ON RETENTION OF OKLAHOMA SECONDARY TRADE

AND INDUSTRIAL EDUCATION TEACHERS:

VOICES FROM THE FIELD

By

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CHAPTER I

INTRODUCTION TO THE STUDY

Background of the Problem

Nothing in American education is in greater need of reform than the way we educate and certify classroom teachers (Feistrizer, 1984). Embedded in the current reform movements is the desire to have higher quality, more professional teachers in the classroom. This reappraisal and retooling is one response to the demands of the 1980s "for placing the schools in the position to meet the challenges of the 21st century" (Elam, Cramer & Brodinsky, 1986). Teacher professionalism is the most important prerequisite for creating knowledge-based schools organized to build on what is known about teaching, learning, curriculum, and human development (Darling-Hammond, 1994).

The last decade has been filled with reports about the need to reform our schools. Teacher preparation has been the focus of many of those reports and with good reason. According to Shulman (1987), teaching may well be the most difficult of all professions to master. Yet, individuals from industry continue to be hired without traditional academic prerequisites (Farmer & Burrow, 1990).

A study released by the National Commission on Teaching and America's Future (1997) includes statistics on teaching in America. The report of both vocational and academic teachers gave a painfully clear message for the need to reform teacher

preparation and certification. More than 12 percent of all newly hired teachers enter the workforce without any training at all. Another 15 percent enter without having fully met state standards. More than 50,000 people who lack the training for their job enter the teaching profession each year on emergency or substandard licenses.

The rate of teacher retention specifically in vocational education is even more revealing. Of every 100 new vocational teachers, about 15 leave the profession after the first year and approximately 50 leave within six years (Heath-Camp & Camp, 1990). While such a high attrition rate is problematic, it is especially troubling when one considers that many of those leaving the teaching profession are some of the most gifted teachers. An even more disturbing finding is that many of those most qualified to teach never enter the field (Odell & Ferraro, 1992).

This high attrition rate among vocational teachers is complicated when one specifically considers the field of trade and industrial education. This field comprises about 20 percent of the secondary vocational teaching force (Lynch, 1997). Trade and industrial (T & I) education teachers are traditionally difficult to find who have both industry experience and pedagogical expertise (Walker, Gregson & Frantz, 1997). Vocational teachers who enter the profession directly from business and industry with limited or no professional preparation face problems of a greater magnitude and have a more difficult time during the induction years (Camp & Heath, 1988).

Other factors that exacerbate this situation include:

a. a severe shortage coupled with an increased demand in specific
 occupational areas of the field of secondary trade and industrial education

exists (America's Teachers, 1993-1994; Lynch, 1996; Projections of Education Statistics, 1998; Roth, 1994);

- considerable resources at both the local and state levels are expended on beginning vocational teachers only to have them leave shortly after they have entered the teaching profession (Lynch, 1996); and
- high attrition rates among secondary T & I teachers negatively impact the respective students, programs and industries they serve (Lynch, 1996;
 Walker, Gregson & Frantz, 1996).

The severe shortage and increased demand of secondary T & I education teachers is reflected in relevant statistics. The Bureau of Labor Statistics (1997) reports the number of total vocational teachers needed will increase from 311,000 to 383,000 between 1996 and 2006 resulting in a 23% increase in total employment.

Numerous programs, activities and systems attempt to develop secondary trade and industrial education teachers professionally with considerable costs at both the local and state level. There is little evidence to support the wisdom of expenditures of resources when an inconsistent and unequal return is made on the investment. The public has come to expect and demand results (Drucker, 1992). The process of teaching involves a continuum of learning, unlearning and relearning. Teacher education cannot be segmented into an artificial preservice-inservice dichotomy; rather it should be viewed as a lifelong process (Brooks, 1987; Huling-Austin, 1990).

A growing research base illuminates induction problems, professional development needs and successes of beginning teachers in general. Little literature is available, however, that deals with the induction process for beginning vocational teachers. This is particularly true for beginning vocational teachers who enter the profession with certification based on occupational experience rather than through teacher education degree programs (Camp & Heath, 1988). But it is also true for the growing number of teachers entering vocational education through "alternative" certification routes, with degrees in related technical disciplines – again without teacher education backgrounds.

Clearly, this culminates in programs that may be inconsistent, students who are less than prepared to compete in a global marketplace and teachers who are less than qualified who suffer from stress and adjustment problems.

Statement of the Problem

There is a lack of understanding of why a substantial proportion of secondary trade and industrial education teachers leave the classroom.

Purpose of the Research

Directing this research study was the complex question of why secondary trade and industrial education teachers leave the teaching profession at a higher rate than any other group of vocational educators. Tremendous resources are spent at a local and state level to assimilate these teachers into the system but often with mixed results. As a vocational administrator, one of the biggest challenges in day-to-day implementation of effective teaching practices and supervision of faculty are those teachers who come directly from business and industry with no pedagogical basis upon which to function. The purpose of this research was to promote a deeper understanding of why secondary trade and industrial education teachers leave the classroom and to gain insight into efforts that might lower the attrition rate.

