

COMPONENTS OF AN EFFECTIVE WORKPLACE MENTORSHIP

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## (ABSTRACT)

The purpose of the study was to identify the components of an effective workplace mentorship. Twenty-five panelists participated in a three-round Delphi study to reach a consensus on these components. The panelists were: (1) local school-site teachers and school-to-work coordinators, (2) community college school-to-work coordinators, (3) directors of tech-prep consortia, and representatives from (4) business and industry, (5) labor and management, (6) corporate research, and (7) federal government.

A two-round pilot study was conducted to test the initial open-ended questions for round 1 and to test the survey instrument developed for round 2. Feedback from the pilot study was used to develop the open-ended questionnaire instrument in round 1 and the Likert scale used in round 2 of the study. Criteria of an effective workplace mentorship were retained in both rounds 2 and 3 if 80 % of the respondents rated them "important" or "very important."

The study produced 93 criteria in five categories necessary for an effective workplace mentorship. The five categories were: (1) program structure; (2) recruitment, selection, and placement; (3) support activities; (4) program outcomes and evaluation; and (5) ethics. A sixth category, barriers and obstacles to an effective workplace mentorship, was included in the survey and contained four

responses. These four responses were summarized along with the 93 criteria of an effective workplace mentorship. A checklist of criteria is included for the assessment of existing programs or to aid those implementing new programs.

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# CHAPTER 1

## INTRODUCTION

By tradition, educational reform movements have emphasized academic improvement for high school students preparing to enter college. Unfortunately, little attention has been given to the improvement of preparing the non-college-bound student with adequate knowledge and skills for successful entry into the workforce. In the past several years, educators, business leaders, and politicians have reluctantly acknowledged the growing realization that American education does a very poor job of preparing youth to make the transition from school to employment and adult life (Grubb, 1992). In fact, non-college-bound youth in our society receive little or no assistance in preparing for and finding employment when they complete their secondary education. Byrne, Constant, and Moore, (1992) described the transition process as a "do-it-yourself" system that may affect as many as 20 million young people who will not go directly from high school to a four-year college.

Our society has traditionally been geared toward preparing students for the college world --75% of students will either not go to or not finish college. The present educational process requires a change as schools attempt to restructure student preparation with the inclusion of work-based learning. Twenty percent of the available jobs in the year 2000 will require at least a B.S. degree and the other approximately 60-70 % will require a high school diploma but less than a baccalaureate degree (Grubb, 1992). It is surprising that we do not pay more attention to the school-to-work transition of non-college-bound youth, especially when data (Burke, McKeena, & McKeen, (1991) indicate that more than three-fourths of all jobs in this country do not require a four-year college degree, but do require specialized knowledge or skills.

This results in young adults floundering from one low-paying job to the next

until the mid-20's and never being trained for a career (Magaziner & Clinton, 1992). For students not enrolled in post-secondary education , the typical first real job is usually in the secondary labor market, requires few skills, offers low pay and provides few benefits, little training, slim opportunity for advancement, and little significant contact with adults. (William T. Grant Foundation Commission on Work, Family, and Citizenship, 1988)

Recent reports such as *The Forgotten Half: Pathways to Success for America's Youth and Young Families* (William T. Grant Foundation Commission on Work, Family, and Citizenship, 1988) and *America's Choice: High Skills or Low Wages* (Commission on the Skills of the American Workforce, 1990) have clearly identified the need to overcome the disconnection between education and work and to provide a smooth, non-fragmented transition for students not pursuing a four-year college degree. Greater emphasis on transition has been found necessary as a result of such factors as changing student and workforce demographics, the need for a more productive and competitive workforce, and concerns about the economic well-being of today's youth. Without question , the United States devotes little assistance to non-college bound youth in transition from school to work. Marshall and Tucker (1992) believed that America is said to have the worst transition system of any industrialized nation in the world.

The Federal school-to-work initiative has opened the path for schools to build partnerships with businesses and industries across the nation. Educators and business partners have begun to collaborate and identify competencies required for entry level employment to ensure that our young people are adequately prepared for the world of work (Leary), 1996).

With 50% of our young people attempting to enter the workforce with inadequate skills and qualifications, our educational system must meet the challenge of preparing these youth for adequate entry into the labor market

(Hoerner & Wehrley, 1995) with a method to include a work-based experience coordinated with classroom learning. This experience would provide an educational/business/industry partnership for implementation of a mentorship opportunity that could be coordinated from the high school site.

Workplace mentors provide a link between the student at work and the school coordinator. The School-to-Work Opportunities Act of 1994 prescribes workplace mentoring as part of the general requirement for workplace learning. The legislation defines a workplace mentor as an employee who possesses the skills and knowledge to be mastered by a student, instructs the student, challenges work performance, and works in consultation with classroom teachers and the employer (Pharis, 1995). A successful school-to-work program often incorporates a mentorship as a key part of a broad range of work experiences (William T. Grant Foundation Commission on Work, Family, and Citizenship, 1988).

### **Statement of the Problem**

The lack of a research-based mentorship component in one's high school experience is one factor leading to an unprepared workforce. Our educational system is facing a major crisis with a 50% failure/rejection/mismatch between students and education in America. Approximately 25% of our youth drop out of high school at the national level; of the 50% of those who start college, approximately 50% do not complete a baccalaureate degree. Ultimately, 50% of our young people are not completing the educational paths that they begin. This results in approximately 50% of our young people attempting to enter the work force with little qualification or lack of preparation for the world of work. How many industries or businesses could operate with a 50% rejection or failure rate of the products or services they produce (Hoerner & Wehrley, 1995)? Is it time for our nation to recognize that as a work-oriented society we need to re-examine the roles

of both educators and business/industry in preparing young people for the world of work? Who is ultimately responsible for the preparation needed for young people to be technically skilled and globally competitive to enter the workforce of 2000 is an on-going question?

Many of the young people leaving America's high schools are not equipped with the skills they need to perform the jobs that our modern, competitive economy is creating. Too often they flounder in the labor market, wasting a decade or more in intermittent, low-paying jobs.

Hoerner and Wehrley (1995) recognized that there has never been such a need and opportunity to systemically change the educational system in the United States. Three-fourths of our young people are receiving less than an adequate educational experience for a work-oriented society. We are in desperate need of an educational system with a central mission and focus to prepare everyone to be a productive member of society. All students should be provided an opportunity to make a smooth transition from school to work through an educational component.

It has been recognized (Kram, 1983; Zey, 1984) that whether in academia, business settings, or in vocational education, educational programs that increase self-awareness, understanding of relationship dynamics, and skills in building and maintaining relationships in a work context have great potential. Often, these relationships are mismanaged or left to chance rather than consciously chosen and managed through such agreements as mentorships. The mentoring relationship can positively contribute to both professional and personal growth in a high school experience as well as increase business/industry organizational effectiveness. A high school mentorship experience is one way of addressing the need.

### **Purpose of the Study**

A work-based mentorship program available at the secondary level is one method to better prepare students to meet the employment needs of business and

industry. A research-based study that identifies program components would serve as a procedural guide for schools that plan to implement mentorships. Therefore, the purpose of the study was to identify components of an effective workplace mentorship program including its structure; processes of recruitment, selection, and placement; needed support; desirable outcomes; ethical considerations; and the barriers and obstacles to the development of productive mentoring relationships.

### **Research Questions**

The study was guided by six questions:

1. What is the structure of an effective workplace mentorship?
2. What guidelines should be established for the processes of recruitment, selection, and placement?
3. What support is necessary for the mentor/mentee relationship to succeed, and who needs to provide the support?
4. What are the desirable outcomes of a workplace mentorship, and what are effective strategies for mentorship evaluation?
5. What are the ethical considerations in workplace mentorships?
6. What are the barriers or obstacles that exist in a mentoring relationship?

### **Significance of the Study**

This study is significant because it provides research-based guidelines and criteria for the development and implementation of an effective mentorship program.

Few studies have been conducted to analyze workplace mentorships. Current high school experiences do not include a high school mentorship that is research based. Business and industry stakeholders are committed to a rigorous academic

foundation and hands-on technical education to develop workers that meet local business and industry needs. Businesses and schools have an opportunity to change the culture of their communities as they prepare young people to directly enter the workplace.

A mentorship program supported by research can serve as one mechanism to provide opportunities for effective collaboration between educators and employers. This allows the workplace to serve as an on-site classroom for learning and doing. Hoerner and Wehrley (1995) stated that the mentoring process has great appeal and can be implemented with any school-to-work structure; however, obtaining enough qualified mentors becomes the challenge because of the commitment that is required.

### **Limitations of the Study**

This study was limited by the possibility of bias as a result of geographic location, occupational career experience, and past experience of the participants. The lack of personal interaction and clarification of questions on the survey instrument were also potential limitations of the Delphi technique.

### **Definitions of Terms**

To facilitate the understanding of terms used in this study, the following definitions of terms were used in this research:

1. Components - all of the activities, processes, and characteristics of a program.
2. Delphi technique - a method for the systematic solicitation and collection of expert opinion.
3. Mentee - a beginner (protégé) under the supervision of a mentor aimed at promoting one's career development.

4. Mentor - a trusted teacher; one who passes on techniques, skills, and wisdom to a younger person.
5. Mentoring functions - those aspects of a developmental relationship that enhance an individuals' growth and advancement.
6. Workforce - the workers engaged in a specific activity or enterprise.

### **Chapter Summary**

An educational experience at the high school level that combines components of academic instruction and on-the-job training has been identified as one way to meet the educational needs of students in preparation for future employment and training needs of business and industry. The collaborative effort of workplace mentorships would include business and industry as an educational partner to utilize the work site and its human resources in preparation of young people for the world of work.

An historical overview of the development and implementation of the school-to-work initiative is included in Chapter 2 along with the rationale for identifying components of effective workplace mentorship programs. Selection of the Delphi technique is reviewed and discussed as the chosen method of research for this study.

Included in Chapter 3 is information regarding the pilot study along with a description of the three-round Delphi technique used for gathering data in the initial study. The Delphi technique produced consensus to determine the necessary components of an effective workplace mentorship. The Delphi 1 instrument (round 1) incorporated ten open-ended questions to solicit responses from the panel of experts. The participants included teachers, local school system and community college participants, school-to-work coordinators, researchers, business and industry representatives, and Federal government employees. The Delphi 2

instrument (round 2) was developed from responses to round 1 and the Delphi 3 instrument (round 3) was developed from responses generated in round 2.

Chapter 4 contains the results of the pilot study and the three-round Delphi. Chapter 5 contains the summary, conclusions, and recommendations for the practice.



## **CHAPTER 2**

### **LITERATURE REVIEW**

The present classroom of today is void of work application and continues to separate learning for knowing and learning for doing. Work-based learning has the potential to be the new paradigm and bring together learning for knowing and doing for many of our young people--especially the forgotten majority. According to Willard Wirtz, we must strive to bring the two worlds of education and work together into one world --LIFE (Hoerner, 1997).

#### **Educational Reform**

Educational reform is linked to school-to-work and workforce and economic development. A broad range of stakeholders is needed to assist with the design and implementation of a comprehensive, integrated system of education and workforce preparation that reflects the local labor market needs. The integration of these components is vital to ensure that all Americans can be trained and employed for jobs available in the 21st century economy.

Our present day industry has changed from one based on muscle to one that is based on brains. In 1950, 60% of the jobs required unskilled workers, 20% skilled, and 20% professional. By the year 2000, only 15% of the jobs will require unskilled labor while 65% will require skilled labor, and 20% of the jobs will be held by professional workers (Hoerner, 1997). Unfortunately, the majority of high school students leave school without the skills or foundation required for the present workforce; in reality, it's not education that's costly--it's the lack of it!

A school that moves from a traditional, industrial society curriculum to a career paths, technological/information society curriculum experiences a transformation, and it does not just add or modify teaching/learning methodologies or restructure the organization. Those involved in leading others through this process are

dedicated change agents.

As an organization, agency, or school system explores the challenge of developing a new secondary program grounded in school-to-work opportunities, it needs to address underlying cultural issues. In addition, any sound school-to-work model must create smooth pathways from learning in schools to learning in the workplace (School-to-Work Opportunities Guide, 1997).

Our culture emphasizes what we possess and what we do and falls short in building character and in helping people to understand who they are. Willard Daggett, Director of the International Center for Leadership in Education, believed that the technologies we teach today will be out-dated by the time students graduate--this results as technology changes. Good school-based learning and good work-based learning can help us to promote the growth of psychologically healthy workers and productive workers within the workplace.

John Gardner explained that a society that scorns excellence in plumbing because it is a humble activity and tolerates mediocrity in philosophy because it is an exalted activity will have both bad plumbing and [bad] philosophy. He believed that neither its pipes nor [its] theories would hold water. (Hartoonian & Van Scotter, 1996).

A central fact dominating the Clinton administration's concerns about the labor market is the declining real income of male high school graduates and high school dropouts. Male high school graduates earned 4 % less per week in 1989 than in 1979 and male high school dropouts earned 13 % less per week than in 1979. Male college graduates earned 11% more per week. These statistics suggest that labor incomes have become more unequally distributed. The story is somewhat different for women. Real wages of female high school graduates have risen but the rise has been even greater for female college graduates.

Inequity of labor incomes has risen for both women and men and economic returns to schooling and skill have increased. The real earnings of workers at the

bottom of the skill distribution (those with less than a high school degree) have declined for both genders. Youth have been hit hardest in this shifting market for higher skills. It is indeed the youth labor market that is a central focus of concern for the Clinton policies (Commission on the Skills of the American Workforce, 1990). Activity in the labor market has definitely declined among the unskilled. There is greater joblessness and nonemployment, as well as longer unemployment spells than among workers with more skills ("unemployed" individuals are looking for work; those who are "nonemployed" are not). This creates the youth labor market problem. The less skilled youth (high school degree or less) appear to wander in the job market for years before they settle down. These youth are a source of major social problems, including teenage pregnancy, crime, and idleness, and are on the increase in most localities.

The problem of a deteriorating market for unskilled or semi-skilled workers is not solely a problem of youth. Displaced adults, mostly factory workers, are a major concern for the Clinton administration and are addressed in the Clinton program. Middle-age workers displaced from high-wage jobs (down-sizing) are at a disadvantage in the new labor market. Displaced workers now make-up 10 to 20 % of the unemployed, and employment tracking suggests that these losses are significant and long-lasting (Council of Chief State School Officers, 1991). Any school-to-work effort, despite good intentions and hard work, will lack success if participants take what communications and media expert Nell Postman (Council of Chief State School Officers, 1991) calls a rearview mirror approach to reform. He believes that fundamental change in schools, classrooms, and students won't occur if we drive into the 21st century looking into the rearview mirror--attempting to do what worked a decade ago.

Hoerner and Wehrley (1995) stated we no longer can tolerate an educational system that places most emphasis on college preparation when indeed only 22% of American students complete a four-year degree. Approximately 25% of our high

school youth either drop out, fail, or do not complete their original educational paths; approximately 50% of high school graduates who enter college do not finish. With projections that include data citing that only 25% of available jobs in the workforce by the year 2000 will require a bachelor's degree, it is obvious that our present educational system has become obsolete as a result of a need for expanded training in a high-tech work-oriented society. We must change our curriculum from one that has traditionally been content-based learning to one that is work-based learning to assure all students a smooth transition from school to work ((Hoerner & Wehrley, 1995).

Three of the great initiators of reform, Peter Senge (management reform), Edward Deming (father of Total Quality Management), and TheodoreSizer (founder of the Coalition of Essential Schools), communicated the same message; they suggested an engaging productive learning environment that allows students to become workers and teachers to become coaches. As educators in the learning environment, we are dependent upon business and industry for a work environment that offers our students opportunities for job shadowing exposure to different careers available (industrial demonstrations) summer internships, and part-time and after school jobs (Dutton, 1996).

Of the 50% of high school graduates who attend college, more than half of them do not complete the degree and typically do not aim for careers in the skilled trades. As a result, U.S. manufacturers are now begging for such tradesmen as machinists, plumbers, pipe fitters, welders, and mechanics. Researchers at The Sandia National Laboratories reported that the U.S. educational system is producing future workers where approximately 26% are college graduates, an additional 60% have 12 to 15 years of schooling, and the final 14% have less than a high school diploma. Youth get their first full-time job with benefits at the age of 28 or 29 according to Rae Nelson, executive director of the Center for Workforce Preparation at the U. S. Chamber of Commerce in Washington, DC.; the majority

of students leave high school and tend to float through the system for 10 years trying to find a match for their skills. These research findings correlate with the findings in both the Hudson Institute's report on near-term work-force requirements, *Workforce 2000*, and the report by the Commission on the Skills of the American Workforce, *America's Choice: High Skills or Low Wages* (Commission on the Skills of the American Workforce, 1990).

### **Reform Movements**

Reforms and initiatives have come and gone since the beginning of 1975, including the changing of the curriculum from Distributive Education to Marketing Education, and a name change for many localities from vocational education to technical education. Initiatives such as 2 + 2, Tech-Prep, School-to-Work Transition, and High-Schools-That-Work have taken their places in high school initiatives. A brief background of explanations, and rationales for such initiatives during the past twenty-two years is provided in this review.

Tech Prep (school-to-work) had its foundations in the late 1970's and early 1980's through efforts of vocational/technical educators to reform and improve their curricula for students. By the mid-1980s, the term Tech Prep was coined, and a quality technical education curriculum was recommended for the neglected majority (those not planning college after graduation) that would be comparable to the curriculum for the college-bound students.

By the mid 1970's, the skills needed by the workforce were being changed by new technology. Equipment was changing and being modified at a rapid pace; different skills were needed by the work force. Training for specific tasks and pieces of equipment was now impractical. Workers were being required to understand the concepts and functions of the equipment in order to diagnose problems as well as solve or repair the equipment (Jobs for the Future, 1991).

In the early 1980's, vocational educators realized the need for students to acquire an academic background in math, science, and communications. From this realization, two initiatives emerged: the teaching of academic concepts (integration) in vocational/technical courses, and the development of specific academic courses for teaching vo-tech students (applied academics). The second initiative involved meetings between vocational educators at both the secondary and community colleges to improve transition from secondary to post-secondary education. This was referred to as articulation.

In 1983, the National Association of State Directors of the Vocational Technical Education Consortium agreed that more needed to be done in integrating academic concepts into the vo-tech curriculum. They recognized the need for a separate, applied academics course in physics and encouraged the Center for Occupational Research and Development (CORD) and the Agency for Instructional Technology (AIT) to develop the principles of technology curriculum. They later introduced applied mathematics, applied communications, and applied biology/chemistry. By this time, most technicians were being trained through two-year programs at the community colleges; however, the increasing knowledge and skills required of high tech technicians were making these programs difficult to complete in a two year period (103rd Congress, 1994, March).

The concept of beginning technical programs in the last two years of high school was conceived and a 2 + 2 articulation program between secondary and post-secondary schools began to be developed. In the early 1980's, the Center for Occupational Research and Development (CORD), the American Vocational Association (AVA), and the American Association of Community Colleges (AACC) began to offer 2 + 2 articulation workshops across the nation.

In 1985, the executive director of AACC, Dale Parnell, published *The Neglected Majority*, indicating that the public school system was not meeting the needs of students in the middle two quartiles—this group of students was referred to as the

neglected majority. He recommended that a quality alternative to college prep be developed and referred to this concept as the tech prep/associate degree program. This reform effort expanded from the vo-tech student to the middle 50-60% of all students. These students tended to be the non-baccalaureate students who preferred experiential learning.

The Tech Prep associate degree stressed a quality program that paralleled the college prep program; combined a common core of learning and technical education: rested on a foundation of proficiency in math, science, communications, and technology; presented its content in applied settings; was an articulated program covering grades 11-14; had structured and closely coordinated curriculum; and was built around career clusters and technical system study. Approximately 100-200 Tech Prep consortia were created around the nation; the concepts proposed by Parnell began to be developed and implemented.

In 1990, the Carl Perkins Vocational and Applied Technology Act was passed which funded Tech Prep consortia in every state. From 1990 through 1994, approximately 1,000 Tech Prep consortia were established. It became apparent that partnerships between secondary and postsecondary schools, between academic and vocational faculty, and between educators and business leaders were essential. Curriculum reform became a central issue in Tech Prep efforts. Teachers were being trained in applied learning/teaching methodologies and implementing the applied academics courses. The general track was eliminated in many schools and students were required to enroll either in the Tech-Prep or College-Prep programs (Dutton, 1996).

We need to recognize that the school can be a place both where students learn and where they carry on productive work. In turn, the workplace should not be just a business where people develop products, provide services, and collect a paycheck, but provide a learning environment for students to grow and create. These two educational components (school-based and work-based learning) are

required in the School-to-Work Opportunities act of 1994 (103rd Congress, 1994, May).

### **School-to-Work Initiative**

The school-to-work initiative is attempting to identify the problem by attracting the high school graduates not planning to go to college. The trades areas, traditionally known as the backbone of the American economy, are lacking for workers and are greatly needed in manufacturing companies today. Owners of these companies are at the heart of this effort and are working on their own and collectively with larger companies, high schools and technical institutes, local and state governments, and chambers of commerce (Anonymous, 1996).

