Not important to technology teachers."

"This has already been accomplished statewide."

"Our students do not work."

"Training plans are the most misunderstood teaching tool we have in coop education. The use of them changes a job into a training station."

"Coordinators already do an excellent job in this area!"

"In Technology Education, we do not coordinate students on a job."

"Coordinators who are working are aware of needs--continuous updating needed."

7. Subject matter updates specific to each vocational program area, including current trends and certification requirements.

"Question 4 answers this question--we don't need in-service in certification requirements."

"Have been doing this."

8. Philosophy of vocational education and the development of a better work ethic.

"I believe in the philosophy part--the work ethic is alive and well."

"Business says it is most important."

"This can be accomplished in question 5."

9. Developing and managing effective instructional approaches for classes composed of diverse populations such as foreign born, disadvantaged, handicapped, gifted and talented, adults, etc.

"Because of makeup of classes and teachers' lack of pre-service in this area, it is a need."

"There is much needed for disadvantaged and handicapped adults."

"Such trends will continue--more in urban areas than rural."

10. Motivating, challenging, and retaining students.

"Also needed for program survival."

11. Help teachers raise their expectations of the programs and of themselves as professionals.

"Many of the above areas will do this."

"Developing a better self image."

"Some need, some don't."

"Defeatist attitude is affecting many mature teachers."

12. Classroom and laboratory management.

"The greatest need of all."

"Always important."

"This is essential. If there is not good class/lab management, there can not be an effective instructional program."

"Without good management, good ideas, new equipment, and expert training are of little value."

13. Understanding the requirements of the Hazard Communication Standard.

"Limited to specific voc. teachers."

"Marketing teachers do not handle very hazardous chemicals, etc. Only need to be aware."

"Do not use this."



"This act is a pain in the \_\_\_."

#### 14. Using Competency-Based Education.

"Exciting teaching method for those who know how to use it."

"Teachers have had too many classes on competency-based education. They have been turned off."

"We have been doing this for a number of years."

"If it's a safety factor, it should be pre-service, not staff development."

"Nationwide, this is being eliminated--check California--CBE is too restrictive and blocks creativity and student control of lessons."

"New teachers need."

"Teachers have had much staff development in CBE already."

"More important in certain voc. areas than others."

#### Additional Staff Development Needs

1. Marketing vocational programs to students, parents, the community, and school administrators; improving the image of vocational classes and teachers.

"Necessary if you want to keep voc. programs."

2. Effective managerial skills, including classroom and laboratory management, time management, and recordkeeping/clerical skills.

"Much of this is in place."

"Marketing Ed. requires effective management skills."

3. Effectively working with special students such as handicapped, disadvantaged, gifted and talented, and adults.

"They need help in this area."

4. Curriculum development which includes new technology, career education, and competency objectives in the affective domain.

"Curriculum development is always a need."

5. Technology update, including using the latest state-of-the-art equipment.

"Efforts are always made to provide equipment. Equipment is not as important as teachers."

"We have been doing this."

6. Teaching methodology including creativity and innovative teaching strategies.

"This should have been accomplished in pre-service training."

"Needed to attract students."

7. Subject update, including trends and actual work experience in industry.

"Update is important--actual work experience may be a problem."

"Update is always needed."

8. Developing a working knowledge of computers and their use in the classroom.

"Hanover teachers have had this training."

"Our teachers using."

9. Using community resources, such as public speakers, advisory councils, and business people to develop stronger programs.

"This is rather well known by most teachers."

"Have done this for years."

"There are many more pressing in-service needs. I do not believe that in-service will make teachers more interested in community resources."

"We are using."

"The community needs to understand what's going on in the schools. Today is different than when they were in school."

"Public image of tremendous importance--budgets,

etc."

10. Interfacing of disciplines, including basic skill development.

"Have done this."

"Too many turf battles."

"Get our own house in order--not a top priority."

11. Planning student clubs and activities that attract and appeal to today's students.

"Not in our setting."

12. Professionalism, including training in preparation for career advancement.

"This should be individual teacher responsibility."

"Not really sure what this means."

13. Understanding school law, legal issues, and certificate renewal requirements that affect vocational education.

"We have had."

14. Competency-Based Education--documenting student competencies and showing students where they are.

"We are doing this."

"All have taken CBE course."

"We have had."

"Already in place."

15. Providing techniques in the coordination of students while working on the job. This includes the development of training plans for students.

"Meat of the program."

"Should not apply to all teachers. Be only for teachers planning coop. training."

"Cooperative Ed.--It is a must!!"

"Not required of technology teachers."

"This type of in-service has been completed state-wide."

"Coop. teachers are doing this."

"Coordinators do excellent job in this area."

"Only for those who coordinate."

16. Understanding individual needs and learning styles of students.

17. Time and stress management.

"I think this has been overworked."

"Other areas cover this."

"We have had time management workshops. Most teachers feel that they were a waste of time."

18. Test validity--planning evaluation instruments which measure the accomplishments of the objective.

"Help needed in testing what is taught."

"Completed in pre-service."

19. Developing laboratory safety awareness.

"I think this is always in place."

"This is something that voc. ed. teachers should already know."

"Not all that much danger in marketing."

"Too broad--covered elsewhere."

20. Grooming and interview principles.

"Not needed as a priority."

"This has been slipping in both students and faculty for some time. Perhaps more by teachers than students."

"Covered in work ethics."

21. Evaluation of vocational teachers, including methods, strategies, and appearance.

"As a supervisor this is imp. not to the tchr."

"Necessary in ME."

"Only specially trained personnel on adm. level evaluate teachers."

"Unclear."

22. Communication with students, teachers, guidance counselors, and principals.

"Necessary for maintenance of voc. program."

"Probably covered elsewhere."

23. Developing a functional philosophy of vocational education.

"Ours are written."

"Repetitious."

"If we had a strong philosophy of voc. ed. then we wouldn't have to constantly be trying to convince them about VSO's and other things that are an integral part of voc. ed."

24. Motivation, including counseling for vocational careers in the lower grades.

"Do not recruit in lower grades."

"Many other areas that are more important."

25. Familiarize the vocational teacher with the concepts of the middle school.

"Haven't sold me on middle school--I like junior high school."

"Have M.S. programs."

"Teach seniors and adults."

"Articulation at all levels important--need to build on exploratory experiences."

26. Convince the teacher training institutions to change their curriculum to reflect new technology.

"Needed."

"I believe they make every effort to do this."

"We are nurses as well as teachers--do not use teacher tr. inst."

"Inappropriate."

"They already are!"

27. Student follow up after leaving vocational programs.

"Needed."

"We must know what students are doing."

"What is there to teach?"

"Administrative, not teacher problem."

"Already doing."

"Not responsibility of classroom teacher."

28. Making the transition from industrial arts to technology education.

"What's the problem--name change only--other areas have change their name and experienced no problems at all--ex. Marketing."

"For business ed."

"Do not teach tech. ed."

"Inappropriate for HOE."

"I'm in another vocational area, so this doesn't concern me nor my teachers."

"Already have."

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