Research Questions

The following research questions guided this study:

- Why do beginning secondary trade and industrial education teachers leave the classroom?
- 2. What efforts could possibly be implemented to lower the attrition rate among these teachers?

Rationale for a Qualitative Design

Both quantitative research and qualitative research have taught researchers many lessons. Both continue to be "works in progress." According to Datta as cited in Reichardt and Rallis' edited book (1994), there are five reasons quantitative and qualitative research can coexist. Those reasons include: both paradigms have been used for years, many evaluators have urged using both paradigms, agencies have supported both, public policy has been influenced by both, and much has been taught by both approaches. Lessons learned from the use of qualitative research include learning to look at the whole event in context and to view a phenomenon by multiple perspectives.

By its very nature, qualitative research uses different methodologies than those of quantitative research and as a result, demands unique measures of validity and reliability. Wiersema (1995) defines the difference between quantitative and qualitative in regards to methodologies as well as measures of trustworthiness. The purpose of qualitative

research is to understand the social phenomena specific to that specific context whereas quantitative research is done to determine relationships, effects, and causes (Wiersema, p. 13).

Strategies used in this study included the use of a field journal and member checks to ensure the credibility of the inquiry. The field journal included the researcher's daily schedule and logistics of the study, a methods log, and a personal reflection on the researcher's thoughts, feelings, ideas, and frustrations concerning the overall research process. Member checks were used between the first and second interviews to allow for more accurate representation of the participant's responses. Merriam (1988) describes member checks as, "taking data and interpretations back to the people from whom they are derived and asking them if the results are plausible" (p. 169).

Cronbach uses the concept of "working hypotheses" in relation to the issue of generalizability. This occurs when local conditions are given proper weight to form a hypothesis from which to work rather than a conclusion. Patton concurs by arguing that rather than truth qualitative researchers are seeking perspective (Merriam, 1988).

Qualitative researchers report the outliers, the deviant, the abnormal, the atypical cases as well as those considered to be typical or normal. The issue of generalizability then becomes not if the findings are transferable but rather to which settings and which respondents (Bogdan & Biklen, 1998). The reasons trade and industrial education teachers leave the profession may or may not be the same reasons health teachers, elementary public school teachers or higher education professors leave. To aid the reader of the study, thick background information including demographics about the participants is included.

This research study used the audit strategy. The audit trail included the following: raw data such as field notes, data reduction, and analysis products such as condensed notes, data reconstruction and synthesis products, process notes, field journal, and instrument development.

Conceptual Framework

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. In 1993, NCES published *America's Teachers: Profile of a Profession.* The researcher used a 1997 follow-up report issued by NCES which contained two major surveys; 1993-1994 Schools and Staffing Survey (SASS: 93-94) and the 1994-1995 Teacher Follow-Up Survey (TFS: 94-95).

The SASS report is a coordinated set of questionnaires that collected data from schools, principals, teachers, and school districts regarding school and district enrollments, programs and staffing policies; teacher supply and demand; principals' and teachers' demographic characteristics, education, and professional qualifications; and teachers' workloads and working conditions. The TFS report is a one-year follow-up of all teachers who were sampled in the previous SASS who left the teaching profession, all who moved, and a subsample of those who continued to teach in their 1993-1994 schools. Together the two reports offer the most significant source of national-level data on teachers and teaching.

The researcher used two parts of the TFS in the data analysis. One part detailed the percentage of leavers who left teaching for various reasons and the other dealt with leavers who left because they were dissatisfied with teaching and the reasons they gave for their departure.

Researcher Bias

The researcher involved in this study fully recognizes that twenty years as a vocational educator in the state of Oklahoma has provided varied experiences with teachers of all levels. The researcher has had the opportunity to be a colleague and peer and program administrator with teachers both who have a teaching degree (coming through a traditional university-based teacher education program) and those who have come directly from business and industry. The frustration and disillusionment as well as joys and successes of both groups have been witnessed. Perhaps teachers directly from business and industry do not have a pedagogical base from which to function but they are often the most innovative and creative concerning the structure and content of their problem. With fresh, timely experiences in industry, the teacher directly from the workplace often sees more clearly the need for education to react more quickly and more effectively to the changing demands of the workplace. The teacher without a traditional educational background many times will function in a totally different paradigm than does the more traditionally trained teacher.

Teachers who are lacking a college degree may perceive themselves as lower in status than a traditionally educated teacher might see themselves. Whether or not this perception actually exists in a given school environment, is immaterial. If the nontraditionally educated teacher has that perspective, in reality it exists for that teacher. The researcher has chosen to interact freely with those teachers and to try and assist them in becoming master teachers. The education system needs teachers with varying levels of experience both within the classroom and within business and industry to fulfill the vital task of educating our young people for the workplace.