Data gathered from employers nationwide indicate that they are seeking employees for the 21st Century who possess the following skills:

1. The Foundation: Knowing How to Learn
2. Competence: Reading-Writing-Computation
3. Communication: Listening-Oral Communication
4. Adaptability: Creative Thinking-Problem Solving
5. Personal Management: Self Esteem-Goal Setting/Motivation-Personal/Career Development
6. Group Effectiveness: Interpersonal Skills-Negotiation-Teamwork
7. Influence - Organizational Effectiveness -Leadership

School-to-work grants introduce an innovative, integrative, and challenging curriculum bench marked to the highest academic and occupational standards. It's geared toward all youth, inclusive of the following groups: the immediately college-bound (continued education beyond high school), the immediately career-bound, the disabled, the limited-English proficient students, the out-of-school



youth, the academically talented, and the diverse and disadvantaged backgrounds.

### **School-To-Work Opportunities Act**

In 1994, the School-to-Work Opportunities Act extended the reform efforts of Tech Prep. While Tech Prep encouraged business involvement, school-to-work required it. Special emphasis was placed on providing work-based experiences for all students and on connecting school-based and work-based experiences for students. The School-to-Work Opportunities Act applies to all students, kindergarten through college, as well as out-of-school youth. The Act provides a national framework for building local systems to ensure that all students can achieve high levels of academic and technical skills and to prepare for further education and careers. A basic premise underlying the Act is that every student, including the college-bound, can benefit from learning about careers as well as being better prepared to pursue careers through learning by doing and applying concepts to realistic situations. This type of learning can help reduce the wandering through low-wage jobs and provide opportunities for students to discover what careers fit their interests and aptitudes.

The School-to-Work Act was the result of 15 years of research and experimentation with how students learn and how classroom teaching can be integrated into the workplace. In 2001, the law "sunsets," with expectations that local school-to-work systems would be the norm in every state (103rd Congress, 1994, May). The Act is closely linked to the Goals 2000: Educate America Act, which provides the framework for state efforts to improve student academic achievement. State academic reform efforts that ensures both academic and occupational instruction are inclusive and are a part of the high standards that complement the school-to-work initiative. Goals 2000 established the National Skill Standards Board (NSSB) that is responsible for facilitating the development

and implementation of a nationwide system of voluntary occupational skill standards. The NSSB encourages all school-to-work systems to incorporate these standards into their own measurement (103rd Congress, 1994, March).

### **School-To-Work**

The specific objectives, established when the President signed the Act on May 4, 1994, include the following:

Create school-to-work opportunity systems in each state for all secondary and postsecondary school-age youth.

Recognize and reform learning for secondary and postsecondary school-age youth in coordination with GOALS 2000, so that all youth who participate in school-to-work opportunities are prepared for first jobs in high-skill, high-wage careers; achieve high academic and occupational standards; and are prepared for further postsecondary education and training.

Build partnerships locally, statewide, and federally among schools, employers, labor, community organizations, and parents to develop and sustain school-to-work opportunities as part of a lifelong learning system for the United States.

The core elements required by every school-to-work system are as follows:

School-based learning-- classroom instruction based on high academic and occupational skill standards that integrates work-based and school-based learning.

Work-based learning-- work experience, structured training, and mentoring at job sites.

Connecting activities--a variety of activities that build and maintain bridges between school and work. Examples could include courses that integrate classroom and on-the-job instruction, matching students with participating

employers, and training with job-site mentors.

The legislation requires school-to-work opportunities systems to include the following school-based, work-based, and connecting components:

A planned program of training and work experiences coordinated with school-based learning.\*

A program of study designed to meet the same academic content standards the state has established for all students, including, where applicable, standards established under the GOALS 2000 Act, and to meet the requirements necessary to prepare a student for postsecondary education and achievement of a skills certificate.\*

A program of instruction and curriculum that integrates work-based and school-based learning.\*

Broad instruction in the classroom and workplace where practice exposes students to all aspects of an industry.

Effective secondary/postsecondary linkages, including at least one year of postsecondary education.\*

Career awareness, exploration, and counseling. \*

Initial selection of a career major no later than the beginning of eleventh grade.

Workplace mentoring and instruction in general workplace competencies.\*

Assistance for students in finding jobs and continuing their education and training.

An asterisk (\*) indicates that the element is required in order for a program to be considered a school-to-work system as described in the Act. Existing programs do not have to possess all the features to be considered and counted as school-to-work systems, but they must have all those with an asterisk (School-to-Work Opportunities Guide, 1997).

The ten job-based work opportunities available in the Schools-to-Work Act included the following experiences as defined by Hoerner and Wehrley (1995):

1. Apprenticeships -- this term applies to a variety of School-to-Work programs sharing some of the characteristics of registered apprenticeship programs. Students who are 16 years of age or older can participate in the youth apprenticeship program that integrates school instruction with on-the-job training.
2. Cooperative Education -- this term applies to a bonafide school-based program that integrates classroom instruction with on-the-job training in a business or industry setting. The teacher/coordinator serves as a liaison between the employer and the student.
3. Clinical Experiences -- used mainly by the health field studies to provide a hands-on opportunity for clinical work experiences.
4. On-the-Job Training -- an unstructured method of learning by doing without the direct supervision of a cooperating instructor; there is no interaction between the school and workplace.
5. Mentorship -- an opportunity for an experienced person in an occupation to serve as a role model for one with no experience in the occupation through a one-on-one relationship.
6. Internship -- provides an opportunity for on-the-job training, usually at the end of the formal education or training program, through a field-based experience.
7. Aligned Work-Study Programs -- a proposal to allow for greater alignment and relationship to study programs by developing work assignments to allow work-based learning to become more prominent in the School-to-Work transition process.
8. School-Linked Summer Employment -- opportunities for students to experience a hands-on experience through the opportunities provided by employers in industry. This is a full-time summer experience incorporated into the school-based career study plan.
9. Community Service Learning -- an opportunity for students to participate in community service activities and discover a link between the school and the community.
10. Business/Education Compacts -- a compact between the school and the business to encourage academic performance and attendance at school; this allows a student to experience workplace activities. (pp. 34-41)

## **Evaluation of Programs**

In the fall of 1996, 1997, and 1999, evaluation teams conducted and will continue to conduct a mail survey of all local partnerships that have received sub-state or direct local grants. The past and future surveys collect data on the composition of partnerships, program designs, specific school-based and workplace activities, linkages to postsecondary options, approaches to student assessment, and levels of student participation. State school-to-work coordinators will receive summary statistical tables and partnership profiles for their state, based on the data collected in each survey (D'Amico & Janus, 1994).

Also included in the evaluation is a sampling of the first eight states that received implementation grants and an average of four local partnerships in each of the states as well as ten local partnerships that received direct federal grants in 1994. Site visits were made and will continue to be made to each of the states to a total of 42 local partnerships in spring 1996, 1997, and 1999. These visits identify how local partnerships are approaching the development of school-based, work-based, and connecting activities, and examine how broadly and systematically they are utilized.

The last stage of evaluation included surveys of a total of 32 partnerships randomly selected across the same eight states, to 12th graders in spring of 1996 (already completed), 1998, and 2000. About 85 students in each partnership did and will complete a questionnaire about their high school experiences toward the end of the 12th grade, and then be interviewed by telephone about 18 months later concerning their post-secondary activities. Data on successive cohorts will be used to identify changes in students' access to and participation in school-based and work-based activities that form the school-to-work system, including any changes in their high school, postsecondary, or employment experiences.

## Mentoring Programs

The mentoring concept dates back to early civilization. "*Mentor was the trusted counselor of the Greek King Odysseus under whose disguise Athena became the guardian and teacher of Telemachus. 'Mentor' has come to mean a trusted teacher- one who passes on techniques, skills and wisdom to a younger person*" (Dykman, 1996, p. 125). Mentoring has become a powerful tradition for preparing high school students for the transition from school-to-work (Backes, 1992).

The word "mentor" has many definitions and meanings in the present society. Included in the terminology are concepts such as teacher, role model, coach, sponsor, advisor, tutor, and patron. These terms describe those significant others who facilitate one's career socialization process (Collins, 1983; Kanter, 1977; Kram, 1985, Zey, 1984).

Mentors have been defined as higher ranking, influential, senior organizational members with advanced experience and knowledge who are committed to providing upward mobility and support to a protégé's professional career (Collins, 1983; Kram, 1985). Substantial emotional commitment by both parties is a characteristic of a mentoring relationship. Shapiro, Haseltine, and Rowe (1978) agreed that the mentor role is the deepest form of supportive role and have developed a continuum of supportive relationships that runs from peer through coach, sponsor, and mentor. They referred to this range of advisory/guiding personae as the "patron system."

The U.S. Government publishes a document (primarily used for vocational counseling) called the Dictionary of Occupational Titles, commonly known as the D.O.T. The D.O.T. classifies career skills into three groups according to whether or not they are being used with People, Things, or Data. Skills in each category are arranged in a hierarchy with lesser skills at the bottom and higher skills at the top. Mentoring is classified as the 'highest order people-related skill. The D.O.T.

described mentoring in terms of actions that an employee would take on the job:

Mentoring. Deals with individuals in terms of their overall life adjustment behavior in order to advise, counsel, and/or guide them with regard to problems that may be resolved by legal, scientific, clinical, spiritual and/or other professional principles. Advises clients on implications of diagnostic or similar categories, courses of action open to deal with a problem, and merits of one strategy over another. (U. S. Department of Labor, Employment, and Training, 1986, p. 49)

Burke et al. (1991) have implied that their definition of mentoring is derived from developmental-contextual theory, and the definition is both functional and comprehensive. They suggested that "it expands the influential developmental definition by postulating that an organism's transformation depends as much upon the dynamic potentials of its context as upon its own charting capacities" (Burke et al., 1991, p. 17). Within this framework, Burke et al. (1991) have defined mentoring to be "a dynamic, reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a beginner (protégé) aimed at promoting the career development of both" (p. 17).

Mentoring usually refers to an older more-experienced person helping a younger one in a one-to-one relationship that goes beyond the formal obligation of a teaching or supervisory role (William T. Grant Foundation Commission on Work, Family, and Citizenship, 1988). In a role of confidant, a mentor can help students cope with everyday problems and hardships and can offer individualized instruction, career information and exploration, and advice to help young people plan their careers and succeed in school (Backes, 1992). This tends to be most helpful when accomplished in a nonjudgmental, accepting manner. A mentor can serve as a role model and lend guidance and support that enables a young person to become whoever he/she chooses to be (William T. Grant Foundation Commission on Work, Family, and Citizenship, 1988).

Mentoring programs are designed and administered in a variety of ways, ranging from informal to highly structured programs. Programs can be

administered by school personnel as elective courses that provide release time from school so that students might regularly interact with their mentors. Others are initiated by local businesses which may provide speakers to work-preparation classes, give tours of their facilities, or offer summer mentorships to students. However, the most successful programs are those that provide long-term and continuous relationships for students. The William T. Grant Foundation Commission on Work, Family, and Citizenship (1988, p. 170) suggested that mentoring involve a year long commitment for the new relationship to provide substantial assistance.

Mentors help students navigate the demands of adult work and life by guidance and encouragement. Programs vary as to whether a student's supervisor and mentor are the same person. Some programs try to keep the two roles separate, feeling that students might feel awkward asking for help on personal or job-related matters from the person who will be evaluating their performance. In some programs, students are assigned formal mentors, while in others students find their own mentors (Burke et al., 1991) which suggests that the real significance of the mentor/mentee relationship is the exchange of values and attitudes. Mentoring can "build skills that increase self-esteem and show young people that caring adults think they are worthwhile, important, and can make a difference in the world" (William T. Grant Foundation Commission on Work, Family and Citizenship, 1988, p. 172).

### **Mentoring Functions**

Numerous researchers have identified a range of mentoring functions or mentoring roles (Kram, 1985; Levinson et al., 1978; Zey, 1984). "Mentoring functions are those aspects of a developmental relationship that enhance both an individual's growth and advancement" (Kram, 1985, p. 22). These functions are the



essential characteristics that differentiate mentor relationships from other work relationships. Kram (1985) summarized the functions into two broad categories of career functions and psychosocial functions. As noted in the following chart, he identified the career functions as those aspects of the relationship that enhance learning and preparing for advancement in a business or industry. These functions are possible because of the senior person's experience, organizational rank, and influence on the organizational context (Noe, 1988). It is this structural role relationship that enables the mentor to provide sponsorship, coaching, exposure, and visibility that assists a young person to function effectively, in the world-of-work (Kram, 1985, p. 23). The career and psychosocial functions model is presented below:

<b>CAREER FUNCTIONS</b>	<b>PSYCHOSOCIAL FUNCTIONS</b>
Sponsorship	Role modeling
Exposure/visibility	Acceptance/confirmation
Coaching	Counseling
Protection	Friendship
Challenging assignments	

*Career Functions* are those aspects of the relationship that enhance career advancement.

*Psychosocial Functions* are those aspects of the relationship that enhance sense of competence, identity, and effectiveness in a professional role.

In the career function, Kram (1985) suggested sponsorship to be the most frequently observed and involves actively nominating an individual for desirable lateral moves and promotions. The mentor can introduce the student mentee, through exposure and visibility, to the work-site culture and politics, and influence

others within the business organization (Burke et.al.,1991). This provides the mentee the opportunity to develop relationships with key figures who may judge the mentee's potential for future advancement. This function serves as a socialization component and prepares the individual for a position of greater responsibility and authority.

The mentor serves much like an athletic coach in the coaching function. Tasks include suggestions for specific strategies to accomplish work objectives, achieve recognition, and career goal procurement (Kram, 1985). The protection function supports the young person in controversial circumstances, and the mentor can intervene when the mentee is inexperienced in a particular situation. Unfortunately, this function can either support or smother the individual. The final career function that Kram (1985) described involves challenging work assignments enabling the student to develop the technical skills necessary for competence in the occupational position.

The range of career functions and psychosocial functions in the mentorship relationship varies, and they may not be entirely distinct from one another (Zey, 1984). Kram (1985) stated,

Supporting career advancement may also enhance an individual's sense of competence and effectiveness in the managerial role. Relationships that provide both kinds of functions are characterized by greater intimacy and strength of interpersonal bond and are viewed as more indispensable, more critical to development, and more unique than other relationships in one's work life. Whereas, relationships that provide only career functions are characterized by less intimacy and are valued primarily for the instrumental ends that they serve in the organizational context (p.24).

Zey (1984) described four major functions served by the mentor relationship which he referred to as "the hierarchy of mentoring". The mentor may perform any or all of the functions while participating in the mentor relationship. Zey (1984) described the process as follows:

Through the role of teacher, the mentor imparts various organizational and

occupational skills to the protégé; instructs the protégé in the power and political framework of the organization, perhaps divulging inside information; and gives the protégé tips on corporate comportment and social grace. As a counselor and source of psychological support the mentor generally tries to build the protégé's sense of self through "pep talks," confidence building, and the like. As an intervenor, the mentor actually intercedes on behalf of the protégé, at some times protecting, at other times advertising the protégé as a "good manager." As a sponsor, the mentor either promotes the protégé into a high position (if the mentor has the power to do so) or influences the "powers that be" to promote the protégé (p.7).

<b>Level</b>	<b>Mentoring activity</b>	<b>Benefit to protégé</b>	<b>Primary mentor investment</b>
I	Teaching	Protégé receives instruction in organizational skills, mgmt. Tricks, social graces given inside information	Time
II	Psychologic Counseling/ personal support	Mentor enhances mentee's sense of self through confidence building, pep talks, may help protégé's personal life on occasion	Emotion/self
III	Organizational intervention	Mentor intercedes on protégé's behalf in organizational setting; runs interference for protégé where needed	Organizational relationships, reputation
IV	Sponsoring	Protégé is recommended by mentor for promotion, more responsibility	Reputation/career

## Exemplary Mentorship Programs

The Jobs for the Future (JFF) Organization identified ten schools nationwide with exemplary mentoring programs. The JFF is a national, non-profit organization that conducts research, provides technical assistance, and proposes policy innovation on the inter-related issues of work and learning. Founded in 1983, its goal is to encourage policies and practices that prepare all citizens for effective transition between learning and work. The organization has worked at local, state, and national levels and is recognized as one of the leading organizations in the country working to improve school-to-work transition (Kopp & Kazis, 1995). The ten programs described below provide a cross section of innovative school-to-work approaches with inclusion of the mentorship component. Each program is different and allows for flexibility in meeting needs of individuals and their school localities. The Cambridge and ProTech programs designate supervisors but allow mentoring relationships to develop naturally. In the Cornell program, all employees are encouraged to be mentors, but they are not paired formally with young people because the staff believe that matches work best when they evolve naturally from work relationships. The ten models identified by JFF (Kopp & Kazis, 1995, p. 39) are as follows:

<b><u>Program and Location</u></b>	<b><u>Supervision/Mentoring</u></b>
Cambridge School (Cambridge, MA)	Mentor relationships may develop; students are assigned teachers.
Cornell Youth Apprenticeship Demo Project (Broome County, NY)	Students have mentors; dept. managers design and supervise learning in their area; coaches teach and monitor student placements.
Craftsmanship 2000 (Tulsa, OK)	Each student has a mentor who serves also as a supervisor.
Kalamazoo Health Occupational	Job-shadowing mentors may be

Program (Kalamazoo, MI)	supervisors and/or preceptors.
Oakland Health and Bioscience Academy (Oakland, CA)	Students have formal worksite mentors. Each student meets with worksite mentor once a week.
Pasadena Graphic Arts Academy (Pasadena, CA)	Each student has industry mentor (who is not necessarily their worksite supervisor).
Pennsylvania Youth Apprenticeship Academy Pennsylvania (6 sites in 4 regions)	Students have formal mentors.
Pickens County Youth Apprenticeship Program (Easley, SC)	Each student has a direct supervisor and a mentor (may be the same person).
Pro-Tech Health Care (Boston, MA)	Each student has a supervisor; informal mentor/mentee relationships may develop.
Roosevelt Renaissance 2000 (Portland, OR)	Students have group mentors in freshman year; plans call for individual mentors starting the junior year.

Kopp and Kazis (1995) summarized learnings from the design and early implementation experience of the programs. The document is organized primarily as a data source book on the programs. The report includes data from three other sources: a set of focus groups with project directors from the ten sites held in February, 1994, and a related series of extended, open-ended interviews with each project director, conducted in the spring of 1994; a survey administered to seniors in eight of the ten programs at the end of the 1993-94 school year; published studies by JFF and other organizations that document and evaluate progress at one or more of the programs.

The JFF organization (Kopp & Kazis, 1995) identified nine key findings as a result of their research. The findings are:

- (1) The ten JFF-affiliated programs have experienced significant expansion. Over time, their numbers and types of students, industries, and schools involved have all increased.**

All but one program increased the number of students served and placed in work-based learning experiences between the 1992-93 and 1993-94 school years. Three of the ten programs expanded to involve new schools and/or districts. The minority participation increased from 62 percent of enrollees in 92-93 to 66 percent in 93-94. The female population also increased along with the college-bound and at-risk population. The number of industries involved expanded; six of the ten programs expanded into more than one occupational area and five now serve four or more industries.

**(2) The programs have significant and sustained employer involvement, and the intensity of employer involvement has increased over time.**

Employers were involved in various ways providing students with career opportunities, mentorships and workplace learning experiences. Employers reported that front line workers who served as mentors and supervisors for the students became more excited about their work, more diligent in their responses and more productive. In some cases corporate executives became vocal advocates at the local, state, and national levels while others joined councils and committees and made presentations at regional and national conferences.

**(3) Significant percentages of students are enrolling in postsecondary education and training.**

Seniors in eight of the programs were surveyed about their work and educational plans after graduation. Seniors in most of the programs surveyed in the spring of 1994 indicated that they planned to enroll in a two-or four-year college (56 percent in a four-year college or university and 34 percent in a two-year school). Most of the programs have tracked the seniors post-graduation activities and conclude that they are "on the mark" as to intentions.

The Cornell program graduates (77 percent across the two years--85 percent of the class of 1993 and 69 percent of the class of 1994) enrolled in some form of post-secondary education. ProTech's 1994 graduates (84 percent) enrolled in either two-or four-year college programs. Eighty percent of the Kalamazoo Health Occupations Program's graduates enrolled in post-secondary education. Eighty-five percent of the Cambridge students and 88 percent of the Pickens graduating students reported that they had plans to go on to college as did 92 percent of the Oakland Health and Bioscience Academy's students.

**(4) Students, employers, and teachers are extremely supportive of the School-to-Work approach.**

Students want to enroll in the programs along with employers who want to become involved. Seniors in eight of the ten programs were surveyed and indicated that their work-based experience enhanced their motivation at school. Fifty-six percent of the students indicated that these school-to-work program helped them create a better feeling about high school while only two percent indicated that the experience made them feel worse. Fifty-one percent of the

students surveyed reported that they spent at least half of their time at the work-site learning new skills; 82 percent said that the work-site was valuable for career exploration; and 92 percent indicated that the work-site helped encourage good work habits.

Program directors indicated that the initiatives created systemic change in the way young people prepare for adulthood and connected institutions and individuals with the creation of student career paths.

**(5) Programs have become more involved in strategies for systemic change in schools, workplaces, and the institutional connections between them.**

The ten JFF-affiliated programs have become more committed to and involved in school reform efforts. All have made a commitment to providing structured, planned learning experiences at the worksite and have expanded their view of what kinds of changes are needed within schools and workplaces to make efforts successful. They have discovered the need for organization that takes responsibility for building, maintaining, and strengthening the partnerships between employers, schools, and other institutions that are involved with school-to-career efforts.

**(6) Many school-to-work models appear to be more expensive per pupil than the typical high school educational program; but they cost more because they provide more extensive services and supports.**

Estimated program costs from the ten JFF-affiliated programs range from minimal incremental costs to per pupil costs as much as \$2,000 above the district average. However, program staff feel that these calculations are misleading and premature and start-up costs varied per program.