Significance of the Study

The significance of this study will be to determine the reasons that Oklahoma secondary trade and industrial education teachers leave the teaching profession at such a high rate. Determining these factors will enable the researcher and other vocational educators to be proactive rather than reactive to this situation. Armed with rich qualitative information, new approaches can be formulated to better meet the induction needs of these teachers. These interviewees strongly felt they had a 'story to tell' and this research study provided that forum.

A concentrated, sustained statewide effort of collaboration with teacher educators and local and state vocational staffs has been undertaken in recent years led by the Professional Development Division of the Oklahoma Department of Vocational-Technical Education. Most all of those interviewed left teaching prior to this effort. This research study will provide a baseline of information prior to this collaboration. New Teacher Survival Modules have been developed and are just beginning to be implemented. The study may offer insight into the use of these modules as well as the focus of professional development and induction efforts throughout the state of Oklahoma.

Assumptions

The following assumptions were made regarding this study:

- 1. All interviewees have been honest in their responses.
- Correct information concerning reasons for leaving the classroom was given to the researcher.

Limitations

The following limitations were considered in this study:

- Interviews were limited to only secondary T & I teachers who had voluntarily left teaching.
- 2. Only individuals who had taught in Oklahoma and in a technology center or area vocational-technical school were interviewed. According to Ivan Armstrong, State Program Administrator in the Trade and Industrial Education Department at the Oklahoma Department of Vocational and Technical Education, the highest numbers of T&I teachers teach at technology centers. Currently in Oklahoma, 558 T&I teachers are at technology centers, 108 teach at high schools and 53 teach in skills centers.
- 3. No analysis was made of the professional development activities the interviewees had either prior to teaching or while teaching.
- 4. The researcher was unable to locate all of the teachers whose names had been given as fitting the criteria for the research study. Multiple and

varied efforts were made to locate as many as possible using research and internet skills and tools.

Definitions Related to Study

For the purposes of this study, the following definitions are provided to assist the reader in understanding terms and concepts used within the study.

<u>AACTE</u> – American Association of Colleges for Teacher Education Organization of teacher education colleges.

<u>Alternative Certification</u> – The certificate or license to teach given to a teacher when the teacher is trained through a means other than the characteristic route involving the completion of a four-year degree. This is usually given for short periods of time until other specific compliance measures have been met (Fowler, 1990). May also be known as provisionally-certified, nondegree, less- than- baccalaureate, or non-teacher education certified (NTEC).

<u>Induction</u> – The broad process by which a novice teacher becomes integrated into the profession of teaching (Camp, 1989; Waters, 1985).

<u>Inservice</u> – A generic term used to describe many forms of staff or professional development, including but not limited to: one or several day workshops, brief sessions on a particular need or topic, and formal and informal activities conducted with and by the faculty and staff of a school.

<u>INTASC</u> – Interstate New Teacher Assessment and Support Consortium, developing standards or principles to guide initial licensing of teachers.

<u>NCATE</u> – National Council for Accreditation of Teacher Education Accredits schools, departments and colleges of education.

<u>NOCTI</u> – National Occupational Competency Testing Institute.

<u>NTEC: Non-Teacher Education Certified</u> – Term used for those who enter vocational education based on occupational experience or technical degrees, without completing a traditional teacher-education degree program.

<u>Traditionally Certified Teachers</u> – A license to teach is given to a teacher based on successful completion of a four-year teaching degree usually through a college or university-based program.

<u>NAITTE</u> – National Association of Industrial and Technical Teacher Educators, aims include to bring about closer cooperation among those engaged in the professional preparation of teachers for Industrial Arts, Trade and Industrial, and Technical Education, promote efforts to improve the quality of Industrial and Technical Teacher Education, disseminate information concerning research in the field, and promote the common good of the group.

Summary and Overview of the Study

This research study details qualitative person to person interviews with secondary T & I education teachers who had voluntarily left the teaching profession. Enormous resources are used to locate and hire individuals with relevant work skills and trades only to have them teach a short period of time. This expenditure of resources is costly and unwise. In order to stem the exodus of those teachers, new and innovative methods following solid research and implementation principles should be employed.

Organization of the Study

This study is organized in the following manner: Chapter I serves as an introduction. Chapter II presents the literature review relevant to the study. Chapter III details the study's procedures, while Chapter IV will address data analysis and present the findings. Conclusions and recommendations will be stated in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this chapter is to offer a selected review of relevant teacher education literature. This chapter is divided into four sections. Section one describes the nature of schools and teaching in general. Section two articulates specifically the uniqueness of the field of trade and industrial education. Section three discusses vocational teacher education and the major design and delivery models for trade and industrial teacher education. Section four deals with various national initiatives and influences that profoundly affect teacher education.