**(7) Three critical activities that are likely to require additional resources: coordination among partners; staff development, including release time for instructional staff; and new curricular materials and frameworks.**

The School-to-Work Opportunities Act specified that resources be targeted to provide for the various connecting activities. This is a coordinating role in the effort and no single program should be expected to absorb the cost of the linkage. However, the ten programs identified three areas of activity that the directors felt were inadequately resourced. They are (1) coordination between the schools and the business partner (2) release time for teacher planning and staff development and (3) the development of new curricular frameworks and materials.

**(8) If school-to-work efforts are to achieve significant scale and quality, important structural and institutional barriers must be addressed.**

The typical high school schedule is centered around the traditional 50-minute periods, individualized tasks, fragmentation into small parts and lock-step scheduling. The school-to-work model incorporates interdisciplinary

curricula, block scheduling, and alteration of time in class and time at work. Failure to adopt this model of flexibility will cause innovations in schools to be both slow and uneven.

- (9) A single school or district is limited in its ability to address some significant obstacles to diffusion of school-to-career efforts. To lower some of the barriers-or to change the calculations of key partners regarding costs, benefits, and risks will require continued leadership, creativity and flexibility by public and private sectors at both the federal and state levels.**

All ten schools agreed that the federal government is an important partner in the initiative. Along with providing funding, the participants agreed that the national government could provide leadership, vision, encouragement, and "permission" to experiment and innovate. For school-to-work efforts to move from isolated programs to a set of state systems working toward the same goals, federal government leadership and support is vital (Kopp & Kazis, 1995, pp. 39-45).

Although more systematic and broader research is necessary to determine what activities are the most important for linking the school and work-based components of the programs at the local level, interviews by Jobs for the Future with program directors and student participants indicated that it is helpful to connect two different perspectives: (1) the institutional and instructional linkages between schools and work places that allow the two worlds to work well together and to understand each other better and (2) the pedagogical strategies and activities that can help participating students feel that their separate school and work-based experiences are an integral part of the collaborative experience.

The student surveys indicated that they placed an emphasis on the second perspective--how students perceive the program and the connection between school and the work-based component. Eight programs with participating seniors were asked questions regarding the relationship between the level of integration of their school and work experiences and feelings about their programs. Responses indicated a positive relationship and students who perceived a high degree of connection between their work placement and their school studies tended to have more positive views about the value of both the work component and the overall



comprehensive program.

One half (51%) of the seniors surveyed reported that at least half of their time at the work site was spent learning new skills; 83 % said that it provided useful career exploration; and 92% said that it encouraged good work habits. Sixty-five percent said their workplace experience was "more enjoyable than school" but only 15 % said that it was "more important than school." Only 3 % indicated that the experience was "boring." (Kopp & Kazis, 1995, p. 44 ).

Results of work-based programs for student learners have been gratifying to the business/industry community as well. Companies can already see the bottom-line effects: training and retraining costs are decreased, and entry-level employees come on board with significant skills and competencies, so they are immediately productive. Preparing secondary students for careers rather than simply for higher education is the strategy: gaining the commitment of business and industry to be partners with educators in designing and delivering education is the technique that will make the strategy work (Leary, 1996).

Two major corporations, American Honda Motor Company and Toyota Motor Sales USA, Inc., have recognized the need for entry-level employees with the basic skills necessary for the job and who have the ability to learn. These two companies have joined forces with the National Automotive Technical Education Foundation; the Vocational Industrial Clubs of America; Texas State Technical College--Waco; Waco Independent School District; and the Center for Occupational Research and Development to develop a curriculum that will help train students for entry-level technician jobs in the automotive industry. The Center for Occupational Research and Development (CORD) identified several benefits that partnerships of this type produce, including savings in the cost of curriculum development for training.

At a recent meeting to introduce their current program, 12 out of 12 employers in the automotive industry agreed to provide worksite learning opportunities to students (Leary, 1996). This was a major step for partnerships between

business/industry and education.

The Fred Meyer Company, a leading regional retailer headquartered in Portland, Oregon, employs 27,000 people. In 1994, the company established business-education partnerships with several school districts in the area. They donated money, personnel, and time. They initiated an exploratory job shadowing (mentoring) program for twelve students from the David Douglas School District in Portland, as well as a four-week exploratory work-based learning experience for ten students from Willamette High School in Eugene. The mentoring experiences ranged from three hours to a full day and occurred in one or more areas of interest in the company. Unpaid, structured, work-based, experience lasted for two hours a day, three days a week, for four weeks. Paid, structured work experience can last five to eight weeks, depending on the model. They are planning to coordinate all of their work-based learning experiences at approximately five more pilot sites in Oregon. These experiences will include job shadowing (mentoring), site tours, mock interviews, unpaid work experiences, and paid work experiences.

The Donaldson Company of Frankfort, Indiana, evaluated company data to discover that they were spending thousands of dollars training and retraining entry-level employees. They began a mentorship program in which 25 students were selected by an evaluation of resumes and interviews. They were assigned mentors and worked four hours per day under their direction. With their mentors, they learned job skills needed for success in a technical occupation. These students have been identified as good employees who are already trained and do not require as much training time as they are already there (Leary, 1996).

Siemens Stromberg-Carlson (Leary, 1996, p. 20) clearly identified bottom-line benefits of the mentorship initiative to business and industry: "It is costly to train and educate students, but the alternative is even more costly" (p.20). This cost may continue to rise if initiatives such as mentorship training are not implemented into the educational system.

## **The Delphi Technique**

This research was conducted using the Delphi technique to determine components of an effective work-based mentorship program. The Delphi technique was named after the ancient Greek oracle at Delphi from which prophecies were given (Koontz & O'Donnell, 1976). By definition, the Delphi technique is a group process used to survey and collect opinions of experts and practitioners on an identified topic. According to Linstone and Turoff (1975), "Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (p. 3). This technique is useful when the opinions and judgments of experts and practitioners are necessary.

The Delphi technique can be traced back to the 1930's to make predictions. The technique commonly used today was developed by Helmer and colleagues for the Rand Corporation in the 1950s. Dalkey and Helmar (1962) were the first to use this technique to solicit opinions on atomic warfare for the military. A group of seven experts was chosen for the panel.

The Delphi technique has been supported by Weaver (1971) as an "intuitive methodology for organizing and sharing expert forecasts about the future" (p. 267). The process for use in the field of education is very much on the increase and is recognized as appropriate for eliciting and refining opinions of people. The validity and reliability of the technique was supported by Helmer (1967) as an appropriate method for data collection from an identified group.

Skutsch and Hall (1973) believed this technique to be useful in achieving consensus in situations where conflict and indecision might be expected. Small group psychology speculates that group consensus is superior to individual ones and anonymity brings greater rationality to the decision making process. Group

pressure that results in group opinion consolidation builds the final principle.

This study incorporated a Delphi model which focused on establishing and rating of priorities. This study, however, does not focus on speculating about what is probable within a given time frame in the future (Anderson, 1975); however, it does attempt to structure a set of properties which could be integrated into a normative future. These properties are based on the criteria of desirability rather than likelihood (Sutherland, 1975).

Rieger (1986) reported that 83 % of the Delphi technique dissertations completed during the 1981-84 year used the normative model; most Delphi studies in educational settings are normative and are believed to be very useful in the information gathering process (Rieger, 1986).

The Delphi process also provides confidentiality which helps to overcome communication issues. Sometimes these barriers can cause a reluctance to provide open, honest opinions if views are in conflict with popular opinions. This particular process is conducive to flexibility and timing and allows the participant to respond in a timely, convenient manner.

The appropriateness of this technique for a particular study has been identified as an overriding factor in the selection of a Delphi technique for a particular study. Linstone and Turoff (1975) identified two circumstances where Delphi techniques are most appropriate: (1) "the problem does not lend itself to precise analytical techniques but can benefit from subjective judgements on a collective basis" (p. 275) and (2) "individuals who need to interact cannot be brought together in a face-to-face exchange because of time or cost constraints" (p. 275). The three-round Delphi technique was appropriate for reaching a consensus in this study.

## **Chapter Summary**

Chapter 2 is a review of the literature in the areas of interest in this study. Past and current initiatives were examined and included regulations and mandates of Tech-Prep, objectives and components of the School-to-Work Opportunities Act, and a review of mentoring functions and processes. Exemplary mentorship programs were reviewed that included the ten model mentoring programs identified by the Jobs for the Future organization (JFF).

Results of current work-based programs in the business/industrial community were included in this chapter and focused on the initiatives and benefits of mentoring partnerships of such companies as American Honda, Toyota Motor Sales USA, Fred Meyer Company, Donaldson Company, and Siemens Stromberg-Carlson. A brief discussion of the Delphi technique was also included in the chapter.

## **CHAPTER 3**

### **RESEARCH DESIGN AND METHODOLOGY**

The purpose of this study was to identify components of an effective workplace mentorship program. The processes for collecting and analyzing the data are discussed in this chapter.

#### **Panel Member Identification and Selection**

An important consideration in the Delphi process is proper and appropriate identification and selection of the members of the panel; their opinions determine the outcome of the research. Factors such as geographic location, career occupation, and career experience that connect to the mentorship experience were included in the criteria for participant selection; elimination of bias was a consideration in the selection of the panel.

The literature review in Chapter 2 served as a source of information on individuals, companies, and organizations that could serve as potential panelists for the Delphi study. Through the literature review and with dissertation advisory committee suggestions, prospective panel members who had active participation in a mentorship experience were identified. The panel members were chosen because of their experience and involvement with school-to-work transition and the High-Schools-That-Work initiative. Twenty-six prospective panel members were contacted, and 25 agreed to participate in the study. Occupational careers of the 25 panel participants included teachers and school-to-work coordinators for local school sites (N=7), school-to-work coordinators from community colleges (N=2), directors of tech-prep consortiums (N=2), representatives from business and industry (N=11), management (N=1), corporate research (N=1), and the federal government (N=1) (See Appendix A). All participants were directly involved in

mentorships at their worksite.

Personal phone calls were used to initially contact prospective panel members and to secure a commitment to participate in the study. Successful contact and commitments were initially established with 26 people for participation on the panel. One of the panelists resigned before the survey rounds began which left a total of 25 members for participation in the study.

The panel members represented such businesses and industries as Fred Meyer, Inc., The Donaldson Company, Ford Motor Company, Siemens Corporation, Enron Corp., E. I. DuPont, and Caterpillar, Inc. The Maryland Alliance for Labor Management, The National Academies of Boston, Partnership for Academic and Career Education (PACE), and the United States Navy also provided personnel for the study (see Appendix A). Local school system and community college representatives were included to provide practitioner-level input. Participants from these educational groups held positions such as mentorship coordinator, school-to-work coordinator, and transition specialist. The Jobs for the Future Organization (JFF) was represented along with several of its participant high schools.

Twelve states were represented in the study. Geographic locations of participants included Illinois, Indiana, Maryland, Massachusetts, New York, North Carolina, Ohio, Oregon, South Carolina, Texas, Virginia, and Wisconsin.

### **Pilot Study**

A two-round pilot study was conducted to test the clarity of the research instruments (see Appendix B). The pilot survey instrument contained five initial categories for component identification: (1) program structure (2) selection process (3) support activities (4) evaluation criteria, and (5) ethics. Four panelists from business/industry and education were identified and agreed to participate in the pilot study. They were asked to respond to survey instruments in the two-round pilot study (see Appendix B).

The round 1 survey asked for: (1) recommendations for structuring a workplace mentorship; (2) guidelines to establish the processes for recruitment, selection, and placement; (3) support necessary for the mentor/mentee relationship and who needed to provide the support; (4) desirable outcomes of a workplace mentorship and recommendations and strategies for mentorship evaluation; and (5) ethical considerations of workplace mentorships. The response to the pilot study was 100% with all four members participating. The members represented both the business/industrial and educational sectors and all were from Virginia.

The purpose of the first-round pilot study was to solicit responses to the five categories of open-ended questions. The questionnaire was intended to generate as many responses as possible to each of the questions. Members were asked to provide comments, suggestions, and/or feedback to the questions asked in each of the categories. The pilot study participants were also asked to identify categories or questions needed for inclusion on the round 2 survey instrument.

The round 1 instrument produced 73 responses from the four members. The responses were analyzed and checked for duplication and repetition. The 73 identified criteria from round 1 were placed on the round 2 survey instrument for rating (see Appendix C). A Likert-scale instrument with four response ratings was developed for rating in round 2 of the pilot study. The ratings were: 1=very important, 2=important, 3=unimportant, and 4=very unimportant. All 73 questions received at least an 80% rating of either very important or important.

### **Instrument Revision**

The results of the pilot study indicated a need for several revisions. The Likert-scale survey instrument developed for the pilot study served as the basic instrument for use in the initial study. Changes were made to reflect suggestions for clarity of directions and convenience for the participant. Suggestions included reversal of the



rating scale to reflect (1-very unimportant, (2-unimportant, (3-important, and (4-very important. The rating scale was also listed at the top of each page of the Likert scale instrument. An additional sixth category, barriers and obstacles, was added for participant response. The five initial questions listed under each component on the round 1 pilot study instrument were divided into individual questions to encourage open and complete response to all questions; this resulted in several components with two or more questions listed under each for participant response.

## **Research Steps**

The following steps occurred during the three-round Delphi study:

1. Identified pilot study panel members.
2. Completed the pilot study (rounds 1 and 2).
3. Revised the survey questions and Likert scale based on responses from the pilot study.
4. Identified the panel members and secured commitments by telephone.
5. Mailed round 1 packets to panel members (including instruction letter and survey instrument).
6. Initiated follow-up phone calls, mail, or faxes to each panel member seven days after the round 1 mailing.
7. Phoned non-respondent panel members two days after the round 1 return-date deadline.
8. Analyzed responses from round 1 to develop the round 2 instrument.
9. Mailed round 2 packets to each panel member (including instruction letter and survey instrument).
10. Phoned non-respondent panel members two days after the no return-date deadline.
11. Analyzed responses from round 2 to develop the round 3 survey instrument.
12. Mailed round 3 packets to panel members (including instruction letter and survey instrument).
13. Phoned non-respondent members two days after the round 3 return date.
14. Analyzed responses to the round 3 survey.
15. Wrote the results of the study.
16. Provided each panel member with a follow-up report of the research findings.

## **Data Collection**

A survey instrument with six components was used in each round of the three-round Delphi study. The round 1 instrument (Appendix D) contained open-ended questions. The survey instruments in rounds 2 and 3 contained criteria for rating on a four-point Likert scale. Packets were mailed to each of the 25 panelists and contained the survey instrument along with directions and instructions for completion. Completed survey instruments were mailed or faxed back to the researcher, with faxing encouraged to expedite the return. The round 1 survey was time consuming as a result of the open-ended questions. The survey instruments in rounds 2 and 3 only required a rating and could be completed within 20 minutes. Three weeks per round were incorporated into the schedule for responses. However, several participants were late in responding because of personal conflicts.

All data were analyzed and consensus of opinion was reported for each of the six components on the survey instruments. Responses from the open-ended round 1 survey were included on the round 2 instrument for rating on a four-point Likert scale: 1= very unimportant, 2=unimportant, 3=important, and 4= very important. Sixty-eight criteria were identified in round 1 and were added to the 73 identified during the pilot study (see Appendix E). This produced a total of 141 criteria for rating on round 2 of the survey (see Appendix F). Retention of survey statements from the second-round instrument for the third-round instrument required that each question have at least an 80% response in the important or very important categories (see Appendix G).

Mailing packets, fax letters, mail, and phone calls were used to communicate with members of the panel. Continued efforts via several phone calls, fax-messages, and mail were used to remind and encourage participants to meet the time lines necessary during each round of the survey (see Appendices D and G). The time lines outlined previously in the study were used as a guideline but did not

prove to be a realistic indicator of time involvement. Very few of the time lines were met, and the three survey rounds took much longer than expected.

According to Babbie (1983), return rates for survey research vary. However, a return rate of 50% is considered to be good, while a rate of 70% is considered to be excellent. All three survey rounds had at least a 70 % return rate to meet the above criteria. Eighteen of the twenty-five panelists participated in round 1 of the survey and twenty participated in rounds 2 and 3. The return rate provided validity to the research study.

### **Chapter Summary**

Chapter 3 contained the design of this three-round Delphi study. The procedures and processes for the research were discussed.

Panel identification and selection was very important in this study; a consensus of opinion was sought. The literature review and the recommendations of the dissertation advisory committee were the basis for identifying the chosen panelists. A national panel of 25 members participated in the study.

A two-round pilot survey was conducted and provided input for changes and revisions in the main study. The round 1 survey, for both the pilot and main study, produced a total of 141 criteria of an effective mentorship program. Seventy-three criteria were identified in the pilot study and an additional 68 items were added by the research panel. The 141 criteria were placed on a second-round instrument and submitted to the panel for rating. An 80 % response of important or very important was necessary for criteria to be placed on the round 3 survey. One hundred thirteen items survived the 80% criterion and were submitted to the panel for rating in round 3. Research findings are reported in Chapter 4. A summary, interpretations and discussion, the development of the checklist, and recommendations are reported in Chapter 5.

## **CHAPTER 4**

### **FINDINGS OF THE STUDY**

Chapter 4 contains the findings of the study. Results of each of the three Delphi surveys are reported and discussed. Charts, tables, and graphs are used to report the data. Table 2 and Table 4 contain the criteria, means, standard deviations, and percentages of respondents who rated the criteria as important or very important; Table 3 and Table 5 contain criteria removed after each round of the survey. Table 7 is a list of five components, the 93 criteria, and the four barriers and obstacles associated with an effective workplace mentorship program.

#### **Round 1 of the Delphi Study**

The round 1 survey instrument generated the responses for development of the survey instrument used in round 2. The open-ended survey questions in round 1 were sent to the 25 panelists who had agreed to participate in the study. Eighteen (72%) of the members completed and returned the survey instrument; seven (28%) of the members did not participate in this round of the study. Four of the seven non-participants provided no response while the other three members participated in rounds 2 and 3 of the three-round Delphi study. No one was removed from the panel at this point in the study.

The round 1 survey instrument was composed of ten open-ended questions (see Appendix D) and generated 356 responses from panel members. The number of criteria received is in Table 1. They are categorized under the following five components of an effective workplace mentorship:

- I. Program Structure
- II. Recruitment, Selection, and Placement

III. Support Activities

IV. Program Outcomes and Evaluation

V. Ethics

VI. Barriers and Obstacles (not included as a component)

**Table 1**

**Number of Criteria Generated by Category and Question in Round 1 of the Delphi Study**

<b>Category and Question</b>	<b>Criteria</b>
<b>I. PROGRAM STRUCTURE</b>	
1. What are your recommendations for structuring a workplace mentorship?	83
<b>II. RECRUITMENT, SELECTION, AND PLACEMENT</b>	
1. What guidelines would you establish for the recruitment process?	31
2. What guidelines would you establish for the selection process?	29
3. What guidelines would you establish for the placement process?	16
<b>III. SUPPORT ACTIVITIES</b>	
1. What support do you feel is necessary for the mentor-mentee relationship to succeed?	32
2. Who needs to provide the support in this relationship?	20
<b>IV. PROGRAM OUTCOMES AND EVALUATION</b>	
1. What do you consider to be desirable outcomes of a workplace mentorship?	56
2. What are your recommendations and strategies for mentorship evaluation?	40
<b>V. ETHICS</b>	
1. What would you recommend regarding ethical considerations of workplace mentorships?	22
<b>VI. BARRIERS AND OBSTACLES</b>	
1. What are the barriers or obstacles that exist in a mentoring relationship?	27
<b>TOTAL CRITERIA</b>	<b>356</b>

After reviewing the criteria for duplication and similarity, the round 1 responses were combined to produce 141 criteria for the round 2 survey instrument. The categorization of criteria from round 1 is located in Appendix E.

### **Round 2 of the Delphi Study**

The 25 panelists were mailed the round 2 survey instrument with the 141 criteria. Twenty of the 25 panelists completed and returned the instrument. Two of the non-respondents in round 1 did respond to the survey instrument in round 2. Again, no member was removed from the panel at this point of the research. The round 2 survey instrument is located in Appendix F.

The mean, standard deviation, and percentage rating the criteria important or very important are in Table 2. The mean identified the relative position, or average, of participant responses while the standard deviation reflected the distribution of responses along the continuum. The mean scores were based on a four-point Likert rating scale: 1 = very unimportant, 2 = unimportant, 3 = important, and 4 = very important. Mean values ranged from a high of 3.94 to a low of 1.74. Items not receiving an important or very important rating by 80% or more of the respondents were removed from further consideration and were not included in the round 3 survey.

Twenty panel members participated in the round 2 survey, but some members did not respond to all of the questions. Twenty-nine items did not meet the 80% criterion. This left 112 items for the round 3 survey instrument. Because of an error in calculating the percentage for item 16, it was included in the round 3 survey even though it did not meet the 80% criteria. Thus, 113 items were included on the round 3 survey. The items removed are listed in Table 3.