Nature of Schools and Teaching and Learning

Described as complex work characterized by simultaneity, unpredictability and multidimensionality, teaching is a difficult task (Jackson, 1968; Lortie, 1975). For decades, the transition from college supervised teaching to independent classroom teaching has posed problems for the novice or beginning teacher (Johnson & Ryan, 1980). Requirements and expectations of independent classroom teaching are so numerous and varied that they overpower the novice teacher whose "primary" concern to date has been "presenting the lesson." The literature is full of case studies and anecdotes

that reflect adjustment difficulties faced by teachers entering the profession. To complicate matters, most first year teachers tend to be both idealistic in their thinking about and unrealistic in their expectations of independent teaching. Consequently, many of these first year teachers become easily disillusioned and frustrated (Calliari, 1990). As a result, some suffer symptoms of heightened stress and anxiety (Johnson & Ryan, 1980).

Experienced teachers, who could be of assistance to novices, are often aging and habit-bound. Little social support is given to the new teacher which leads to feelings of dislocation and loneliness, of compromise and inadequacy – feelings that cause new teachers to question their commitment to teaching (Moran, 1990). Not wishing to appear incompetent, new teachers often do not ask for assistance. This isolation is so common that some authors have dubbed education as "the profession that eats its young" (Halford, 1998). Beginning teachers may have educational philosophies which are simplistic and are expected to be responsive, responsible, vigorous, compassionate, and competent *right now* with no latitude to adjust to a new environment (Moran, 1990).

Add to this difficult transition into teaching, the political debates and discussions concerning education and one begins to grasp the extent of the challenges. In recent years, a plethora of reports have illuminated the challenges facing educators. Reports such as the 1983 report entitled "A Nation at Risk" have described American education as choking on mediocrity (Finn, 1990). Highly endorsed and referenced by leading educators, the report has led many to believe that the quality of education is in serious jeopardy.

Proponents of this perspective that our education system is inadequate, state that low standards, too little time, anemic content, and irrelevant tests, make for an

educational system in need of reform. Today, children of every race, class, ethnic background, or handicapping condition can get a primary and secondary education free of charge. We expect every child to graduate. The result has been, according to this perspective, that most high school diplomas have come to only mean that a student has accumulated seat time in an approved location. To many, minimum requirements have quickly translated into maximum expectations (Murphy, 1993).

Nehring (1992) has stated that schools are "human" institutions which are designed to create citizenship. The political nature of schools is both its strength and its weakness. The student in the school becomes caught in the crossfire about whether or not the American education system is in desperate need of reform. Schools have long been institutions that are both labor and capital intensive. Control of that labor and capital is power and gaining that power often puts the best interest of students forgotten (Drucker, 1992). Put all of this in a present-day context of greater technological complexity and multicultural diversity and one begins to comprehend the struggles of the turbulent education arena.

On the other side of the arena are those that feel that education is not in such a desperate state of affairs and the whole idea of a crisis was manufactured in order to serve political and personal agendas. In their book, "The Manufactured Crisis," Berliner and Biddle (1995), expose the myths of the education crisis and provide a rationale for its occurrence.

Following World War II, a huge expansion of public education occurred with higher expectations that public schools had the ability to accomplish a huge range of tasks. According to Berliner and Biddle (1995): In those years schools were seen not only as providers of knowledge and cultural uplift but also as centers for hobby and recreational interests, objects of ethnic or community pride, solvers of social problems, purveyors of services for individuals and their families, and engines of economic growth (p. 130).

As social problems escalated in the 70s and the economy soured, schools were found to be missing the mark of such high expectations. Added to this perceived deficiency, were unfunded mandates that schools were trying to implement. The public lost confidence in education and educators found themselves begging for additional funds with a decreasing source of dollars.

In the 1980s, schools were asked to educate a more diverse group of learners and to be aware and monitor the drop-out rate of students. Serious social problems occurred and conservative educational thought was widely publicized. The media reported the United States was not keeping its once-competitive advantage in labor-intensive industries. The needs of business and industry in regards to education were paramount.

Focusing the sole purpose of education in providing highly trained workers for the workplace is an outgrowth of the philosophy referred to as "Human Capital." This philosophy had begun in the nineteenth century and flourished in the 1950's. Employers, eager to reduce training costs, endorsed an education system built to accommodate the training needs of industry.

The concern with the message of a crisis in education is confusion and derailment of efforts that are badly needed to help the neediest schools. Critical issues to address are lost in the overwhelming sense of panic about a system in need of complete and thorough revision. The mechanism is not in place to get the information gained by research to those who make the decisions about education. Lawrence Cremin in "Popular Education and Its Discontents" (as cited in Berliner and Biddle, 1995), emphasized the legitimate concerns facing education.