Table 2

**Means, Standard Deviations, and Percentage Rating of Workplace Mentorship Criteria in Round 2 of the Delphi Study**

Criterion <sup>a</sup>	N	Responses in each category <sup>b</sup>				% Important Very Important <sup>c</sup>	M	SD
		1	2	3	4			
1	20	0	0	4	16	100	3.80	0.4
2	20	1	5	6	8	70	3.05	0.9
3	20	0	1	8	11	95	3.50	0.5
4	20	0	0	5	15	100	3.75	0.4
5	20	0	1	8	11	95	3.50	0.5
6	20	0	3	8	9	85	3.30	0.7
7	20	0	1	5	14	95	3.65	0.5
8	20	0	1	7	12	95	3.55	0.5
9	20	0	3	9	8	85	3.25	0.7
10	20	1	1	8	10	90	3.35	0.7
11	20	0	0	4	16	100	3.80	0.4
12	20	0	1	6	13	95	3.60	0.5
13	20	0	2	4	14	90	3.60	0.6
14	20	0	0	5	15	100	3.75	0.4
15	20	0	0	6	14	100	3.70	0.4
16	20	0	7	6	7	65	3.00	0.8
17	20	0	5	5	10	75	3.25	0.8
18	20	0	0	6	14	100	3.70	0.4
19	20	0	1	6	13	95	3.60	0.5
20	20	0	1	10	9	95	3.40	0.5
21	20	0	1	8	11	95	3.50	0.5
22	20	0	0	9	11	100	3.55	0.5
23	19	1	2	11	5	84	3.05	0.7
24	18	1	2	9	6	83	3.11	0.8
25	19	0	1	4	14	95	3.68	0.5
26	20	0	0	8	12	100	3.60	0.4
27	20	0	2	7	11	90	3.45	0.6
28	20	2	7	8	3	55	2.60	0.8
29	18	0	5	11	2	72	2.83	0.6
30	18	2	8	7	1	44	2.39	0.7

(table continues)

Criterion <sup>a</sup>	<u>N</u>	<u>Responses in each category<sup>b</sup></u>				% Important Very Important <sup>c</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
31	20	1	5	7	7	70	3.00	0.8
32	20	0	1	9	10	95	3.45	0.5
33	17	0	1	9	7	94	3.35	0.5
34	19	2	1	11	5	84	3.00	0.8
35	20	7	9	3	1	20	1.90	0.8
36	20	0	3	7	10	85	3.35	0.7
37	20	5	5	7	3	50	2.40	1.0
38	20	1	3	9	7	80	3.10	0.8
39	20	1	1	6	12	90	3.45	0.8
40	20	2	9	2	7	45	2.70	1.0
41	20	0	1	7	12	95	3.55	0.5
42	20	0	1	8	11	95	3.50	0.5
43	20	0	2	3	15	90	3.65	0.6
44	19	0	3	8	8	84	3.26	0.7
45	19	0	0	9	10	100	3.53	0.5
46	20	0	0	12	8	100	3.40	0.4
47	20	0	2	5	13	90	3.55	0.6
48	19	0	3	8	8	84	3.26	0.7
49	20	0	1	10	9	95	3.40	0.5
50	20	0	0	10	10	100	3.50	0.5
51	18	2	8	7	1	44	2.39	0.7
52	18	1	1	10	6	89	3.17	0.7
53	19	2	1	9	7	84	3.11	0.9
54	20	5	10	5	0	25	2.00	0.7
55	20	0	3	11	6	85	3.15	0.6
56	20	3	5	9	3	60	2.60	0.9
57	19	0	1	11	7	95	3.32	0.5
58	19	0	3	8	8	84	3.26	0.7
59	19	2	1	13	3	84	2.89	0.7
60	19	1	1	8	9	89	3.32	0.8
61	20	0	0	5	15	100	3.75	0.4
62	20	0	1	9	10	95	3.45	0.5
63	20	0	0	7	13	100	3.65	0.4
64	20	0	1	5	14	95	3.65	0.5
65	19	0	2	7	10	89	3.42	0.6

(table continues)

Criterion <sup>a</sup>	<u>N</u>	Responses in each category <sup>b</sup>				% Important Very Important <sup>c</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
66	20	0	0	9	11	100	3.55	0.5
67	20	0	0	5	15	100	3.75	0.4
68	19	0	1	6	12	95	3.58	0.5
69	19	1	1	9	8	89	3.26	0.7
70	19	0	2	7	10	89	3.42	0.6
71	19	0	0	11	8	100	3.42	0.4
72	19	1	0	6	12	100	3.72	0.8
73	20	0	0	11	9	100	3.45	0.5
74	20	0	3	11	6	85	3.15	0.6
75	20	1	5	8	6	70	2.95	0.8
76	20	0	1	8	11	95	3.50	0.5
77	20	0	3	6	11	85	3.40	0.7
78	20	0	3	7	10	85	3.35	0.7
79	18	1	2	6	9	83	3.28	0.8
80	20	0	0	10	10	100	3.50	0.5
81	20	0	0	10	10	100	3.50	0.5
82	20	2	4	10	4	70	2.80	0.8
83	20	0	0	10	10	100	3.50	0.5
84	20	0	0	10	10	100	3.50	0.5
85	20	0	3	14	3	85	3.00	0.5
86	20	0	0	6	14	100	3.70	0.4
87	20	0	0	6	14	100	3.70	0.4
88	20	0	0	8	12	100	3.60	0.4
89	20	0	0	8	12	100	3.60	0.4
90	20	0	0	8	12	100	3.60	0.4
91	20	0	0	10	10	100	3.50	0.5
92	20	0	2	8	10	90	3.40	0.6
93	20	3	10	6	1	35	2.25	0.7
94	20	0	0	9	11	100	3.55	0.5
95	20	0	0	8	12	100	3.60	0.4
96	20	0	2	11	7	95	3.42	0.6
97	20	0	0	8	12	100	3.60	0.4
98	20	0	0	11	9	100	3.45	0.5
99	20	0	2	10	8	90	3.30	0.6
100	20	0	1	11	8	95	3.35	0.6
101	19	0	0	5	14	100	3.74	0.4
102	19	0	0	10	9	100	3.47	0.5

(table continues)

Criterion <sup>a</sup>	<u>N</u>	Responses in each category <sup>b</sup>				% Important Very Important <sup>c</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
103	19	0	1	11	7	95	3.32	0.5
104	20	0	0	9	11	100	3.55	0.5
105	20	0	1	7	12	95	3.55	0.7
106	20	0	0	5	15	100	3.75	0.4
107	20	1	2	8	9	85	3.25	0.8
108	20	0	0	6	14	100	3.70	0.4
109	20	0	2	5	13	90	3.55	0.6
110	20	0	2	5	13	90	3.55	0.6
111	20	4	11	3	2	25	2.15	0.8
112	18	1	6	7	4	61	2.78	0.8
113	18	0	2	14	2	89	3.00	0.4
114	20	0	0	11	9	100	3.45	0.5
115	18	0	7	7	4	61	2.83	0.7
116	20	0	1	8	11	95	3.50	0.5
117	19	0	1	6	12	95	3.58	0.5
118	20	0	0	7	13	100	3.65	0.4
119	20	0	0	7	13	100	3.65	0.4
120	20	0	1	6	13	95	3.60	0.5
121	20	0	5	6	9	75	3.20	0.8
122	19	1	6	8	4	63	2.79	0.8
123	20	0	0	8	12	100	3.60	0.4
124	20	0	2	8	10	90	3.40	0.6
125	20	3	6	7	4	55	2.60	0.9
126	20	0	0	8	12	100	3.60	0.4
127	19	9	7	2	1	16	1.74	0.8
128	20	0	1	11	8	95	3.35	0.5
129	20	2	1	14	3	85	2.90	0.7
130	18	2	4	9	3	67	2.72	0.8
131	19	1	3	9	6	79	3.05	0.8
132	19	2	1	10	6	84	3.05	0.8
133	19	1	1	8	9	89	3.32	0.8
134	18	0	2	9	7	89	3.28	0.6
135	18	1	2	11	4	83	3.00	0.7
136	19	0	4	12	3	79	2.95	0.6
137	17	0	3	10	4	82	3.06	0.6
138	18	1	7	5	5	56	2.78	0.9

(table continues)

Criterion <sup>a</sup>	<u>N</u>	<u>Responses in each category<sup>b</sup></u>				% Important Very Important <sup>c</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
139	17	0	6	5	6	65	3.00	0.8
140	19	0	5	6	8	74	3.16	0.8
141	18	1	2	11	4	83	3.00	0.7

**Note:** <sup>(a)</sup> Criteria are listed in Appendix F.

<sup>(b)</sup> 1=very unimportant, 2=unimportant, 3=important, 4=very important

<sup>(c)</sup> This is the percentage of the respondents rating each criterion as important or very important in a workplace mentorship program.

### **Round 3 of the Delphi Study**

The survey instrument in round 3 of the study contained 113 criteria; 28 of the initial 141 criteria were removed after the round 2 survey results. The survey packet was mailed to the 25 panel members. Twenty of the panel members rated and returned the survey instrument; these were the same 20 members who participated in round 2 of the study. The survey instrument is located in Appendix G.

The means, standard deviations, and percentages of respondents rating each criterion as important or very important are in Table 4. Each criterion with at least 80% of the respondents rating it as important or very important remained in the final list of criteria for effective mentorship programs. No criterion was rated as important or very important by 100% of the respondents in this round, and 16 of the criteria received a rating of unimportant or very unimportant. They failed to meet the 80% criterion and were removed. They are listed in Table 5. A comparison of the number of criteria removed and remaining after rounds 2 and 3 by category is in Table 6. Ninety-seven criteria remained after round 3; 93 were criteria of an effective workplace mentorship program and four were barriers and obstacles. The criteria and barriers and obstacles are listed by category in Table 7.

**Table 3**

**Criteria Removed After Round 2 of the Delphi Study**<sup>a</sup>

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**I. PROGRAM STRUCTURE**

- 2. The mentorship program should not be mixed with other workplace programs, such as apprenticeship, job shadowing, etc.
- 17. Business/community partnerships need to be established.
- 28. Prospective mentors should be nominated by workplace managers.
- 29. Mentor candidates should be required to complete a mentor checklist.
- 30. Mentor candidates should complete an Individual Development Plan.
- 31. Sexual harassment in the workplace training should be provided to both the mentors and the mentees.

**II. RECRUITMENT, SELECTION, AND PLACEMENT**

- 35. The selection process should include a review of standardized scores.
- 37. The student should have an interview with the guidance counselor.
- 40. The mentorship program should be limited to only juniors and seniors.
- 51. Target schools should be identified for participation.
- 54. Student recruitment should only include participants in work-based learning programs ready for on-the-job training.
- 56. The hiring standards that are used for the employees should also be used for the student mentees.

**III. SUPPORT ACTIVITIES**

- 75. Employers should network with each other to facilitate the mentoring process.

**IV. PROGRAM OUTCOMES AND EVALUATION**

- 82. The evaluation process should include a parent evaluation of the mentor program.

93. Once the mentorship has been completed there should be a possibility of part-time employment for the mentee.

111. Both the mentor and the mentee should be required to keep a journal.

112. A formal means of evaluation should include a portfolio.

115. True evaluation is difficult as a result of the “intrinsic” learning that takes place.

## **V. ETHICS**

121. Screening mentor records for child abuse, criminal, or sexual offenses should take place.

122. Liability insurance for mentors should be considered.

125. A meeting with the mentors and parents should be held.

127. Mentors should not be alone with the mentee.

## **VI. BARRIERS AND OBSTACLES**

130. Prejudice against young people or adults exists in the mentoring partnership.

131. Poor rapport between the mentor and student presents an obstacle.

136. Lack of transportation is an obstacle.

138. The lack of community support is a barrier.

139. The mentorship experience becomes a costly benefit for the business.

140. Businesses are “bottom-line” oriented and accountable for continued productivity.

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<sup>a</sup> These items did not meet the 80% criterion; that is, less than 80% of the respondents marked these items as important or very important in a workplace mentoring program. There was one exception: item 16 listed under Program Structure did not meet the 80% criterion. Inadvertently, it remained on the round 3 survey instrument and was rated.



**Table 4**

**Means, Standard Deviations, and Percentage Rating of Workplace Mentorship Criteria in Round 3 of the Delphi Study**

Criterion <sup>a</sup>	<u>N</u>	<u>Responses in each category<sup>b</sup></u>				% Important Very Important <sup>†</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
1	20	1	0	5	14	95	3.60	0.74
2	20	1	2	10	7	85	3.15	0.79
3	20	1	2	4	13	85	3.45	0.86
4	20	2	1	7	10	85	3.25	0.94
5	20	1	1	5	13	90	3.50	0.81
6	20	1	1	3	15	90	3.60	0.80
7	20	1	1	7	11	90	3.40	0.80
8	20	1	3	7	9	80	3.20	0.87
9	20	1	2	7	10	85	3.30	0.84
10	20	1	1	7	11	90	3.40	0.80
11	20	2	1	6	11	85	3.30	0.95
12	20	1	1	4	14	90	3.55	0.80
13	20	1	0	6	13	95	3.55	0.74
14	19	1	1	8	9	89	3.32	0.79
15	20	1	9	4	6	50	2.75	0.94
16	20	2	0	4	14	90	3.50	0.92
17	20	0	2	7	11	90	3.45	0.67
18	20	0	1	11	8	95	3.35	0.57
19	20	1	1	9	9	90	3.30	0.78
20	20	1	1	5	13	90	3.50	0.81
21	20	2	1	10	7	85	3.10	0.89
22	20	1	5	7	7	70	3.00	0.89
23	20	1	0	7	12	95	3.50	0.74
24	19	1	0	6	12	95	3.53	0.75
25	20	1	1	9	9	90	3.30	0.78
26	20	2	0	9	9	90	3.25	0.89
27	20	1	5	6	8	70	3.05	0.92
28	20	1	3	10	6	80	3.05	0.80
29	12	1	0	8	3	92	3.10	0.76
30	20	3	5	7	5	60	2.70	1.00
31	20	1	2	6	11	85	3.35	0.85

(table continues)

Criterion <sup>a</sup>	N	Responses in each category <sup>b</sup>				% Important Very Important	M	SD
		1	2	3	4			
32	20	1	1	7	11	90	3.40	0.80
33	20	1	5	6	8	70	3.05	0.92
34	20	1	0	6	13	95	3.55	0.74
35	20	1	8	5	6	55	2.80	0.93
36	20	0	3	9	8	85	3.25	0.70
37	20	0	2	10	8	90	3.30	0.64
38	20	0	1	7	12	95	3.55	0.59
39	20	3	5	5	7	60	2.80	1.08
40	20	0	3	11	6	85	3.15	0.65
41	20	1	1	10	8	90	3.25	0.77
42	20	1	0	7	12	95	3.50	0.74
43	20	1	2	14	3	85	2.95	0.67
44	20	0	5	10	5	75	3.00	0.71
45	20	1	2	8	9	85	3.25	0.83
46	20	1	1	7	11	90	3.40	0.80
47	20	3	6	8	3	55	2.55	0.92
48	20	1	2	7	10	85	3.30	0.84
49	20	1	1	3	15	90	3.60	0.80
50	20	0	3	8	9	85	3.30	0.71
51	20	0	2	6	12	90	3.50	0.67
52	20	1	1	4	14	90	3.55	0.80
53	20	2	1	8	9	85	3.20	0.93
54	20	0	2	6	12	85	3.50	0.67
55	20	0	1	6	13	95	3.60	0.58
56	20	1	2	5	12	85	3.40	0.86
57	20	1	0	13	6	95	3.20	0.68
58	17	1	1	3	12	88	3.53	0.92
59	20	1	0	14	5	95	3.15	0.65
60	20	1	1	7	11	90	3.40	0.80
61	20	1	1	7	11	90	3.40	0.80
62	19	1	1	10	7	89	3.21	0.77
63	20	1	0	12	7	95	3.25	0.70
64	19	1	1	9	8	89	3.26	0.78
65	20	0	3	7	10	85	3.35	0.77
66	20	0	5	5	10	75	3.25	0.83

(table continues)

Criterion <sup>a</sup>	<u>N</u>	<u>Responses in each category<sup>b</sup></u>				% Important Very Important <sup>c</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
67	20	0	0	11	9	100	3.50	0.75
68	20	1	0	13	6	95	3.20	0.68
69	20	1	0	8	11	95	3.45	0.74
70	20	2	0	11	7	90	3.15	0.85
71	20	3	2	10	5	75	2.85	0.96
72	20	1	0	5	14	95	3.60	0.73
73	20	1	1	8	10	90	3.35	0.79
74	20	1	2	10	7	85	3.15	0.79
75	20	1	0	8	11	95	3.45	0.74
76	20	1	0	7	12	95	3.50	0.74
77	20	1	1	10	8	90	3.25	0.77
78	20	2	0	11	7	90	3.15	0.85
79	20	1	0	9	10	95	3.40	0.73
80	20	1	1	8	10	90	3.35	0.79
81	20	1	0	13	6	95	3.20	0.68
82	20	1	3	5	11	80	3.30	0.90
83	20	0	2	10	8	90	3.30	0.64
84	20	3	5	4	8	60	2.85	1.11
85	20	1	1	9	9	90	3.30	0.78
86	20	1	1	6	12	90	3.45	0.80
87	20	1	0	8	11	95	3.45	0.74
88	20	1	1	10	8	90	3.25	0.77
89	20	1	1	9	9	90	3.30	0.78
90	20	1	0	7	12	95	3.50	0.74
91	20	1	0	6	13	95	3.55	0.74
92	20	1	2	7	10	85	3.30	0.84
93	20	1	0	5	14	95	3.60	0.73
94	20	1	2	8	9	85	3.25	0.83
95	20	1	2	5	12	85	3.40	0.86
96	20	1	3	10	6	80	3.05	0.80
97	20	1	1	5	13	90	3.50	0.81
98	20	1	1	9	9	90	3.30	0.78
99	20	1	1	9	9	90	3.30	0.78
100	20	1	0	4	15	95	3.65	0.73
101	20	1	0	5	14	95	3.60	0.73

(table continues)

Criterion <sup>a</sup>	<u>N</u>	<u>Responses in each category<sup>b</sup></u>				% Important Very Important <sup>c</sup>	<u>M</u>	<u>SD</u>
		1	2	3	4			
102	20	1	0	6	13	95	3.55	0.74
103	19	1	0	3	15	95	3.68	0.73
104	18	1	2	5	10	83	3.33	0.88
105	19	1	0	5	13	95	3.58	0.75
106	20	1	1	9	9	90	3.30	0.78
107	19	1	2	9	7	84	3.16	0.81
108	18	2	6	5	5	56	2.72	0.99
109	19	2	5	5	7	63	2.89	1.02
110	19	1	1	7	10	89	3.37	0.81
111	20	1	4	10	5	75	3.11	0.84
112	18	1	1	9	7	89	3.22	0.79
113	18	2	9	4	3	39	2.44	0.90

Note: <sup>(a)</sup> Criteria are listed in Appendix G.

<sup>(b)</sup> 1=very unimportant, 2=unimportant, 3=important, 4=very important

<sup>(c)</sup> This is the percentage of the respondents rating each criterion as important or very important in a workplace mentorship program.

**Table 5**

**Criteria Removed After Round 3 of the Delphi Study**

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**I. PROGRAM STRUCTURE**

**(Item numbers correspond with criteria listed on the round 3 survey instrument in Appendix G.)**

- 15. The guidelines should define the student target group for mentoring.
- 22. Design a student project or planned set of activities.

**II. RECRUITMENT, SELECTION, AND PLACEMENT**

- 27. The student application should be reviewed by the coordinator and a selection committee.
- 30. The prospective student should provide a resume.
- 33. Journals and related on-going projects should be incorporated as part of the program.
- 35. The mentor selection guidelines should include a student recommendation process.
- 39. Guidelines should be developed that would not exclude a large number of students.
- 44. A database should be developed that identifies experts who have time to help with the mentoring program.
- 47. The mentor and mentee should complete a checklist to assess traits to necessitate proper placement.

**III. SUPPORT ACTIVITIES**

- 58. Mentors must have tools and resources to be able to provide an adequate setting in which students can accomplish objectives.

**IV. PROGRAM OUTCOMES AND EVALUATION**

- 66. The evaluation process should include the turning in of student forms on time to the coordinator.
-

71. A student survey to determine interest in continuing with the program the following year should be administered.

84. The job/career mentoring area should result from the student's career interest.

## **V. ETHICS**

NONE

## **VI. BARRIERS AND OBSTACLES**

108. Lack of student interest in the profession or industry presents a barrier.

109. The school shows a lack of support for the mentorship arrangement.

113. A mentoring partnership is labor intensive and often lowers the productivity in a business.

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**Table 6**

**Comparison of Numbers of Criteria Removed and Remaining After Rounds 2 and 3 by Category**

Category	Round 2 (141 Criteria)		Round 3 (113 Criteria)		Total	
	Removed	Remaining	Removed	Remaining	Removed	Remaining
	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>
<b>I. Program Structure</b>	6	26	2	24	8	24
<b>II. Recruitment, Selection, and Placement</b>	6	21	7	14	13	14
<b>III. Support</b>	1	16	0	16	1	16
<b>IV. Program Outcomes and Evaluation</b>	5	34	4	30	9	30
<b>V. Ethics</b>	4	9	0	9	4	9
<b>VI. Barriers and Obstacles</b>	6	7	3	4	9	4
<b>Total Removed or Remaining</b>	<b>28</b>	<b>113<sup>a</sup></b>	<b>16</b>	<b>97</b>	<b>44</b>	<b>97</b>

<sup>a</sup>Item 16 is included. Because of an error in calculating the percentage of respondents marking it important or very important it was included in error.