If there is a crisis in American schooling, it is not the crisis of putative mediocrity and decline charged by the recent reports but rather a crisis inherent in balancing [the] tremendous variety of demands Americans have made on their schools and colleges – of crafting curricula that take account of the needs of a modern society at the same time that they make provision for the extraordinary diversity of America's young people; of designing institutions where well-prepared teachers can teach under supportive conditions, and where *all* students can be motivated and assisted to develop their talents to the fullest; and of providing the necessary resources for creating and sustaining such institutions. (1990, p. 43)

Regardless of the stance one would take in reference to this real *or* manufactured crisis in education, renewal in schools is important for the educational process to adjust to changes in society. Technology, instantaneous worldwide communications, and improved transportation have revolutionized almost every aspect of our lives. This postmodern culture causes renewal in schools to be attempted during an "age of paradoxes" (Hargreaves, 1995). Hargreaves writes of five such paradoxes. These include the fact that the very attributes that are being demanded of schools are both not considered any longer to be the responsibility of parents and when produced, are not often utilized by businesses. While standards are being stressed, the opposite of diversity and integration is emphasized. As the society has a stronger orientation to the future, a greater nostalgia for the past develops. The idea of a global economy and environment often leads to more tribalism as each culture strives for self-identity. As a result, it should not be surprising that today's educators feel more and more pressure to comply with an everrising bar of excellence.

Nature of Trade and Industrial Education Teachers

Consider then being suddenly thrust into a classroom with little or no preparation for teaching or dealing with the myriad of issues that daily confront a teacher. Such is the case for those trade and industrial education (T & I) teachers who are often alternatively or provisionally certified.

Trade and industrial education has a seventy-five year history of using nontraditional or alternative approaches to preparing its workforce. Trade and industrial teachers do not have to follow the same teacher preparation or state certification rules, as do other teachers. These teachers are hired because of technical expertise and experience in a craft or a profession. Requirements are so dissimilar from state to state that there is no reciprocity among states. Because the words, "vocational teacher education" are not always the descriptors of such programs, it is difficult to determine which colleges and universities even offer vocational and technical teacher education (Lynch, 1996).

The approach towards alternative certification can be traced to Charles Prosser in 1917 who believed that teachers' trade experience would translate into successful student outcomes. In fact, this philosophy is evident in the Smith-Hughes Act of 1917 which required states to recruit and certify teachers from business and industry in order to receive federal funds in support of trade and industrial education programs (Frantz, Friedenberg, Gregson, & Walter, 1996). Others lean more toward John Dewey's approach that promoted a more general education to prepare teachers to help students for a lifetime of learning and change. This philosophical dichotomy still exists today (Lynch, 1996).

Camp and Heath (1988) have noted that beginning vocational teachers who enter the profession with certification based on occupational experience rather than through teacher education degree programs present unique challenges in terms of teacher induction. Without the benefit of teacher education and experiences such as student teaching, nontraditionally certified teachers are put into the classroom. Camp and Heath concluded that nontraditionally certified vocational education teachers need much more assistance than is frequently provided them which only adds to the already challenging task of teaching.

One of the challenges facing the beginning teacher coming directly from business and industry is a struggle with a sense of professional identity. In the world of business and industry, unlike teaching, professional identity is easy to pinpoint. In fact, being a teacher as a career choice may not be highly regarded and is not always considered to be a true profession. Lynch (1997) gives two goals that a profession should have: (a) the professionals themselves have established requirements for training and entry, and (b) specific measures for accountability have been set. Dismissing the requirement of professional preparation and a credential prior to practice is also uncharacteristic of a profession. On-the-job training is not characteristic of a profession but this is often the case with trade and industrial teachers (Roth, 1994).

In some cases, the move towards alternative certification is because of dissatisfaction with traditional teacher education programs (Wise & Darling-Hammond, 1992). Other times, alternative certification occurs because of a personnel shortage in education. Schools find it difficult to find persons who have both industrial experience and pedagogical expertise. When faced with a choice between industry experience or a

standard teaching certificate, administrators often opt for the industry experience. Historically, the mission of vocational education has been to prepare tomorrow's workforce. Administrators believe that the industry experience is more important to the success of that mission. The industry experience affords the teacher a good grasp of industrial standards and practice, a network of business contacts in their respective occupational area, and a familiarity with the various aspects of the industry (Walker, Gregson, & Frantz, 1996).

The tendency for vocational education teachers to have less education and more work experience than academic teachers is heavily concentrated in trade and industrial education which constitute approximately 20 percent of the secondary vocational teaching force. Some 45 percent of trade and industrial teachers have less than a bachelor's degree. This is not like other vocational fields such as business, marketing or agriculture. However, secondary trade and industrial teachers do have more than twice as much occupational experience as other secondary vocational teachers – 17 years, as compared to eight years (Lynch, 1997).

Vocational Teacher Education

In the early 1900s the Federal Board of Vocational Education, led by Charles Prosser, held the belief that the most important characteristic of vocational teachers was their technical expertise. It was the Board's position that vocational teachers needed practical experiences in their trade before they could turn teach that trade. Professional teacher education was felt to be impractical and colleges and universities were not in a position to provide T & I teacher education. With the onset of the industrial revolution, the focus of high school curricula shifted from college preparation to the preparation of a skilled workforce. Sarkees-Wircenski and Scott (1995) summarized this shift by stating, "For most Americans, what was needed was a more practical curriculum that would prepare them for work" (p. 79). Prosser's essentialism was that education should train for jobs rather than train for culture.