**Table 7**

**Components and Criteria of an Effective Workplace Mentorship Program**

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**I. PROGRAM STRUCTURE**

1. Achievement objectives for the program should be set.
2. A formal written program plan should be developed for use by the school, business, and mentor at the direction of the mentorship coordinator.
3. A mentorship program needs a coordinator or supervisor.
4. A mentorship program needs a guideline handbook for structuring the mentorship program.
5. The handbook should include a mission statement.
6. The guidelines should include a definition of mentorship.
7. The guidelines should include the structure of the program.
8. The handbook should include information regarding the selection process.
9. The handbook should include a student application for the program.
10. The guidelines should include student expectations and requirements.
11. The guidelines should include the mentorship agreement arrangements.
12. The guidelines should include an evaluation process.
13. The guidelines should include the role of the mentor.
14. The guidelines should include the role of the coordinator.
15. The program needs to be promoted to the business community, the students, and the parents.
16. Prospective mentors need to be interviewed as to their willingness to provide on-the-job instruction to students.

(table continues)



17. Prospective mentors need to be interviewed as to their ability to connect the school-to-work philosophy.
18. Program policies and procedures for the students should be established.
19. The program coordinator should make every possible effort to place the student in a mentorship site that is appropriate to the development of the student's career interest.
20. Establish the grade level of participating students.
21. Students should be provided feedback and evaluation.
22. Students should be made to feel they are a part of the workplace.
23. Timelines for the mentorship process should be established.
24. There should be continuous improvement as a result of evaluations addressing additions or changes in the mentorship program.

## **II. RECRUITMENT, SELECTION, AND PLACEMENT**

25. The student selection process should include an interview.
26. The selection process should include a review of the student's high school transcript.
27. There should be an interview between the student and the mentor.
28. The number of mentorship hours required for the school year should be decided in advance.
29. Students must demonstrate positive behavior traits, good communication skills, and a sincere desire to learn about a specific career area.
30. The mentor selection guidelines should include coordinator contact and an interview process.
31. The student, coordinator, and mentor should meet to discuss program collaboration and coordination.
32. The mentor selection guidelines should include mentor willingness and interest in accepting students.
33. An orientation program for proper etiquette is needed.

(table continues)

34. The program should provide mentor orientation and training.
35. Announcements stating the objectives, qualifications, and application process should be created and distributed to the target schools.
36. An informal mentoring session with supervisors, managers, and executives should be held to identify possible worksite mentors.
37. The mentor/mentee match should coincide between the student's interests/skills and the mentor's business/industry.
38. A learning/training agreement should be drafted to identify involved parties, schedules, objectives, and outcomes.

### **III. SUPPORT ACTIVITIES**

39. The coordinator should originate and facilitate the total program.
40. The business firm or company needs to lend its support for this relationship to develop.
41. Parents need to encourage their sons and daughters to become active participants in the program.
42. The school and the teachers need to help students convert the learning process from the classroom to the workplace.
43. Students must have parent permission to participate in the program.
44. Students must provide their own transportation to and from the mentorship site.
45. Students must meet with their coordinator each grading period to discuss their job evaluations, portfolio development, etc.
46. School administrative support is essential for dealing with students who may "skip" the mentorship or who may experience other problems related to the mentorship program.
47. Community support is vital to the development and continued operation of the program.
48. A clearly explained guideline and conflict resolution plan should be available through the school or business.

(table continues)

49. Mentors must have tools and resources to be able to provide an adequate setting in which students can accomplish objectives.
50. Co-workers should cooperate to make students feel that they are a part of the team.
51. Support is needed from the overall governing bodies of the school system.
52. A feedback form should be completed by both the mentor and mentee after several months of the mentorship arrangement.
53. The mentor/mentee feedback form should include an action plan of learning experiences to be completed jointly by the mentor and mentee.
54. Teachers within the school should understand and value the mentorship concept.

#### **IV. PROGRAM OUTCOMES AND EVALUATION**

55. Evaluation criteria should include the mentor's six week written evaluation of the student.
56. Evaluation should include regular visits to the mentorship student's worksite by the coordinator.
57. A student self-evaluation should include the most rewarding aspects of the program.
58. A student self-evaluation should include the most challenging aspect of the program.
59. The evaluation process should include a mentor evaluation.
60. The evaluation process should include a student evaluation of the mentor program.
61. The mentor should provide "hands-on" experiences for the student.
62. The mentor should demonstrate a personal interest in the career development of the student.
63. The mentor should take time to explain how school subjects relate to the work being performed in the mentoring firm.

(table continues)

64. The mentor should be willing to meet with the program coordinator for the purpose of evaluating the student.
65. Evaluation should include student punctuality to the mentorship site.
66. Evaluation should include student self-evaluation of progress at the mentorship site.
67. Experience evaluations should be completed at the end of the semester by the student and mentor.
68. Academic and technical skills that are transferable to the workplace should be developed.
69. Students should be taught skills that are relevant to the host business.
70. The workplace culture should be understood by the mentee.
71. Interaction with co-workers and supervisors should take place during the mentoring process.
72. Students should develop an understanding between school, work, and the achievement of goals.
73. Identification of goals should be a joint effort of both the mentor and mentee.
74. Outcomes of mentoring relationships should reflect balance, interdependence, and respect.
75. The mentor should provide the mentee feedback that is frank and compassionately straight forward.
76. Evaluations should include the student's overall workplace attitudes and behaviors.
77. The mentee's outstanding qualities should be identified.
78. Evaluation should include whether or not the mentee could be recommended for future employment.
79. The mentee's evaluation should be discussed with him/her.
80. A pre-conference to establish goals should be held.
81. A post-conference to determine success (or lack of) should be held.

(table continues)

82. The student should gain a maturity about work that results in a clearer vision of the work-world.
83. A student's self-esteem should become increased.
84. Employees in the business should become "re-energized" as a result of the mentorship experience.

## **V. ETHICS**

85. All aspects of student expectations should be covered during the student/mentor interview.
86. All participant expectations should be discussed.
87. Students must be made aware of confidentiality guidelines as they apply to certain types of businesses and offices.

## **Chapter Summary**

The findings of the study were presented in this chapter. Analysis of the data from each of the three rounds was reported by round and included means, standard deviations, and percentages of respondents rating criteria as important or very important to an effective mentorship program. The first round survey was open-ended and produced 141 criteria for rating in round 2. Twenty-eight items were removed after round 2 which left 113 items for rating in round 3.

Sixteen items were removed after round 3 which resulted in 97 final items. Ninety-three items were identified as criteria necessary for an effective workplace mentorship program. Four of the items were identified as obstacles and barriers for consideration of the program.

The five components of an effective mentorship program identified in the study were (1) program structure; (2) recruitment, selection, and placement of students; (3) support activities; (4) program outcomes; and (5) ethics.

Tables and charts were also presented in this chapter. A summary, interpretation and discussion, recommendations, and development of a checklist are presented in Chapter 5.

## CHAPTER 5

### SUMMARY, INTERPRETATION AND DISCUSSION, RECOMMENDATIONS, AND CHECKLIST DEVELOPMENT

#### Summary

A workplace mentorship experience during high school is one way to meet the challenge of adequately preparing youth for the labor market. With 50% of our youth entering the labor market with inadequate skills and qualifications, this method of preparation would provide the opportunity for an educational system to include a high school work-based experience that is coordinated with classroom learning. Collaboration between education and business and industry would create a partnership to provide students an opportunity to experience the workplace during their high school education.

Research-based components of an effective mentorship program have not been available to local school systems or business and industry until now. The criteria identified in this study may be used to assess existing mentorship programs or to guide the implementation of new programs.

The research methodology was a three-round Delphi technique. After a literature review, 25 people from across the nation were identified and selected to serve as panelists. Their task was to reach consensus regarding components of an effective mentorship program. The following questions were used in a pilot study to solicit initial criteria from panelists:

1. What are your recommendations for structuring a workplace mentorship?
2. What guidelines would you establish for the processes of recruitment, selection, and placement?
3. What support do you feel is necessary for the mentor/mentee relationship to succeed, and who needs to provide the support?

4. What are the desirable outcomes of a workplace mentorship and what are your recommendations and strategies for mentorship evaluation?
5. What would you recommend regarding ethical considerations of workplace mentorships?
6. What are the barriers and/or obstacles that exist in a mentoring relationship?

A two-round pilot study was conducted to test the questions. Seventy-three criteria were identified by the respondents in the pilot study and were added to the criteria identified after round 1 of the main study. The open-ended survey in round 1 of the main study was completed by eighteen (72%) of the 25 panelists. They identified 68 additional criteria for a total of 141 criteria. All 141 criteria were included on the round 2 instrument.

The second round instrument was completed by twenty (80%) of the panelists. They responded to the 141 items on Likert scales with a range of one to four (1 = very unimportant and 4 = very important). Twenty-nine of the items were not rated as important or very important by at least 80% of the respondents and were removed after round 2. The 112 items remaining (plus item 16 which was included because of an error in calculating the percentage marking it important or very important) were included on the round 3 survey instrument for rating.

The round 3 instrument was mailed to the 25 panel members, and 20 of the participants completed this round of the study. Again, for an item to remain as a criterion, the item must have been rated important or very important by 80% of the respondents. Sixteen items were removed after the round 3 survey. Ninety-three criteria of an effective mentorship program remained. These were in five categories. The categories and the number of criteria in each were: program structure (24 criteria); recruitment, selection, and placement (14 criteria); support activities (16 criteria); program outcomes and evaluation (30 criteria); and ethics (9 criteria). Barriers and obstacles, a sixth category with four criteria, was not included as one of the components.



## **Interpretation and Discussion**

The Schools-to-Work Act identified ten job-based opportunities for student participation at the high school level. The mentorship experience was defined by Hoerner and Wehrley (1995) in their book, *Work-Based Learning: The Key to School-to-Work Transition*, as an opportunity for an experienced person in an occupation to serve as a role model for one with no experience in the occupation through a one-on-one relationship. The panel of experts was conclusive in the identification of the five components and 93 criteria necessary for an effective workplace mentorship program. The criteria include both process and program criteria and are considered necessary for program effectiveness. The participant responses are discussed and interpreted for each of the components.

### Program Structure

The program structure component contained 24 criteria and included both who and what should be included in the mentorship. The following guidelines were derived from the 24 criteria for structuring an effective mentorship program. They are grouped into categories and represent the key points identified under program structure.

Roles of the Participants:

- An effective mentoring experience needs a coordinator or supervisor to oversee the program. Responsibilities of this person should include the development of a handbook to serve as a guide for the program.
- Participants in the mentorship (to include the mentor and coordinator) should be identified and their roles should be specified in the handbook.
- Prospective program mentors should be interviewed and should be able to connect with the school-to-work philosophy.
- Workplace mentors should make students feel they are a part of the workplace.

- Students should be properly placed by the program coordinator or supervisor.

Expectations and Requirements:

- Clear student expectations and requirements, including the evaluation process and feedback, are important for an effective program.

Program Evaluation:

- The process should be structured to provide an assessment for continuous program improvement.
- As a result of evaluations, changes in the mentorship program should occur.

Program Agreement:

- An effective mentoring experience needs a coordinator or supervisor to oversee the program. Responsibilities of this person should include the development of a handbook to serve as a guide for the program.

Publicity:

- It is important that the program be continuously promoted to the business community, the students, and the parents.

Program Handbook:

- The handbook should provide formal, written policies and procedures to guide the program and should include other pertinent information for program participants.
- The handbook should contain objectives for the program, a mission statement, and a definition of mentorship.
- The handbook should contain information on the selection process and grade level of participating students.
- The handbook should serve as the policy and procedures manual for the program and should be made available to all of the participants.

#### Recruitment, Selection, and Placement

The recruitment, selection, and placement component includes 14 criteria and focuses on the participants and their roles in the program. The following represent

the key points identified under recruitment, selection, and placement.

#### Selection:

- The selection process, which should be conducted by the coordinator, should include interviews for student and mentor selection.
- Criteria for student selection should include positive behavior traits, good communication skills, and a sincere desire to learn about a specific career area.
- Prospective mentors should be identified through an informal meeting held with the supervisors, managers, and executives of participating businesses.
- Mentor selection guidelines should be developed. Mentors should be willing to accept students.
- To culminate the selection process, student, coordinator, and mentor should meet to discuss program collaboration and coordination and to draft a learning/training agreement.

#### Recruitment:

- The recruitment process should include announcements throughout the school and should include objectives of the program, qualifications for selection, and information on the application process. It is important that this information be distributed to the schools involved in the mentoring program.

#### Placement:

- After completion of the selection process, an interview between the student and the mentor should transpire.
- The student's interests and skills should coincide with the mentor's business or industry.
- Responsibilities of the involved parties should include setting program objectives and schedules (including program hours required) and achieving outcomes of the program.
- A proper orientation program for both mentor and student is important and

should include training in proper student etiquette.

- The utilization of communication skills by all parties of the program is important for the implementation of an effective program.

### Support Activities

In the area of support activities, the panel identified 16 criteria for inclusion in a program. This study identified those who should be included in the program and would most benefit from involvement. The following represent the key points identified under support activities.

Coordinator:

- The coordinator should originate and facilitate the total program and meet with students each grading period to discuss job evaluations.

Mentor/Mentee:

- Mentors should have the tools and resources that enable them to provide an adequate setting for students to accomplish program objectives.

Parents:

- Parents should encourage their children to become active participants in the mentorship experience and should provide permission and support for program participation.
- Parents should be expected to assist their children with transportation arrangements to and from the workplace.

School System:

- The school system should provide program support from various administrative levels, including the overall governing body of the school system.
- The school-site administration should provide the disciplinary support necessary for students who may experience problems related to the mentorship program.
- The teachers within the local school should understand and value the

mentorship concept and should assist students in integrating the classroom and workplace in their learning process.

Business/Industry:

- Business firms should become active partners and provide support for the program.
- Co-workers of the business firm should cooperate to make the students feel that they are a part of the team.

### Program Outcomes and Evaluation

Results from the survey indicated that the program outcomes and evaluation component is an important area; 30 criteria are included. Most of the criteria identified in this component refer to the process and structure of effective evaluation. Respondents identified those to be included in the evaluation and the extent and time frame of the involvement. The following represent the key points identified under program outcomes and evaluation.

Participant Criteria:

- Goals should be a joint effort of both the mentor and the mentee.
- The mentee's outstanding qualities should be identified during the conference.
- Students need to develop an understanding of the relationships among school, work, and the achievement of goals and should develop an understanding of workplace culture.
- As a result of this understanding, a clearer vision of the work world should begin to develop.
- With this understanding in mind, students are able to identify academic and technical skills and knowledge relevant to the host business and should be able to transfer and apply those to the "real world setting."
- The criteria for evaluation should include student punctuality, overall workplace attitudes and behaviors, and a recommendation for future

employment.

- During the mentorship experience, an interaction between the student and the mentor (including co-workers and supervisors) should develop.
- The mentor should demonstrate a personal interest in the career development of the student and provide "hands-on" experiences. This requires that the mentor take time to explain how school subjects relate to work performance in the mentoring firm.

Evaluation:

- A pre-conference to establish the goals and a post-conference to determine success (or lack of) should be held.
- The evaluation process should include regular visits by the coordinator to the mentorship site.
- The mentor should be willing to meet with the program coordinator for evaluation purposes.
- A feedback form should be completed by both mentor and mentee.
- After several months of the mentorship arrangement, the evaluation process should include a student evaluation (self-reflection) to include the most rewarding and challenging aspects of the program.
- An evaluation feedback form completed by both the mentor and the mentee is recommended after several months of the mentorship arrangement; the feedback should be frank and compassionately straight forward.
- After the initial evaluation, a written evaluation process should continue every six weeks.
- Experience evaluations should be a joint effort by the student and the mentor and completed at the end of the semester.
- The outcomes of the mentoring relationship should reflect balance, interdependence, and respect. This was the major theme identified in the program outcomes and evaluation component of an effective mentorship.

### Ethics

The panel identified nine criteria related to the ethics component. The following represent the key points identified under ethics.

- Open lines of communication with immediate feedback should exist between and among all parties.
- All participant expectations should be discussed and student expectations should be covered during the student/mentor interview.
- Students must be aware of confidentiality guidelines as they apply to certain types of businesses and offices and need to be considerate of the mentoring firm's employees and their daily responsibilities; workplace etiquette training is recommended.
- The same code of conduct/ethics that already exists for the employees should also exist for the students.
- Students are not to remove any of the mentor's materials or equipment from the workplace unless permission is granted to do so.
- Workplace mentors should be recommended by the business.

### Barriers and Obstacles

After careful study and examination of panel responses to barriers and obstacles, the four identified items are included in the study only as considerations for program developers. They are: (1) student behavior and inappropriate dress is an obstacle in the mentorship program, (2) the time needed for success by both parties is a barrier, (3) scheduling the mentorship is an obstacle, and (4) past negative experiences by either party are a barrier. Student behavior and dress at the work-site is a variable that might not be fully controlled by school personnel. Time presents a challenge in the development and implementation of a mentorship program as a result of graduation requirements that leave little time in a student schedule for release time for on-the-job training. Teachers and employers are

encumbered with schedules and activities that might not lend adequate time for the management of a mentorship program. Scheduling time for such a program is more challenging as a result of increased non-traditional scheduling, including the 4 x 4 block schedule and the alternate A/B day block schedule. Any past negative experiences by either party (school or business/industry) with cooperative programs or on-the-job student experiences could present a barrier in the development or implementation of a workplace mentorship program.

### **Recommendations**

A mentorship program checklist has been developed to assess existing mentorship programs or assist in the implementation of new ones. The instrument, located at the end of this chapter (see Exhibit 1), has been developed for use by practitioners in the field and is recommended to serve as a guide for local school systems and business and industry.

The second recommendation is that a Mentorship Program Guide should be developed. This handbook would contain information needed by all parties involved in the mentorship program. Suggestions for meeting the 93 criteria of effective mentorships should be included.

Changes in high school graduation requirements is the third recommendation as a result of the study. A required mentorship experience during the high school experience is recommended for graduation. The mentorship exposure would enhance student transition from the classroom setting into the work setting. Implementation of the recommendation would require a change in the state accreditation process and the support of local school boards. Local business and industry would need to support the philosophy that students would benefit from an opportunity to experience on-the-job training at the high school level. The establishment of local high school pilot sites is recommended for testing and evaluation of such mentorship programs. Comparisons of schools that have



incorporated this component and those that have not should be conducted to assess student progress and validate the effectiveness of mentorships.

With the realization that there must now be a connection between the schooling process and the ability to make a living, one success can be evidenced by the inclusion of a high school workplace mentorship program that changes the learning process from one of an abstract environment to one of a real-world learning environment (Hoerner & Wehrley, 1995). Students would be provided the opportunity to develop the skills and competencies necessary for competitive employment in a global twenty-first century economy.

**Exhibit 1**

**MENTORSHIP PROGRAM CHECKLIST**

This checklist is designed to assist in the assessment of an existing workplace mentorship program or in the implementation of a new one. The checklist is designed for use by practitioners in educational institutions or in business and industry. Five components-- (1) Program Structure, (2) Recruitment, Selection, and Placement, (3) Support Activities, (4) Program Outcomes and Evaluation, and (5) Ethics--are listed with 93 criteria. Two response choices--"YES" and "NO"--are listed. Criteria with "No" responses should be evaluated as to importance in the development or implementation of a mentorship program.