On the other hand, John Dewey felt, as a progressive, that one's education should provide preparation for a role in a democratic society as an informed citizen. He did not believe in teaching specific skill training:

Such restricted specialism is impossible; nothing could be more absurd than to try to educate individuals with an eye to only one line of activity. In the first place, each individual has of necessity a variety of callings . . . and in the second place, any one occupation loses its meaning and becomes a routine keeping busy at something in the degree to which it is isolated from other interests. (Dewey, 1916, p. 317)

With the enactment of the Smith-Hughes Act of 1917, the debate was settled in Prosser's favor. The fundamentals of this legislation was the development of separate systems of education, one for preparation of skilled craftsmen and one for college preparation (Lynch, 1997). In recent years, the pendulum appears to have swung towards Dewey's philosophy with the advent of integration of academic and vocational subject matter and the movement towards collaboration and teamwork between two very distinct systems of education.

This philosophical dichotomy has affected vocational teacher education and is an evolutionary process. Prosser is famous for 16 theorems with two that have a direct impact upon teacher education.

Vocational education will be effective in proportion as the instructor has had successful experience in the application of skills and knowledge to the operations and processes he undertakes to teach.

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• The only reliable source of content for specific training in an occupation is in the experiences of masters of that occupation (Prosser & Quigley, 1949).

In recent years, numerous reform movements and policy changes have affected vocational teacher education. Vocational educators are accustomed to meeting rapidly changing demands of business and industry and can readily adapt to goals of school reform. One focus is that these changes could be categorized into eight themes. Recruitment of highly qualified and talented individuals into the teaching force needs to occur. A particular focus should be the recruitment of minorities and other groups underrepresented in the teaching force. Minority students in particular would benefit from role models in the profession of teaching. Extensive preparation in the liberal arts as well as substantial coursework in the subjects that they teach should be included. Entrance into teacher preparation programs should be as rigorous as entrance into other professional fields. Rigorous pre- and postbaccalaureate preparation would mimic other professions. Current research and knowledge should form the foundation for professional education courses and extensive clinical field experiences would provide valuable 'realworld' practicality. Alternative certification programs should be continued as well as giving teachers more of a voice in the decisions that affect them (Lynch & Griggs, 1989).

Teacher Preparation and Certification Standards

Central to education reform efforts is the preparation and licensure of teachers. Our society stands to suffer when inadequate thought and research is given to the needs of teachers. Cruickshank (1980 as cited in Camp & Heath, 1988) gives the following three reasons that teacher education problems should be identified: (1) teacher education must be related more directly to the everyday needs of practitioners, (2) teacher concerns or problems do not go away with the accumulation of teaching experience alone, and (3) teacher satisfaction is important.

Numerous researchers have examined teacher satisfaction. Darling-Hammond (1996), Miller and McKenna (1998), and Odell and Ferraro(1992) are just a few among those who have researched teacher satisfaction. Camp and Heath-Camp have studied more specifically the field of vocational education in regards to teacher satisfaction, while Lynch has studied more specifically the trade and industrial education teacher.

Job satisfaction is an affective reaction to an individual's work situation. It can be related to specific outcomes such as productivity (Rice, Gentile, & McFarlin, 1991). Job satisfaction can be defined as an overall feeling about one's job or career or in terms of specific facets of a job or career such as compensation, autonomy, and coworkers. Job satisfaction for a teacher can have profound effects upon students and their learning. If teachers are highly motivated to do a good job and feel supported in their roles as teachers, they will be less likely to change schools or to leave the teacher profession altogether. When a dissatisfied teacher leaves the profession, the environment of school

is

disrupted and a shift of valuable educational resources is made from actual instruction towards costly staff replacement efforts (Projections of Education Statistics to 2008, p. 2-3).

People in an organization make decisions based on perceiving the positives to be greater than the negatives. No best solution exists in any given problem, but some solutions are more satisfactory than others are. Teachers resolve the question of remaining in education through "satisficing" rather than through optimizing. The result of frequent teacher turnover is the threatening of school reform efforts, a continuing negative effect, and the perception that education is not valued by our society (Hoy & Miskel, 1991).

Both intrinsic and extrinsic factors affect a teacher's satisfaction. Intrinsic satisfaction can come from the psyche of the teacher and stem from daily activities within the classroom while extrinsic factors include salary, perceived support from administrators, school safety, and availability of school resources. These and other characteristics of a teacher's work environment have been often cited by individuals who claim that "poor working conditions have demoralized the teaching profession" (Choy, 1993, p. 137).