I. PROGRAM STRUCTURE	<u>YES</u>	<u>NO</u>
1. A coordinator or supervisor oversees the mentorship program.	_____	_____
2. A program handbook for the overall program has been developed.	_____	_____
3. The handbook serves as a guide for program structure.	_____	_____
4. The handbook contains the policies and procedures that guide the program.	_____	_____
5. The handbook contains pertinent information for program participants.	_____	_____
6. The handbook contains policy information	_____	_____
7. The handbook contains achievement objectives for the program.	_____	_____
8. The handbook contains a mission statement.	_____	_____
9. The handbook contains information regarding the student selection process.	_____	_____
10. The handbook identifies the grade level of participating students.	_____	_____
11. The handbook provides a definition of mentorship.	_____	_____
12. Specific roles for all mentorship participants have been established.	_____	_____

	Yes	No
13. Program mentors in the program are selected through an interview process.	_____	_____
14. Program mentors in the program are able to connect with the school-to-work philosophy.	_____	_____
15. Program mentors are able to make the students feel they are a part of the workplace.	_____	_____
16. Students are properly placed in the workplace by the program coordinator or supervisor.	_____	_____
17. Student expectations and requirements are clearly stated.	_____	_____
18. The evaluation process serves as a source of feedback.	_____	_____
19. The evaluation process is structured to provide assessment for continuous program improvement.	_____	_____
20. Evaluations address additions or changes in the mentorship program.	_____	_____
21. Agreement arrangements for the mentorship experience are included in the program.	_____	_____
22. Timelines for the mentorship experience are identified.	_____	_____
23. The program is continuously promoted to the business community.	_____	_____
24. The program is continuously promoted to the students.	_____	_____
25. The program is continuously promoted to the parents.	_____	_____
26. The policies and procedures manual is readily available to all program participants.	_____	_____
<b>II. RECRUITMENT, SELECTION, AND PLACEMENT</b>		
27. The selection process is conducted by the coordinator or supervisor.	_____	_____
28. The selection process includes a student interview.	_____	_____
29. The selection process includes a mentor interview.	_____	_____

	Yes	No
	_____	_____
30. The student recruitment process includes announcements throughout the school.	_____	_____
31. The student recruitment process includes school announcements that state program objectives.	_____	_____
32. The student recruitment process includes school announcements that identify qualifications for selection.	_____	_____
33. The student recruitment process includes school announcements that identify criteria for the application process.	_____	_____
34. Information regarding the mentoring program is distributed to the participating target schools.	_____	_____
35. Positive behavioral traits are included in the criteria for student selection.	_____	_____
36. The ability to communicate well is a criterion for student selection.	_____	_____
37. A sincere desire to learn about a specific career area is a criterion for student selection.	_____	_____
38. Prospective program mentors are identified through an informal meeting held with the supervisors, managers, and executives of the participating business.	_____	_____
39. A mentor selection guide is developed.	_____	_____
40. The mentor selection guidelines include criteria for mentor willingness and interest in acceptance of students.	_____	_____
41. The student's interests and skills match the mentor's business and industry.	_____	_____
42. Student, coordinator, and mentor meet to discuss program collaboration and coordination.	_____	_____
43. A learning or training agreement is drafted.	_____	_____
44. Program participants are responsible for program objectives.	_____	_____
45. Program participants are responsible for scheduling.	_____	_____

	Yes	No
46. Program participants are responsible for outcomes of the program.	_____	_____
47. An orientation to the mentorship program was presented to the mentor.	_____	_____
48. An orientation to the mentorship program was presented to the student.	_____	_____
49. Proper student etiquette training was provided.	_____	_____
50. Program participants exhibit communication skills.	_____	_____
<b>III. SUPPORT ACTIVITIES</b>		
51. The coordinator originates and facilitates the total program.	_____	_____
52. The coordinator meets with the students each grading period to discuss job evaluations.	_____	_____
53. A mentor-mentee feedback form is included in the evaluation process.	_____	_____
54. A learning experience action plan is jointly completed by the mentor and mentee.	_____	_____
55. Mentors have adequate tools to provide adequate settings to meet program objectives.	_____	_____
56. Parents encourage their children to become active participants in the mentorship program.	_____	_____
57. Parents provide their permission and support for program participation.	_____	_____
58. Parents assist their children with transportation to and from the mentorship site.	_____	_____
59. Program support is provided from various administrative levels of the local school system.	_____	_____
60. Teachers at the local school site understand and value the mentorship concept.	_____	_____
61. Teachers assist the students in the conversion of learning in the classroom to application in the workplace.	_____	_____

	Yes	No
	_____	_____
62. The program has support from the community.	_____	_____
63. The business firm or company provides support to the program as an active mentorship partner.	_____	_____
64. Co-workers in the business firm cooperate to make the students feel they are a part of the team.		
<b>IV. PROGRAM OUTCOMES AND EVALUATION</b>		
	_____	_____
65. Program goals are identified as a joint effort between the mentor and the mentee.	_____	_____
66. A pre-conference is held to establish goals.	_____	_____
67. A post-conference is held to determine program success.	_____	_____
68. The mentee's outstanding qualifications are identified during a pre- or post-conference.	_____	_____
69. Students develop an understanding of the relationship among school, work, and the achievement of program goals.	_____	_____
70. An understanding of the workplace culture is developed by students.	_____	_____
71. Students identify academic and technical skills relevant to the host business.	_____	_____
72. Students transfer and apply academic and technical skills to the "real-world setting."	_____	_____
73. Evaluation includes regular coordinator visits to the mentorship site.	_____	_____
74. The mentor meets with the program coordinator for evaluation purposes.	_____	_____
75. Criteria for evaluation includes student punctuality to the mentorship site.	_____	_____
76. Criteria for evaluation includes the student's overall workplace attitude and behaviors.	_____	_____
77. Criteria for evaluation includes a recommendation for		

	Yes	No
future employment.	_____	_____
78. A feedback form is completed by both the mentor and the mentee.	_____	_____
79 The evaluation process includes a student self-evaluation of the mentorship program.	_____	_____
80 Feedback is frank and compassionately straight forward.	_____	_____
81 A written evaluation process continues every six weeks.	_____	_____
82 Experience evaluations are completed at the end of the semester.	_____	_____
83 Experience evaluations are a joint effort of the student and mentor.	_____	_____
84 An interaction between the student and mentor is developed.	_____	_____
85 The mentor demonstrates a personal interest in the career development of the student.	_____	_____
86 The mentor provides the mentee “hands-on” experiences.	_____	_____
87 The mentor explains the relation of school subjects to work performance.	_____	_____
88 The outcomes of the mentorship experience reflect balance, interdependence, and respect.	_____	_____
V. ETHICS	_____	_____
89. Open lines of communication exist between mentorship participants.	_____	_____
90. Student expectations are discussed during the student interview.	_____	_____
91. Students are aware of confidentiality guidelines as they apply to the business.	_____	_____
92. Workplace etiquette training has been provided.	_____	_____
93. The same code of conduct/ethics that exists for employees exists for the students.	_____	_____

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**APPENDIX A**

**LETTER OF INVITATION TO PANEL MEMBERS**

DATE:

(Panel Member)

Dear

Thank you for the agreement to become a participant in the study to identify components necessary for an effective WORKPLACE Mentorship program. Your feedback will be most helpful in the identification of these components for future model development.

As previously discussed on the phone, this study will follow a Delphi technique which will consist of three-survey round instruments. I am sending you the first of this series of questionnaires which is designed to seek your input on the identification of the components. This first instrument is an open-ended questionnaire to solicit your opinion and response. The goal of the process is to reach a consensus of opinion through a rating scale to be reflected in responses from Delphi 2 and 3. A final report will be provided you at the conclusion of the project.

Please complete the questionnaire and return to me by mail. You can return the questionnaire by fax (540-989-0786), by e-mail (Mzelaneous@AOL.com), or by the enclosed self-addressed stamped envelope. Should you have any questions, please feel free to call me collect at 540-989-5395.

Again, thank you for your participation in this project.

Cordially,

Elaine W. Woolwine  
Doctoral Candidate, VPI & SU

RESPONSE FORM

\_\_\_\_\_ YES Please include me as a panelist in your study.

\_\_\_\_\_ NO I am unable to participate at this time.

PANELIST INFORMATION

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EMPLOYMENT: \_\_\_\_\_

OCCUPATION: \_\_\_\_\_

MENTORSHIP EXPERIENCE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_

E-MAIL: \_\_\_\_\_

Return to: Elaine Woolwine

4404 Farm Hill Drive

Roanoke, Virginia 24018

Phone: 540-989-5395

Fax: 540-989-0786

## **PANEL MEMBERS**

### BUSINESS AND INDUSTRY

#### CATERPILLAR, INC.:

Mr. Terry Hoyland, Mentorship Coordinator  
Caterpillar, Inc.  
P.O. Box 600  
Mossville, Illinois 61552-0600-MOS51

#### DONALDSON COMPANY:

Mrs. Jeanne Walden, Human Resources Director  
3260 W. State Road  
Frankford, Indiana 46041

#### E.I. DUPONT:

Mr. Freelyn Stanley, Jr., VAE Mentorship Coordinator  
Employee Relations Specialist  
E. I. DuPont, 400 DuPont Boulevard  
Waynesboro, VA 22980

#### ENRON CORPORATION:

Ms. Ceci Twachtman, Sr. Dir. of Recruiting & Assoc Analy.  
1400 Smith Street, Rm 3633  
Houston, TX 77002-7361

#### FORD MOTOR COMPANY:

Mr. Nell Jeffries, Training & Development  
Ford Motor Company  
2424 Ford Drive  
Norfolk, VA 23523

#### FRED MEYER, INC.:

Ms. Christi Grossman, Corporate STW Coordinator  
P.O. Box 42121  
Portland, Oregon 97242  
503-797-7851 FAX: 503-797-7878

### COMMUNITY COLLEGE SYSTEM

#### CEDAR VALLEY COLLEGE (DALLAS COUNTY)

Catherine Chew, School-to-Work Coordinator  
Dallas, Texas

#### NASSAU COUNTY TECH PREP CONSORTIUM

Mary Mirabito, Research Development consultant  
718 The Plain Road  
Westberry, NY 11590

#### PIEDMONT CONSORTIUM:

Robert Humkey, School-To-Work Coordinator

P.O. Box 2121  
Martinsville, VA 24112

TRI-COUNTY TECHNICAL COLLEGE:  
Diana Walter, Asst. to President for Enrollment Mgmt.  
P.O. Box 578  
Pendleton, SC 29670

VALLEY VOCATIONAL-TECHNICAL CENTER:  
Don Leland, Augusta County Mentorship Director  
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LOCAL SCHOOL SYSTEMS:

CESA HIGH SCHOOL  
Pam Hillensheim-Setz, School-to-Work Coordinator  
626 E. Slifer Street, West  
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R. E. LEE HIGH SCHOOL  
Jennifer Bolt, Mentorship Coordinator  
Staunton, VA

ROBINSON COUNTY PUBLIC SCHOOL  
Eveland Wooten, School-to-Work Coordinator  
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Lumberton, NC 28359

WAYNESBORO HIGH SCHOOL  
Sandra Curry, Mentorship Coordinator  
1200 W. Main Street  
Waynesboro, VA 22980



**APPENDIX B**

**PILOT STUDY (ROUND 1)**

## **PILOT STUDY PANEL MEMBERS**

Mrs. Jennifer Bolt (See list of panel members)

Mrs. Sandra Curry (See list of panel members)

Mr. Don Leland (See list of panel members)

Mr. Freelyn Stanley, Jr. (See list of panel members)

November 10, 1997

(Panel Member - Pilot Study 1)

Dear \_\_\_\_\_:

Thank you for your agreement to become a participant in the pilot test regarding round 1 of the Delphi technique. The purpose of this round is to solicit a number of varied comments regarding my dissertation study "Components of an effective Workplace Mentorship." As previously discussed, round 1 is an open-ended questionnaire to seek as many responses as possible pertaining to the topic areas of program structure, the selection process, support activities, program outcomes, and ethics. If there are other areas that I have not identified for response, please do so and list your comments.

After completion of the questionnaire, please fax responses (or send by mail) to the following:

FAX: 540-989-0786 ADDRESS: Mrs. Elaine Woolwine  
4404 Farm Hill Drive  
Roanoke, VA 24018

Thank you for your interest and the time involved in responding to the questionnaire. I will provide you feedback upon analysis of the responses received.

If you have any questions, please call me collect at 540-989-5395 or e-mail me at MZELANEOUS~OL.COM. I would appreciate your responses by Tuesday, November 25.

Thanks again and have a good day!

Cordially,

Elaine W. Woolwine  
Doctoral Candidate  
VPI & SU

**DELPHI 1  
(Pilot Study I)**

**RESEARCH QUESTION:**

What are the Components of An Effective Workplace Mentorship Program?  
(Components is defined as all of the activities, processes, and characteristics of a program).

Directions: Please answer this research question as completely as possible responding to the five categories listed. If you wish to list additional categories, please do so. Use the back of this paper should additional space be needed.

**CATEGORY 1: PROGRAM STRUCTURE**

What guidelines would you recommend for structuring a workplace mentorship program. Please list all responses.

**CATEGORY 2: SELECTION PROCESS**

What guidelines would you establish for the selection process (to include both the mentor and the mentee)? Please list all responses.

### CATEGORY 3: SUPPORT ACTIVITIES

What support, and by whom, do you feel is necessary for the mentor/mentee relationship? Please list all responses.

### CATEGORY 4: PROGRAM OUTCOMES

What criteria would you recommend for the evaluation of a workplace mentorship program? Please list all responses.

## CATEGORY 5: ETHICS

What guidelines would you recommend regarding ethical considerations of a workplace mentorship program? Please list all responses.

**APPENDIX C**

**PILOT STUDY (ROUND 2)**

December 2, 1997

(Pilot Study 2 Panel Member) Dear

Thank you so much for your timely response to the first round (Delphi 1) of my pilot research project. Your responses, along with all of the other information you provided, have contributed to the data collected to begin the actual research.

I have analyzed all of the responses received and developed the survey instrument to be rated in round 2 of the Delphi process. Please rate each statement according to the rating scale. I would also appreciate any comments, suggestions, etc. regarding the instrument and its clarity. If there are any unclear or repeated statements, please identify them for me so that I can make the necessary changes.

I am excited about the numerous and varied responses received in round 1 of the Delphi and look forward to receiving the ratings in round 2. I will share the results as soon as I can analyze the information.

Please fax the survey back (540-989-0786) by Tuesday, December 9. If you have any questions, feel free to call me collect (540-989-5395) at any time.

Thank you again for your participation; it is greatly appreciated!

Sincerely,

Elaine Woolwine,  
Doctoral Candidate  
VPI & SU



## DELPHI II

(Pilot Study 2)

### SURVEY INSTRUMENT

PLEASE RATE EACH OF THE FOLLOWING STATEMENTS. RATE EACH STATEMENT ACCORDING TO ONLY **ONE** OF THE FOLLOWING CATEGORIES.

1. **VERY IMPORTANT**
2. **IMPORTANT**
3. **UNIMPORTANT**
4. **VERY UNIMPORTANT**

#### **I. MENTORSHIP GUIDELINES:**

- \_\_\_ 1. Achievement objectives for the program should be set.
- \_\_\_ 2. The mentorship program should not be mixed with other work place programs, such as apprenticeship, job shadowing, etc.
- \_\_\_ 3. A formal written program plan should be developed for use by the school, business and mentor at the direction of the mentorship coordinator.
- \_\_\_ 4. A mentorship program needs a coordinator or supervisor.
- \_\_\_ 5. A mentorship program needs a guideline handbook for structuring the mentorship program.
- \_\_\_ 6. The handbook should include a mission statement.
- \_\_\_ 7. The guidelines should include a definition of mentorship.
- \_\_\_ 8. The guidelines should include the structure of the program.
- \_\_\_ 9. The handbook should include a student application for the program.
- \_\_\_ 10. The handbook should include information regarding the selection process.
- \_\_\_ 11. The guidelines should include student expectations and requirements.
- \_\_\_ 12. The guidelines should include the mentorship agreement arrangements.
- \_\_\_ 13. The guidelines should include an evaluation process.
- \_\_\_ 14. The guidelines should include the role of the mentor.
- \_\_\_ 15. The guidelines should include the role of the coordinator.
- \_\_\_ 16. The guidelines should define the student target group for mentoring.

- \_\_\_ 17. Business/community partnerships need to be established.
- \_\_\_ 18. The program needs to be promoted to the business community, the students, and the parents.
- \_\_\_ 19. Prospective mentors need to be interviewed as to their willingness to provide on-the-job instruction to students.
- \_\_\_ 20. Prospective mentors need to be interviewed as to their ability to connect school-to-work.
- \_\_\_ 21. Program policies and procedures for the students should be established.
- \_\_\_ 22. The program coordinator should make every possible effort to place the student in a mentorship appropriate to the development of the student's career interest.

## **II. SELECTION PROCESS:**

- \_\_\_ 23. The student application should be reviewed by the coordinator and a selection committee.
- \_\_\_ 24. The process should include a review of the student's high school transcript.
- \_\_\_ 25. The selection process should include a review of standardized test scores.
- \_\_\_ 26. The student selection process should include an interview of each student by the coordinator.
- \_\_\_ 27. The student should have an interview with the guidance counselor.
- \_\_\_ 28. The prospective student should provide a resume.
- \_\_\_ 29. There should be an interview between the student and the mentor.
- \_\_\_ 30. The mentorship program should be limited to only Juniors and Seniors
- \_\_\_ 31. The number of mentorship hours required for the school year should be decided in advance.
- \_\_\_ 32. Journals and related on-going projects should be incorporated as part of the program.
- \_\_\_ 33. Students must demonstrate positive behavior traits, good communications skills, and a sincere desire to learn about a specific career area.
- \_\_\_ 34. The mentor selection guidelines should include coordinator contact and an interview process.
- \_\_\_ 35. The student selection guidelines should include coordinator contact and an interview process.
- \_\_\_ 36. The student, coordinator, and mentor should meet to discuss program

collaboration and coordination.

- \_\_\_ 37. The mentor selection guidelines should include mentor willingness and interest in accepting students.
- \_\_\_ 38. Guidelines should be developed that would not exclude large numbers of students.
- \_\_\_ 39. An orientation program regarding proper mentoring etiquette should be provided to the students.
- \_\_\_ 40. The program should provide mentor orientation.

### **III. SUPPORT ACTIVITIES:**

- \_\_\_ 41. The coordinator should originate and facilitate the total program.
- \_\_\_ 42. The business firm or company needs to lend its support for this relationship to develop.
- \_\_\_ 43. Parents need to encourage their sons and daughters to be as active participants in the program.
- \_\_\_ 44. The school and the teachers need to help students convert the learning process from the classroom to the work place.
- \_\_\_ 45. Students must have parent permission to participate in the program.
- \_\_\_ 46. Students must provide their own transportation to and from the mentorship site.
- \_\_\_ 47. Students must meet with their coordinator each grading period to discuss their job evaluations, portfolio development, and other issues regarding the mentorship experience.
- \_\_\_ 48. School administrative support is essential for dealing with students who may “skip” the mentorship or who may experience other problems related to the mentorship program.
- \_\_\_ 49. Community support is vital to the development and continued operation of the program.

### **IV. PROGRAM OUTCOMES:**

- \_\_\_ 50. Evaluation criteria should include the mentor's six-week written evaluation of the student.
- \_\_\_ 51. Evaluation should include regular visits to the mentorship student work site by the coordinator.
- \_\_\_ 52. The evaluation process should include the turning in of student forms on time to the coordinator.
- \_\_\_ 53. Student self-evaluation to include the most rewarding aspect of the experience.

- \_\_\_ 54. Student self-evaluation to include the most challenging aspect of the program.
- \_\_\_ 55. The evaluation process should include a parent evaluation of the mentor program.
- \_\_\_ 56. The evaluation process should include a mentor evaluation of the mentor program.
- \_\_\_ 57. The evaluation process should include a student evaluation of the mentor program.
- \_\_\_ 58. A student survey to determine interest in continuing with the program the following year should be administered.
- \_\_\_ 59. The mentor should provide “hands-on” experiences.
- \_\_\_ 60. The mentor should demonstrate a personal interest in the career development of the student.
- \_\_\_ 61. The mentor should take time to explain how school subjects relate to the work being performed in the mentoring firm.
- \_\_\_ 62. The mentor should be willing to meet with the program coordinator for the purpose of evaluating the student.
- \_\_\_ 63. Evaluation should include student punctuality to the mentorship site.
- \_\_\_ 64. Evaluation should include student self-evaluation of progress at the mentorship site.
- \_\_\_ 65. Experience evaluations should be completed at the end of the semester by the student and mentor.
- \_\_\_ 66. There should be a possibility of paid part-time work experience with the mentor once the mentorship has been completed.

**V. ETHICS:**

- \_\_\_ 67. All aspects of student expectations should be covered during the student/mentor interview.
- \_\_\_ 68. All participant expectations should be discussed.
- \_\_\_ 69. Students must be made aware of confidentiality guidelines as they may apply to certain types of businesses and offices.
- \_\_\_ 70. Students need to be considerate of the mentoring firm’s employees and of their daily responsibilities.
- \_\_\_ 71. Students are not to remove materials, equipment, etc., from the work place that are

the property of the mentor unless permission has been granted to do so.

\_\_\_ 72. Screening mentor records for child abuse, criminal, or sexual offenses should take place.

\_\_\_ 73. Liability insurance for mentors should be considered.

**APPENDIX D**  
**ROUND 1 SURVEY**

January, 1998 Round 1

Dear Panelist:

Thank you for your commitment to participate as a panelist to identify Desirable Components of a Workplace Mentorship Program. We have an excellent panel of experts who will contribute valuable information to the study.

Enclosed you will find a personal data sheet, instructions, and a survey instrument for round 1 of the three-round Delphi study. The first-round instrument is open-ended to allow for all initial opinions of the participants. These responses will be analyzed and developed into a rating scale instrument for rounds two and three. Your input is very important and all responses will remain confidential. A final report of the research findings will be sent to all participants at the end of the study. I believe that you will find this information both useful and valuable in your future mentorship endeavors.

Your prompt response to the survey is essential in the expected completion of the project--please note the return date of JANUARY 30, 1998, for the survey and personal data sheet. **PLEASE ADHERE TO THE TIME LINE FOR THE STUDY.**

Faxing the survey instrument and personal data sheet would speed up the process; however, I have enclosed a self-addressed, stamped envelope should public mail be your choice. I have also included my e-mail address for another option.

FAX#: 540-989-0786, or e-mail                      Address: MZELANEOUS@AOL.COM

Should you have any questions, please contact me at 540-989-5395. I look forward to your responses in round 1 of the study and thank you very much for your commitment to the project.

Sincerely,

Elaine W. Woolwine, Doctoral Student

**PANELIST DATA SHEET**

Please complete this form and return with your Delphi I (Round 1) survey instrument.

\_\_\_ YES      I would like to participate as a panel member to identify desirable components of an effective workplace mentorship.

\_\_\_ NO      I am unable to participate in this study.

**PANEL INFORMATION**

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

GENDER: \_\_\_\_\_ RACE: \_\_\_\_\_

PHONE #: (\_\_\_) \_\_\_-\_\_\_\_ EXT: \_\_\_\_

FAX#: (\_\_\_) \_\_\_-\_\_\_\_

E-MAIL: \_\_\_\_\_

POSITION: \_\_\_\_\_

CAREER/OCCUPATIONAL FIELD: \_\_\_\_\_

EXPERIENCE WITH MENTORSHIP: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ADDITIONAL COMMENTS: \_\_\_\_\_  
\_\_\_\_\_



## **ROUND 1**

### **DELPHI 1 INSTRUMENT**

The purpose of this study is to identify desirable components for an effective workplace mentorship as determined by a panel of experts. (Components are defined as all of the activities, processes, and characteristics of a program).