Intrinsic factors such as a desire to help young people learn a skill may influence the original choice to become a teacher but it is often extrinsic factors which more strongly influence satisfaction with teaching. A female teacher who teaches in elementary schools is the most likely group of teachers to be the most satisfied with teaching. 67.4% of elementary teachers described themselves as "satisfied with teaching," whereas, only 24.2% of secondary teachers described themselves in that manner (Projection of Education Statistics to 2008, p. 39). Age and experience relate negatively to satisfaction. The younger and less experienced teacher is more likely to be satisfied with teaching.

Workplace conditions concerning freedom from violence and a supportive school atmosphere relate positively to job satisfaction. If staff members are recognized for a job well done, and enjoy administrative support and leadership, their satisfaction is higher. A teacher having control over classroom procedures, being able to participate in making important school decisions, and having professional autonomy as a teacher are also critical to satisfaction. Parental support plays a part in job satisfaction, as does student behavior.

A satisfied teacher, according to the literature, is one that can answer affirmatively to three decisions.

- 1. If they could do it all over again (choose to be a teacher), they would.
- 2. They intend to keep teaching as long as they are able.

3. They strongly disagree that teaching is a waste of their time.

One of the main directions in teacher preparation reform is viewing both prospective and practicing teachers as active learning partners rather than as passive recipients of professional knowledge (Giroux, 1988). Teacher educators must begin to minimize lecture and role model the pedagogy necessary to promote student-centered classrooms as opposed to teacher-centered classrooms (Gregson, 1993). Teacher educators must be willing to return to the classroom in order to remain on the cutting edge. Teachers are professionals and when given the opportunity, will make responsible decisions about their growth and development (Edwards, 1995). From the paradigm that teachers are professionals and should be prepared and certified by the use of standards, one national organization has led the charge. The National Association of Industrial and Technical Teacher Educators (NAITTE) have proposed a set of teacher preparation and certification standards. Using these standards as a benchmark and a method of determining common ground, a universally accepted level of proficiency for trade and industrial education teachers would emerge. Two types of NAITTE standards exist; one which addresses the process of trade and industrial teacher education and the other focusing on curriculum content and instructional aspects of preparation. Through these standards, the framework of lifelong learning and professional development through one's teaching career is formed. Basic principles of adult education come into play as courses are customized to meet the learner's needs basing them on life experiences.

A multilevel professional development program (career ladder) for the continued growth and development of the teacher is proposed. Each level has increasing proficiency as well as additional education that is culminated by the completion of a formal degree. A trade and industrial education teacher would progress through the three levels which are: (a) Associate teacher (Level 1), (b) Qualified teacher (Level II), and (c) Master teacher (Level III). The culmination would be a master's degree with five years of successful teaching experience with permanent trade and industrial education certification, with state reciprocity (Frantz, Gregson, Friedenberg, Walter, & Miller, 1996).

Farmer and Burrow (1990) suggest a similar, clinical approach to credentialing trade and industrial education teachers. Their model would continue the practice of an

immediate transition from the occupation into the school through a carefully designed, supervised, and evaluated clinical and academic experience. Three critical components, that focus on the outcomes of education while responding to school reform efforts, form the philosophical base for this proposed model. They are (a) a social component, (b) an intellectual component, and (c) a technical (vocational and pedagogical) component. The authors caution against random changes not documented or backed by solid research and evaluative measures and basing decisions on personal experience and professional judgment. With implementation of any teacher education changes should also come a method of evaluation to determine the appropriateness and effectiveness of such changes (Farmer & Burrow, 1990).

Others such as McKibben (1988) identify the need for collaboration with state and local agencies, colleges, universities, and local education agencies. He suggested that essential elements of teacher preparation include continuing support for new teachers, an effective training system, and a solid blend of theory and practice. For even greater improvement, working together with other disciplines in particular those of academia, teacher preparation would gain more relevance.

One unique characteristic of these clinical-based models is a differentiated staffing pattern. The thinking behind the use of different levels of staff positions is that a new beginning teacher is not ready for total day in and day out responsibility of the classroom. The person enrolled in the field-based teacher education program would be employed as a beginning, non-tenured teacher with limited teaching responsibilities. The person would be used in non-instructional roles supporting other teachers until competence in core curriculum is certified. Then under the guidance of a master teacher,

the beginning teacher would gradually begin taking a limited instructional role. This model would eliminate the reality that many current teachers have not had the opportunity to watch a master teacher in action. Other roles involved in this concept are the vocational administrator and/or principal, and a teacher educator. With careful planning and coordination, a model such as this could prove to be highly effective (Farmer & Burrow, 1990).

The kind of learning needed by beginning teachers cannot be separated from practice or from college classrooms. In essence, beginning teachers need a much different experience than their experience as students. Opportunities need to be provided for teachers to study, do, reflect, look closely at students and their work, collaborate with other teachers, and to share what they have seen. The "rub between theory and practice" (Miller & Silvernail, 1994, p.6), will occur and be most productive when questions arise in the context of real students and work in progress, and where research and disciplined inquiry are also at hand (Darling-Hammond, 1998).