**INSTRUCTIONS:** Please respond to the following questions in each of the five categories listed. If you wish to add any other categories, use additional sheets as needed.

#### COMPONENT 1: PROGRAM STRUCTURE

1. What are your recommendations for structuring a workplace mentorship?

#### COMPONENT 2: RECRUITMENT, SELECTION, AND PLACEMENT

1. What guidelines would you establish for the recruitment process (to include both the mentor and the mentee)?

COMPONENT 2: RECRUITMENT, SELECTION, AND PLACEMENT

2. What guidelines would you establish for the selection process (to include both the mentor and the mentee)?

COMPONENT 2: RECRUITMENT, SELECTION, AND PLACEMENT

3. What guidelines would you establish for the placement process (to include both the mentor and the mentee)?

COMPONENT 3: SUPPORT ACTIVITIES

1. What support do you feel is necessary for the mentor/mentee relationship to succeed?

COMPONENT 3: SUPPORT ACTIVITIES

2. Who needs to provide the support in this relationship?

COMPONENT 4: PROGRAM OUTCOMES AND EVALUATION

1. What do you consider to be desirable outcomes of a workplace mentorship?

COMPONENT 4: PROGRAM OUTCOMES AND EVALUATION

2. What are your recommendations and strategies for mentorship evaluation?

### COMPONENT 5: ETHICS

1. What would you recommend regarding ethical considerations of workplace mentorships?

### COMPONENT 6: BARRIERS AND OBSTACLES

1. List barriers and/or obstacles that exist for mentorship activities.

February 20, 1998

(Panelist - Round I)

Dear Panel Member:

Thank you for your agreement to participate in the workplace mentorship survey. Your input is important and will help provide both feedback and validity to the project.

I am aware of the importance of your time and want to reassure you that if time does not permit you to complete ALL the questions on the survey, those that are completed will be both useful and appreciated.

After completion of the survey and personal data sheet, faxing would expedite your return to me. My fax number is 540-989-0786. Also, I can be e-mailed at MZELANEIOUS@AOL.com should you care to do so. My home phone number is 540-989-5395 if you have any questions or need to talk to me for any reason.

Again, thank you for your time and cooperation with this survey and I look forward to your input.

Cordially,

Elaine Woolwine, Doctoral Candidate  
VPI & SU

**APPENDIX E**

**CRITERIA FROM ROUND 1 CATEGORIZED WITHIN COMPONENTS OF AN  
EFFECTIVE WORKPLACE MENTORSHIP**

Initial responses from round 1 of the main study were charted for each question of the five components to be rated on the round 2 survey instrument shown in Appendix F. Category six, barriers and obstacles, included criteria for consideration but was not included as a component. Responses that were identical or similar were combined into one item.

The process used to identify criteria for the round-two instrument was to analyze the responses generated by the panel in the round one survey. The responses were classified according to the following five components:

I. PROGRAM STRUCTURE (32 responses)

Achievement objectives for the program should be set.

The mentorship program should not be mixed with other work place programs, such as apprenticeship, job shadowing, etc.

A formal written program plan should be developed for use by the school, business, and mentor at the direction of the mentorship coordinator.

A mentorship program needs a coordinator or supervisor.

A mentorship program needs a guideline handbook for structuring the mentorship program.

The handbook should include a mission statement.

The guidelines should include a definition of mentorship.

The guidelines should include the structure of the program.

The handbook should include a student application for the program.

The handbook should include information regarding the selection process.

The guidelines should include student expectations and requirements.

The guidelines should include the mentorship agreement arrangements.

The guidelines should include an evaluation process.

The guidelines should include the role of the mentor.

The guidelines should include the role of the coordinator.

The guidelines should define the student target group for mentoring.



Business/community partnerships need to be established.

The program needs to be promoted to the business community, the students, and the parents.

Prospective mentors need to be interviewed as to their willingness to provide on-the-job instruction to students.

Prospective mentors need to be interviewed as to their ability to connect the school-to-work philosophy.

Program policies and procedures for the students should be established.

The program coordinator should make every possible effort to place the student in a mentorship site that is appropriate to the development of the student's career interest.

Establish the grade level of participating students.

Design a student project or planned set of activities.

Students should be provided feedback and evaluation.

Students should be made to feel they are a part of the workplace.

Time lines for the mentorship process should be established.

Prospective mentors should be nominated by workplace managers and supervisors.

Mentor candidates should be required to complete a mentor checklist.

Sexual harassment in the workplace training should be provided to both the mentors and the mentees.

There should be continuous improvement as a result of evaluations addressing additions or changes in the mentorship program.

## **II. RECRUITMENT, SELECTION, AND PLACEMENT (27 responses)**

The student application should be reviewed by the coordinator and a selection committee.

The selection process should include a review of the student's high school transcript.

The selection process should include a review of standardized scores.

The student selection process should include an interview of each student by the coordinator.

The student should have an interview with the guidance counselor.

The prospective student should provide a resume.

There should be an interview between the student and the mentor.

The mentorship program should be limited to only juniors and seniors.

The number of mentorship hours required for the school year should be decided in advance.

Journals and related on-going projects should be incorporated as part of the program

Students must demonstrate positive behavior traits, good communication skills, and a sincere desire to learn about a specific career area.

The mentor selection guidelines should include a student recommendation process.

The mentor selection guidelines should include coordinator contact and an interview process.

The student, coordinator, and mentor should meet to discuss program collaboration and coordination.

The mentor selection guidelines should include mentor willingness and interest in accepting students.

Guidelines should be developed that would not exclude large numbers of students.

An orientation program regarding proper mentoring etiquette should be provided to the students.

The program should provide mentor orientation and training.

Target schools should be identified for participation.

Announcements stating the objectives, qualifications, and application process should be created and distributed to the target schools.

An informal mentoring session with supervisors, managers, and executives should be held to identify possible worksite mentors.

Student recruitment should only include participants in work-based learning programs ready for on-the-job training.

A database should be developed that identifies experts who have time to help with the mentoring program.

The hiring standards that are used for the employees should also be used for the student mentees.

The mentor/mentee match should coincide between the student's interests/skills and the mentor's business/industry.

A learning/training agreement should be drafted to identify involved parties, schedules, objectives, and outcomes.

The mentor and mentee should complete a checklist to assess traits to necessitate proper placement.

### **III. SUPPORT ACTIVITIES (17 responses)**

The coordinator should originate and facilitate the total program.

The business firm or company needs to lend its support for this relationship to develop.

Parents need to encourage their sons and daughters to become active participants in the program.

The school and the teachers need to help students convert the learning process from the classroom to the work place.

Students must have parent permission to participate in the program.

Students must provide their own transportation to and from the mentorship site.

Students must meet with their coordinator each grading period to discuss their job evaluations, portfolio development, and other issues regarding the mentorship experience.

School administrative support is essential for dealing with students who may "skip" the mentorship or who may experience other problems related to the mentorship program.

Community support is vital to the development and continued operation of the program.

A clearly explained guideline and conflict resolution plan should be available through the school or business.

Mentors must have tools and resources to be able to provide an adequate setting in which students can accomplish objectives.

Co-workers should cooperate to make students feel that they are a part of the team.

Support is needed from the overall governing bodies of the school system.

A feedback form should be completed by both the mentor and mentee after several months of the mentorship arrangement.

The mentor/mentee feedback form should include an action plan of learning experiences to be completed jointly by the mentor and mentee.

Employers should network with each other to facilitate the mentoring process.

Teachers within the school should understand and value the mentorship concept.

### **IV. PROGRAM OUTCOMES AND EVALUATION (38 responses)**

Evaluation criteria should include the mentor's six-week written evaluation of the student.

Evaluation should include regular visits to the mentorship student worksite by the coordinator.

The evaluation process should include the turning in of student forms on time to the

coordinator.

A student self-evaluation should include the most rewarding aspects of the program.

A student self-evaluation should include the most challenging aspect of the program.

The evaluation process should include a parent evaluation of the mentor program.

The evaluation process should include a mentor evaluation.

The evaluation process should include a student evaluation of the mentor program.

A student survey to determine interest in continuing with the program the following year should be administered.

The mentor should provide "hands-on" experiences for the student.

The mentor should demonstrate a personal interest in the career development of the student.

The mentor should take time to explain how school subjects relate to the work being performed in the mentoring firm.

The mentor should be willing to meet with the program coordinator for the purpose of evaluating the student.

Evaluation should include student punctuality to the mentorship site.

Evaluation should include student self-evaluation of progress at the mentorship site.

Experience evaluations should be completed at the end of the semester by the student and mentor.

Once the mentorship has been completed there should be a possibility of part-time employment for the mentee.

Academic and technical skills that are transferable to the workplace should be developed.

Basic skills and knowledge should be applied to "real world settings."

Students should be taught skills that are relevant to the host business.

A student's self-esteem should become increased.

The workplace culture should be understood by the mentee.

The job/career mentoring area should result from the student's career interest.

Interaction with co-workers and supervisors should take place during the mentoring process.

Students should develop an understanding between school, work, and the achievement of goals.

Identification of goals should be a joint effort of both the mentor and mentee.

Outcomes of mentoring relationships should reflect balance, interdependence, and respect.

The mentor should provide the mentee feedback that is frank and compassionately straight forward.

Evaluations should include the student's overall workplace attitudes and behaviors.

The mentee's outstanding qualities should be identified.

Evaluation should include whether or not the mentee could be recommended for future employment.

The mentee's evaluation should be discussed with him/her.

A pre-conference to determine success (or lack of) should be held.

Both the mentor and mentee should be required to keep a journal.

A formal means of evaluation should include a portfolio.

Employees in the business should become "re-energized" as a result of the mentorship experience.

The student should gain a maturity about work that results in a clearer vision of the work world.

True evaluation is difficult as a result of the "intrinsic" learning that takes place.

## **V. ETHICS (13 responses)**

All aspects of student expectations should be covered during the student/mentor interview.

All participant expectations should be discussed.

Students must be made aware of confidentiality guidelines as they apply to certain types of businesses and offices.

Students need to be considerate of the mentoring firm's employees and their daily responsibilities.

Students are not to remove materials, equipment, etc. from the workplace that are the property of the mentor unless permission has been granted to do so.

Screening mentor records for child abuse, criminal, or sexual offenses should take place.

Liability insurance for mentors should be considered.

The same code of conduct/ethics that already exists for employees in the business should also be used for the students.

Participating mentors in the workplace should be recommended by the business.

A meeting with the mentors and parents should be held.

Open lines of communication with immediate feedback to all parties should exist.

Mentors should not be alone with the mentee.

Workplace etiquette training should be provided to the students.

**VI. BARRIERS AND OBSTACLES (14 responses)**  
**(Not included as one of the components)**

Student behavior and inappropriate dress are obstacles in the mentorship program.

Prejudice against young people or adults exists in the mentoring partnership.

Poor rapport between the mentor and student presents an obstacle.

Lack of student interest in the profession or industry presents a barrier.

The school shows a lack of support for the mentorship arrangement.

The time needed for success by both parties is a barrier.

Scheduling the mentorship is an obstacle.

Lack of student interest in the profession or industry presents a barrier.

The school shows a lack of support for the mentorship arrangement.

The time needed for success by both parties presents a barrier.

The lack of community support is a barrier.

The mentorship experience becomes a costly benefit for the business.

Businesses are "bottom-line" oriented and accountable for continued productivity.

A mentoring partnership is labor intensive and often lowers the productivity in a business.

**APPENDIX F**  
**ROUND 2 SURVEY**

March, 1998 (Round 2 )

Dear Panelist:

Thank you for your participation in my study of Components of Effective Workplace Mentorships. Your feedback has provided excellent data for the rating sheet in round 2. Since round 1 was an open-ended survey, all different responses have been included in the round 2 instrument; however, duplicated responses were revised into one response. While the return rate was high, the response time has taken longer than anticipated , thus the reason for the lag time between round 1 and round 2.

You will find instructions for completion of the survey instrument in this packet. All responses will remain confidential and will be analyzed for consensus in the final rating sheet for round 3. Your assistance to quickly complete and return the form will be GREATLY appreciated.

Please write your name on page 1 of the survey and fax only the survey to me at 540-989-0786. Also, my E-mail is MZELANEOUS@AOL.COM and my phone number is 540-989-5395. Please call me about any questions or concerns.

Again, thank you so much for your time and effort in this study. I look forward to a completed project for you sometime in May.

Sincerely,

Elaine Woolwine, Doctoral Candidate  
VPI & SU



## INSTRUCTIONS

### Round #2 of: Components of an Effective Workplace Mentorship

1. Enclosed is the survey instrument identifying the responses for Components of an Effective Workplace Mentorship in round 1 of the study.
2. Please respond to each statement for Components of an Effective Workplace Mentorship by rating with the appropriate number. The range of choices is: 1 = Very Unimportant, 2 = Unimportant, 3 = Important, and 4 = Very Important.
3. Please complete the survey and preferably fax it to me at 540-989-0786 in order to expedite the process. If you prefer to mail the survey, my address is:

Elaine Woolwine  
4404 Farm Hill Drive  
Roanoke, VA 24018.

Your prompt response and participation as a panelist is greatly valued and appreciated for this study.

**THANK YOU FOR PARTICIPATING IN THIS STUDY!**

**ROUND #2**

**DELPHI 2 INSTRUMENT**

**COMPONENTS OF AN EFFECTIVE WORKPLACE MENTORSHIP**

**Rating Scale: 1 = Very Unimportant  
2 = Unimportant  
3= Important  
4= Very Important**

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**I. PROGRAM STRUCTURE**

	Important (Circle One)
1. Achievement objectives for the program should be set.	1 2 3 4
2. The mentorship program should not be mixed with other work place programs, such as apprenticeship, job shadowing, etc.	1 2 3 4
3. A formal written program plan should be developed for use by the school, business and mentor at the direction of the mentorship coordinator.	1 2 3 4
4. A mentorship program needs a coordinator or supervisor.	1 2 3 4
5. A mentorship program needs a guideline handbook for structuring the mentorship program.	1 2 3 4
6. The handbook should include a mission statement.	1 2 3 4
7. The guidelines should include a definition of mentorship.	1 2 3 4
8. The guidelines should include the structure of the program.	1 2 3 4
9. The handbook should include a student application for the program.	1 2 3 4
10. The handbook should include information regarding the selection process.	1 2 3 4
11. The guidelines should include student expectations.	1 2 3 4
12. The guidelines should include the mentorship agreement arrangements.	1 2 3 4
13. The guidelines should include an evaluation process.	1 2 3 4
14. The guidelines should include the role of the mentor.	1 2 3 4

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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|--|---------|
| 15. The guidelines should include the role of the coordinator.   | 1 2 3 4 |
| 16. The guidelines should define the student target group for mentoring.   | 1 2 3 4 |
| 17. Business/community partnerships need to be established.  | 1 2 3 4 |
| 18. The program needs to be promoted to the business community, the students, and the parents.   | 1 2 3 4 |
| 19. Prospective mentors need to be interviewed as to their willingness to provide on-the-job instruction to students.  | 1 2 3 4 |
| 20. Prospective mentors need to be interviewed as to their ability to connect the school-to-work philosophy.   | 1 2 3 4 |
| 21. Program policies and procedures for the students should be established.  | 1 2 3 4 |
| 22. The program coordinator should make every possible effort to place the student in a mentorship site that is appropriate to the development of the student's career interest. | 1 2 3 4 |
| 23. Establish the grade level of participating students.   | 1 2 3 4 |
| 24. Design a student project or planned set of activities.   | 1 2 3 4 |
| 25. Students should be provided feedback and evaluation.   | 1 2 3 4 |
| 26. Students should be made to feel they are a part of the workplace.  | 1 2 3 4 |
| 27. Time line for the mentorship process should be established.  | 1 2 3 4 |
| 28. Prospective mentors should be nominated by workplace managers.   | 1 2 3 4 |
| 29. Mentor candidates should be required to complete a mentor checklist.   | 1 2 3 4 |
| 30. Mentor candidates should complete an Individual Development Plan.  | 1 2 3 4 |
| 31. Sexual harassment in the workplace training should be provided to both the mentors and mentees.  | 1 2 3 4 |
| 32. There should be continuous improvement as a result of evaluations addressing additions or changes in the mentorship program.   | 1 2 3 4 |

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

## II. RECRUITMENT, SELECTION, AND PLACEMENT

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|--|---------|
| 33. The student application should be reviewed by the coordinator and a selection committee.   | 1 2 3 4 |
| 34. The selection process should include a review of the student's high school transcript.   | 1 2 3 4 |
| 35. The selection process should include a review of standardized scores.  | 1 2 3 4 |
| 36. The student selection process should include an interview of each student by the coordinator.  | 1 2 3 4 |
| 37. The student should have an interview with the guidance counselor.  | 1 2 3 4 |
| 38. The prospective student should provide a resume.   | 1 2 3 4 |
| 39. There should be an interview between the student and the mentor.   | 1 2 3 4 |
| 40. The mentorship program should be limited to only juniors and seniors.  | 1 2 3 4 |
| 41. The number of mentorship hours required for the school year should be decided in advance.  | 1 2 3 4 |
| 42. Journals and related on-going projects should be incorporated as part of the program.  | 1 2 3 4 |
| 43. Students must demonstrate positive behavior traits, good communication skills, and a sincere desire to learn about a specific career area. | 1 2 3 4 |
| 44. The mentor selection guidelines should include a student recommendation process.   | 1 2 3 4 |
| 45. The mentor selection guidelines should include coordinator contact and an interview process.   | 1 2 3 4 |
| 46. The student, coordinator, and mentor should meet to discuss program collaboration and coordination.  | 1 2 3 4 |
| 47. The mentor selection guidelines should include the mentor's willingness and interest in accepting students.                                | 1 2 3 4 |

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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| 48. Guidelines should be developed that would not exclude large numbers of students.   | 1 2 3 4 |
| 49. An orientation program for proper etiquette is needed.   | 1 2 3 4 |
| 50. The program should provide mentor orientation and training.  | 1 2 3 4 |
| 51. Target schools should be identified for participation.   | 1 2 3 4 |
| 52. Announcements stating the objectives, qualifications, and application process should be created and distributed to the target schools. | 1 2 3 4 |
| 53. An informal mentoring session with supervisors, managers, and executives should be held to identify possible worksite mentors.         | 1 2 3 4 |
| 54. Student recruitment should only include participants in work-based learning programs ready for on-the-job training.                    | 1 2 3 4 |
| 55. A database should be developed that identifies experts who have time to help with the mentoring program.                               | 1 2 3 4 |
| 56. The hiring standards that are used for the employees should also be used for the student mentees.                                      | 1 2 3 4 |
| 57. The mentor/mentee match should coincide between the student's interests/skills and the mentor's business/industry.                     | 1 2 3 4 |
| 58. A learning/training agreement should be drafted to identify involved parties, schedules, objectives, and outcomes.                     | 1 2 3 4 |
| 59. The mentor and mentee should complete a checklist to assess traits to necessitate proper placement.                                    | 1 2 3 4 |
| <br>III. SUPPORT ACTIVITIES  |         |
| 60. The coordinator should originate and facilitate the total program.   | 1 2 3 4 |
| 61. The business firm or company needs to lend its support for this relationship to develop.   | 1 2 3 4 |
| 62. Parents need to encourage their sons and daughters to become active participants in the program.                                       | 1 2 3 4 |
| 63. The school and the teachers need to help students convert the learning process from the classroom to the workplace.                    | 1 2 3 4 |

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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|--|---------|
| 64. Students must have parent permission to participate in the program.  | 1 2 3 4 |
| 65. Students must provide their own transportation to and from the mentorship site.  | 1 2 3 4 |
| 66. Students must meet with their coordinator each grading period to discuss their job evaluations, portfolio development, etc.  | 1 2 3 4 |
| 67. School administrative support is essential for dealing with students who may “skip” the mentorship or who may experience other problems related to the mentorship. | 1 2 3 4 |
| 68. Community support is vital to the development and continued operation of the program.  | 1 2 3 4 |
| 69. A clearly explained guideline and conflict resolution plan should be made available through the school or business.  | 1 2 3 4 |
| 70. Mentors must have tools and resources to be able to provide an adequate setting in which students can accomplish objectives.                                       | 1 2 3 4 |
| 71. Co-workers should cooperate to make students feel that they are a part of the team.  | 1 2 3 4 |
| 72. Support is needed from the overall governing bodies of the school system.  | 1 2 3 4 |
| 73. A feedback form should be completed by both the mentor and mentee after several months of the mentorship arrangement.  | 1 2 3 4 |
| 74. The mentor/mentee feedback form should include an action plan of learning experiences to be completed jointly by the mentor and mentee.                            | 1 2 3 4 |
| 75. Employers should network with each other to facilitate the mentoring process.  | 1 2 3 4 |
| 76. Teachers within the school should understand and value the mentorship concept.   | 1 2 3 4 |

#### IV. PROGRAM OUTCOMES AND EVALUATION

- |  |         |
|--|---------|
| 77. Evaluation criteria should include the mentor's six-week written evaluation of the student.      | 1 2 3 4 |
| 78. Evaluation should include regular visits to the mentorship student work site by the coordinator. | 1 2 3 4 |

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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|--|---------|
| 79. The evaluation process should include the turning in of student forms on time to the coordinator.                    | 1 2 3 4 |
| 80. A student self-evaluation should include the most rewarding aspects of the program.                                  | 1 2 3 4 |
| 81. A student self-evaluation should include the most challenging aspect of the program.                                 | 1 2 3 4 |
| 82. The evaluation process should include a parent evaluation of the mentor program.                                     | 1 2 3 4 |
| 83. The evaluation process should include a mentor evaluation.   | 1 2 3 4 |
| 84. The evaluation process should include a student evaluation of the mentor program.                                    | 1 2 3 4 |
| 85. A student survey to determine interest in continuing with the program the following year should be administered.     | 1 2 3 4 |
| 86. The mentor should provide "hands-on" experiences for the student.  | 1 2 3 4 |
| 87. The mentor should demonstrate a personal interest in the career development of the student.                          | 1 2 3 4 |
| 88. The mentor should take time to explain how school subjects relate to the work being performed in the mentoring firm. | 1 2 3 4 |
| 89. The mentor should be willing to meet with the program coordinator for the purpose of evaluating the student.         | 1 2 3 4 |
| 90. Evaluation should include student punctuality to the mentorship site.  | 1 2 3 4 |
| 91. Evaluation should include student self-evaluation of progress at the mentorship site.                                | 1 2 3 4 |
| 92. Experience evaluations should be completed at the end of the semester by the student and mentor.                     | 1 2 3 4 |
| 93. Once the mentorship has been completed there should be a possibility of part-time employment for the mentee.         | 1 2 3 4 |
| 94. Academic and technical skills that are transferable to the workplace should be developed.                            | 1 2 3 4 |

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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|--|---------|
| 95. Basic skills and knowledge should be applied to "real world" settings.                             | 1 2 3 4 |
| 96. Students should be taught skills that are relevant to the host business.                           | 1 2 3 4 |
| 97. A student's self-esteem should become increased.   | 1 2 3 4 |
| 98. The workplace culture should be understood by the mentee.  | 1 2 3 4 |
| 99. The job/career mentoring area should result from the student's career interest.                    | 1 2 3 4 |
| 100. Interaction with co-workers and supervisors should take place during the mentoring process.       | 1 2 3 4 |
| 101. Students should develop an understanding between the school, work, and the achievement of goals.  | 1 2 3 4 |
| 102. Identification of goals should be a joint effort of both.   | 1 2 3 4 |
| 103. Outcomes of mentoring relationships should reflect balance, interdependence, and respect.         | 1 2 3 4 |
| 104. The mentor should provide the mentee feedback that is frank and compassionately straight forward. | 1 2 3 4 |
| 105. Evaluations should include the student's overall workplace attitudes and behaviors.               | 1 2 3 4 |
| 106. The mentee's outstanding qualities should be identified.  | 1 2 3 4 |
| 107. Evaluation should include whether or not the mentee could be recommended for future employment.   | 1 2 3 4 |
| 108. The mentee's evaluation should be discussed with him/her.   | 1 2 3 4 |
| 109. A pre-conference to establish goals should be held.   | 1 2 3 4 |
| 110. A post-conference to determine success (or lack of) should be held.                               | 1 2 3 4 |
| 111. Both the mentor and mentee should be required to keep a journal.                                  | 1 2 3 4 |
| 112. A formal means of evaluation should include a portfolio.  | 1 2 3 4 |
| 113. Employees in the business should become "re-energized" as a result of the mentorship experience.  | 1 2 3 4 |



1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

114. The student should gain a maturity about work that results in a clearer vision of the work world. 1 2 3 4
115. True evaluation is difficult as a result of the "intrinsic" learning that takes place. 1 2 3 4

#### V. ETHICS

116. All aspects of student expectations should be covered during the student/mentor interview. 1 2 3 4
117. All participant expectations should be discussed. 1 2 3 4
118. Students must be made aware of confidentiality guidelines as they apply to certain types of businesses and offices. 1 2 3 4
119. Students need to be considerate of the mentoring firm's employees and their daily responsibilities. 1 2 3 4
120. Students are not to remove materials, equipment, etc., from the workplace that are the property of the mentor unless permission has been granted to do so. 1 2 3 4
121. Screening mentor records for child abuse, criminal, or sexual offenses should take place. 1 2 3 4
122. Liability insurance for mentors should be considered. 1 2 3 4
123. The same code of conduct/ethics that already exists for employees in the business should also be used for the students. 1 2 3 4
124. Participating mentors in the workplace should be recommended by the business. 1 2 3 4
125. A meeting with the mentors and parents should be held. 1 2 3 4
126. Open lines of communication with immediate feedback to all parties should exist. 1 2 3 4
127. Mentors should not be alone with the mentee. 1 2 3 4
128. Workplace etiquette training should be provided to the students. 1 2 3 4

#### VI. BARRIERS AND OBSTACLES

129. Student behavior and inappropriate dress are obstacles in the mentorship program. 1 2 3 4

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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|--|---------|
| 130. Prejudice against young people or adults exists in the mentoring partnership.               | 1 2 3 4 |
| 131. Poor rapport between the mentor and student presents an obstacle.                           | 1 2 3 4 |
| 132. Lack of student interest in the profession or industry presents a barrier.                  | 1 2 3 4 |
| 133. The school shows a lack of support for the mentorship arrangement.                          | 1 2 3 4 |
| 134. The time needed for success by both parties is a barrier.                                   | 1 2 3 4 |
| 135. Scheduling the mentorship is an obstacle.   | 1 2 3 4 |
| 136. Lack of transportation is an obstacle.  | 1 2 3 4 |
| 137. Past negative experiences by either party presents a barrier.                               | 1 2 3 4 |
| 138. The lack of community support is a barrier.   | 1 2 3 4 |
| 139. The mentorship experience becomes a costly benefit for the business.                        | 1 2 3 4 |
| 140. Businesses are "bottom-line" oriented and accountable for continued productivity.           | 1 2 3 4 |
| 141. A mentoring partnership is labor intensive and often lowers the productivity in a business. | 1 2 3 4 |

**APPENDIX G**  
**ROUND 3 SURVEY**

## INSTRUCTIONS

### ROUND #3 OF:

#### Identification of Components of an Effective Workplace Mentorship

1. Enclosed you will find the survey instrument for Round 3 of the research. These are the criteria identified in Round 2 of the study and were identified as important by at least 80 percent of the participants.
2. Please refer to the four-point rating scale when assessing each question. The scale is located at the top of each page for your convenience.
3. Only those questions identified as important or very important by at least 80 percent of the respondents remain on this instrument.
4. Please complete the survey instrument and return by FAX to 540-989-0786 to hasten the return time. If you wish to mail the instrument, please do so to:

Elaine Woolwine  
4404 Farm Hill Drive  
Roanoke, VA 24018

If you have any questions, please feel free to call me collect at 540-989-5395. I look forward to your input on Round 3 of the study.

**THANK YOU FOR YOUR CONTINUED PARTICIPATION IN THIS STUDY!**

## DELPHI 3 INSTRUMENT

### COMPONENTS OF AN EFFECTIVE WORKPLACE MENTORSHIP

Rating Scale: 1 = Very Unimportant  
2 = Unimportant  
3 = Important  
4 = Very Important

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#### I. PROGRAM STRUCTURE

- |   |         |
|---|---------|
| 1. Achievement objectives for the program should be set.  | 1 2 3 4 |
| 2. A formal written program plan should be developed for use by the school, business and mentor at the direction of the mentorship coordinator. | 1 2 3 4 |
| 3. A mentorship program needs a coordinator or supervisor.  | 1 2 3 4 |
| 4. A mentorship program needs a guideline handbook for structuring the mentorship program.  | 1 2 3 4 |
| 5. The handbook should include a mission statement.   | 1 2 3 4 |
| 6. The guidelines should include a definition of mentorship.  | 1 2 3 4 |
| 7. The guidelines should include the structure of the program.  | 1 2 3 4 |
| 8. The handbook should include a student application for the program.   | 1 2 3 4 |
| 9. The handbook should include information regarding the selection process.   | 1 2 3 4 |
| 10. The guidelines should include student expectations and requirements.  | 1 2 3 4 |
| 11. The guidelines should include the mentorship agreement arrangements.  | 1 2 3 4 |
| 12. The guidelines should include an evaluation process.  | 1 2 3 4 |
| 13. The guidelines should include the role of the mentor.   | 1 2 3 4 |
| 14. The guidelines should include the role of the coordinator.  | 1 2 3 4 |
| 15. The guidelines should define the student target group for mentoring.  | 1 2 3 4 |
| 16. The program needs to be promoted to the business community, the students, and the parents.  | 1 2 3 4 |

1 = Very Unimportant 2 = Unimportant 3 = Important 4 = Very Important

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| 17. Prospective mentors need to be interviewed as to their willingness to provide on-the-job instruction to students.  | 1 2 3 4 |
| 18. Prospective mentors need to be interviewed as to their ability to connect the school-to-work philosophy.   | 1 2 3 4 |
| 19. Program policies and procedures for the students should be established.  | 1 2 3 4 |
| 20. The program coordinator should make every possible effort to place the student in a mentorship site that is appropriate to the development of the student's career interest. | 1 2 3 4 |
| 21. Establish the grade level of participating students.   | 1 2 3 4 |
| 22. Design a student project or planned set of activities.   | 1 2 3 4 |
| 23. Students should be provided feedback and evaluation.   | 1 2 3 4 |
| 24. Students should be made to feel they are a part of the workplace.  | 1 2 3 4 |
| 25. Timeline for the mentorship process should be established.   | 1 2 3 4 |
| 26. There should be continuous improvement as a result of evaluations addressing additions or changes in the mentorship program.   | 1 2 3 4 |
| <br>II. RECRUITMENT, SELECTION, AND PLACEMENT  |         |
| 27. The student application should be reviewed by the coordinator and a selection committee.   | 1 2 3 4 |
| 28. The selection process should include a review of the student's high school transcript.   | 1 2 3 4 |
| 29. The student selection process should include an interview of each student by the coordinator.  | 1 2 3 4 |
| 30. The prospective student should provide a resume.   | 1 2 3 4 |
| 31. There should be an interview between the student and the mentor.   | 1 2 3 4 |
| 32. The number of mentorship hours required for the school year should be decided in advance.  | 1 2 3 4 |

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| 33. Journals and related on-going projects should be incorporated as part of the program.  | 1 2 3 4 |
| 34. Students must demonstrate positive behavior traits, good communication skills, and a sincere desire to learn about a specific career area. | 1 2 3 4 |
| 35. The mentor selection guidelines should include a student recommendation process.   | 1 2 3 4 |
| 36. The mentor selection guidelines should include coordinator contact and an interview process.   | 1 2 3 4 |
| 37. The student, coordinator, and mentor should meet to discuss program collaboration and coordination.  | 1 2 3 4 |
| 38. The mentor selection guidelines should include the mentor's willingness and interest in accepting students.                                | 1 2 3 4 |
| 39. Guidelines should be developed that would not exclude large numbers of students.   | 1 2 3 4 |
| 40. An orientation program for proper etiquette is needed.   | 1 2 3 4 |
| 41. The program should provide mentor orientation and training.  | 1 2 3 4 |
| 42. Announcements stating the objectives, qualifications, and application process should be created and distributed to the target schools.     | 1 2 3 4 |
| 43. An informal mentoring session with supervisors, managers, and executives should be held to identify possible worksite mentors.             | 1 2 3 4 |
| 44. A database should be developed that identifies experts who have time to help with the mentoring program.                                   | 1 2 3 4 |
| 45. The mentor/mentee match should coincide between the student's interests/skills and the mentor's business/industry.                         | 1 2 3 4 |
| 46. A learning/training agreement should be drafted to identify involved parties, schedules, objectives, and outcomes.                         | 1 2 3 4 |
| 47. The mentor and mentee should complete a checklist to assess traits to necessitate proper placement.  | 1 2 3 4 |

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### III. SUPPORT ACTIVITIES

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| 48. The coordinator should originate and facilitate the total program.   | 1 2 3 4 |
| 49. The business firm or company needs to lend its support for this relationship to develop.   | 1 2 3 4 |
| 50. Parents need to encourage their sons and daughters to become active participants in the program.   | 1 2 3 4 |
| 51. The school and the teachers need to help students convert the learning process from the classroom to the workplace.  | 1 2 3 4 |
| 52. Students must have parent permission to participate in the program.  | 1 2 3 4 |
| 53. Students must provide their own transportation to and from the mentorship site.  | 1 2 3 4 |
| 54. Students must meet with their coordinator each grading period to discuss their job evaluations, portfolio development, etc.  | 1 2 3 4 |
| 55. School administrative support is essential for dealing with students who may "skip" the mentorship or who may experience other problems related to the mentorship. | 1 2 3 4 |
| 56. Community support is vital to the development and continued operation of the program.  | 1 2 3 4 |
| 57. A clearly explained guideline and conflict resolution plan should be available through the school or business.   | 1 2 3 4 |
| 58. Mentors must have tools and resources to be able to provide an adequate setting in which students can accomplish objectives.                                       | 1 2 3 4 |
| 59. Co-workers should cooperate to make students feel that they are a part of the team.  | 1 2 3 4 |
| 60. Support is needed from the overall governing bodies of the school system.  | 1 2 3 4 |
| 61. A feedback form should be completed by both the mentor and mentee after several months of the mentorship arrangement.  | 1 2 3 4 |
| 62. The mentor/mentee feedback form should include an action plan of learning experiences to be completed jointly by the mentor and mentee.                            | 1 2 3 4 |



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63. Teachers within the school should understand and value the mentorship concept. 1 2 3 4

#### IV. PROGRAM OUTCOMES AND EVALUATION

64. Evaluation criteria should include the mentor's six-week written evaluation of the student. 1 2 3 4

65. Evaluation should include regular visits to the student's work-site by the coordinator. 1 2 3 4

66. The evaluation process should include the turning in of student forms on time to the coordinator. 1 2 3 4

67. A student self-evaluation should include the most rewarding aspects of the program. 1 2 3 4

68. A student self-evaluation should include the most challenging aspect of the program. 1 2 3 4

69. The evaluation process should include a mentor evaluation. 1 2 3 4

70. The evaluation process should include a student evaluation of the mentor program. 1 2 3 4

71. A student survey to determine interest in continuing with the program the following year should be administered. 1 2 3 4

72. The mentor should provide "hands-on" experiences for the student. 1 2 3 4

73. The mentor should demonstrate a personal interest in the career development of the student. 1 2 3 4

74. The mentor should take time to explain how school subjects relate to the work being performed in the mentoring firm. 1 2 3 4

75. The mentor should be willing to meet with the program coordinator for the purpose of evaluating the student. 1 2 3 4

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| 78. Experience evaluations should be completed at the end of the semester by the student and mentor.  | 1 2 3 4 |
| 79. Academic and technical skills that are transferable to the workplace should be developed.         | 1 2 3 4 |
| 80. Basic skills and knowledge should be applied to "real world" settings.                            | 1 2 3 4 |
| 81. Students should be taught skills that are relevant to the host business.                          | 1 2 3 4 |
| 82. A student's self-esteem should become increased.  | 1 2 3 4 |
| 83. The workplace culture should be understood by the mentee.   | 1 2 3 4 |
| 84. The job/career mentoring area should result from the student's career interest.                   | 1 2 3 4 |
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| 87. Identification of goals should be a joint effort of both the mentor and mentee.                   | 1 2 3 4 |
| 88. Outcomes of mentoring relationships should reflect balance, interdependence, and respect.         | 1 2 3 4 |
| 89. The mentor should provide the mentee feedback that is frank and compassionately straight forward. | 1 2 3 4 |
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95. A post-conference to determine success (or lack of) should be held. 1 2 3 4
96. Employees in the business should become “re-energized” as a result of the mentorship experience. 1 2 3 4
97. The student should gain a maturity about work that results in a clearer vision of the work-world. 1 2 3 4

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98. All aspects of student expectations should be covered during the student/mentor interview. 1 2 3 4
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102. Students are not to remove materials, equipment, etc., from the work place that are the property of the mentor unless permission has been granted to do so. 1 2 3 4
103. The same code of conduct/ethics that already exists for employees in the business should also be used for the students. 1 2 3 4
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105. Open lines of communication with immediate feedback to all parties should exist. 1 2 3 4
106. Workplace etiquette training should be provided to the students. 1 2 3 4

#### VI. BARRIERS AND OBSTACLES

107. Student behavior and inappropriate dress are obstacles in the mentorship program. 1 2 3 4
108. Lack of student interest in the profession or industry presents a barrier. 1 2 3 4
109. The school shows a lack of support for the mentorship arrangement. 1 2 3 4

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| 110. The time needed for success by both parties is a barrier.                                   | 1 2 3 4 |
| 111. Scheduling the mentorship is an obstacle.   | 1 2 3 4 |
| 112. Past negative experiences by either party presents a barrier.                               | 1 2 3 4 |
| 113. A mentoring partnership is labor intensive and often lowers the productivity in a business. | 1 2 3 4 |

**ELAINE W. WOOLWINE**

**Doctoral Candidate**

**VPI & SU**

**FAX TRANSMISSION**

**TO:**

**Fax #:**

**FROM: Elaine Woolwine**

**Fax #: 540-989-0786**

**DATE: March 24, 1998**

**SUBJECT: Fax Problems**

**Pages: 1**

COMMENTS: My fax machine was hit by lightning on Friday. After four modems and much agony we are back in business. If you have tried unsuccessfully to fax me between Friday afternoon and today, I would greatly appreciate a "re-try."

I look forward to your input on this survey and greatly appreciate your continued participation in the research.

Elaine W. Woolwine

Doctoral Candidate

VPI & SU

**FAX TRANSMISSION**

**TO:**

**FAX #:**

**FROM: Elaine Woolwine**

**FAX # 540-989-0786**

**DATE: March 29, 1998**

**SUBJECT: ROUND 2 SURVEY RETURN**

**COMMENTS:**

Recently you were sent the Round 2 Survey Instrument to rate responses from round 1 of the study to identify Components Necessary for an Effective Workplace Mentorship. I would greatly appreciate your faxing (540-989-0786) the survey back to me this week if possible. I am trying to complete the project by the end of April in order to provide you with timely completed data from the research. If there is a problem or concern, please call me at 540-989-5395 or e-mail me at [MZELANEOUS@AOL.COM](mailto:MZELANEOUS@AOL.COM). I look forward to your input on this survey and greatly appreciate your continued participation in the research. THANKS AGAIN!

ELAINE W. WOOLWINE

Doctoral Candidate

VPI & SU

**FAX MEMO:**

**TO:**

**FROM: Elaine Woolwine**

**FAX It: 540-989-0786**

**DATE: April 6, 1998**

**SUBJECT: Round 2 Survey Instrument**

**COMMENTS:**

Recently you received round 2 of the survey instrument to rate components for an effective workplace mentorship program. I would be greatly appreciative if you would fax me your completed survey with your input so that I can analyze the data for the final round of the study. Do not worry if you did not participate in all rounds of the survey; the feedback you provide on any round is important in the study. PLEASE call me if you encounter any problems or have any questions.

Thank you for ALL of your assistance in the completion of this research!

## VITA

Elaine W. Woolwine

4451 Sloan Branch Road  
Draper, Virginia 24324

### EDUCATION:

Ed.D.-- Virginia Polytechnic Institute and State University  
Blacksburg, Virginia, 1998  
Major: Educational Administration

CAGS (Certificate of Advanced Graduate Studies)  
Virginia Polytechnic Institute and State University  
Blacksburg, Virginia, 1997  
Major: Educational Administration

M.Ed.-- Virginia Polytechnic Institute and State University  
Blacksburg, Virginia, 1987  
Major: Vocational/Technical Administration

B.S. Degree -- Virginia Polytechnic Institute and State University  
Blacksburg, Virginia, 1975  
Major: Marketing Education

A.S. Degree -- Wytheville Community College  
Wytheville, Virginia, 1973  
Major: Pre-Teacher Education

### EXPERIENCE:

#### July 1998 to Present

Vocational Director/Principal, Pulaski County Schools  
Pulaski, Virginia

Responsible for leadership of vocational faculty in school system (one high school and two middle schools). Oversee the day-to-day operations of the Technical Center located at Pulaski County High School.

#### October 1997 to June 1998

Instructor, Alternative Education  
Franklin County Schools, Rocky Mount, Virginia

Responsible for instruction in the program, including program evaluation for restructure.



July 1996 to October 1997

Assistant Principal for Instruction, Cave Spring High School  
Roanoke County Schools, Roanoke, Virginia

Responsible for curriculum and instruction in all departments,  
including teacher supervision and evaluation. Also responsible for  
the operation of the Columbia School System in the daily operation  
of the school.

July 1988 to July 1996

Principal, Gibboney Technical Center, Roanoke City Schools  
Roanoke, Virginia

Responsible for leadership of faculty, staff, and student body;  
curriculum development; discipline; in-service; and evaluation.  
Responsible for the day-to-day general operation of the facility.

July 1975 to July 1988

Marketing Education Instructor, William Fleming High School  
Roanoke City Schools, Roanoke, Virginia

Responsible for curriculum and instruction in the marketing  
department, coordination of student employment and work  
experience.

PROFESSIONAL ORGANIZATIONS:

American Vocational Association, Virginia Vocational Association,  
National Education Association, Virginia Education Association, Virginia  
Association of Vocational Administrators, Phi Delta Kappa, Region VI  
Vocational Administrators

GENERAL: Born: Wilmington, Delaware  
December 26, 1952

FAMILY: Husband - Randy  
Daughter - Lauren