Major Design and Delivery Methods

In vocational and technical education in particular, three major design and delivery models exist with a great amount of variation within each one. The three models include: (a) alternative certification programs, primarily using occupational experience as a substitute for formal education, (b) in-service education or staff development programs sponsored by various state departments of education, colleges and universities, local school systems, and/or professional associations, and (c) college or university degree programs. In reality, there is probably a fourth approach, a "do-it-yourself" model. Many vocational and technical education teachers, especially in postsecondary technical schools or community colleges, receive no teacher preparation prior to the beginning of their teaching career (Lynch, 1996).

Alternative Certification

This certificate allows for occupational experience to be substituted for higher levels of formal education. The basic belief is that knowledge gleaned from the job can replace formal teacher education. The 1994 National Assessment of Vocational Education reports that nearly 12 percent of the nation's secondary and 15 percent of the postsecondary vocational teaching forces have less than bachelor's degrees. Trade and industrial teachers have even higher percentages; 45 percent for secondary and 33 percent for postsecondary. Cumulative follow-up studies and research evidence do not support this believe that industry experience equates with teacher preparation.

In-Service Education

The concept of in-service education is to hire "masters" from industry and through a process of staff development prepare these "masters" for teaching. Peterson (1981) includes in staff development the idea that the purpose of all staff development is better learning for students and responsible self-renewal for educators. She refers also to "organization development" and closely links staff and organization development. Both are necessary for maximum growth and effective change. They are complementary human processes, inextricably interwoven, dynamic, interactive, nonlinear, and incredibly complex. When these processes attempt to operate in isolation, the results for school and teacher improvement are hindered.

A more modern term currently being used for staff development is "professional development." Professional development suggests a sequential, systematic and thoughtful reflection of practice and desired behaviors and attitudes. Glatthorn and Gox (1996) contend that quality teaching is only possible when teachers are considered professionals and their development is a high priority. Teachers who have mastered the basic skills of teaching and are moving forward in their development of intermediate and advanced skills accomplish comprehensive growth. Achieving expertise in teaching is a developmental process.

Professional development must fulfill three needs: (a) a social need for a humane educational system, (b) a developmental need for students to improve their potential, and (c) a need to select and develop the caliber of teachers (Joyce, 1986). Particularly in need of professional development are provisionally certified teachers who have no pedagogical base from which to operate.

Professional development is one of the most powerful routes to teacher motivation and school improvement and should include a measure of the teachers' level of competence prior to beginning teaching and during their career. An individual professional development plan can be an effective tool. This development process is ongoing with both teachers and administrators (Frase & Conley, 1994). Fullan and Hargreaves (1996) refer to this as "interactive professionalism."

College and University Degree Programs

Colleges and universities have long been providers of teachers for public vocational and technical education programs. An undergraduate major in one of the traditional subject areas has been the most common route. Major enrollment declines have occurred in these areas in recent years. The fields of agriculture, family and consumer sciences, business, and technology have been the hardest hit. As many as onethird of all these programs have been curtailed to the point of being combined with other majors, producing very few teachers or being eliminated altogether.

Scholars give an overall view of the status of vocational and technical certification in the United States. The didactic knowledge at the base of vocational and technical education has not been adequately researched or debated. Currently, there are fewer than 100 vocational and technical teacher education programs with four or more programs at the approximately 1,200 colleges and universities with comprehensive teacher education programs. In a study of these institutions, no substantive reform in administration, program, or curriculum has took place to integrate vocational and academic education (Lynch, 1996).

In Oklahoma, an individual can be granted a teaching certificate with a bachelor's degree in the area to be taught, plus education courses. In the areas of business, marketing, health occupations, occupational home economics, and trade and industrial occupational certification consists of 3 years of relevant work experience or an education degree and 2 years of work experience (Vocational Education Journal, 1993).

The level of quality in teacher preparation is paramount regardless of which design and delivery method is used. This includes increasing the professionalism of teaching. Teacher professionalism is the most important prerequisite for creating knowledge-based schools organized to build on what is known about teaching, learning, curriculum, and human development. High levels of student understanding require skillful teaching and schools that allow for continuous learning by teachers (Darling-Hammond, 1994). The idea of lifelong learning as a teacher is critical.

The culture in work-based education must embrace learning to teach as a lifelong endeavor and recognize continuing education and professional development as simply the norm for the privilege of being able to practice professionally. (Lynch, 1997, p. 90)

Three major areas that seem to embrace the professionalism of teachers are the use of mentoring, national teaching standards, and efforts to obtain and keep quality teachers.

Mentoring

Teachers helping teachers through mentoring programs is gaining preference as a way to assimilate novice teachers into the teaching profession. Clearly, mentoring is needed as statistics of 30% of beginning teachers not teaching beyond two years are reported. Odell (1992) stated three goals of mentoring beginning teachers: (a) providing beginning teachers with guidance and support, (b) promoting the professional development of beginning teachers, and (c) retaining beginning teachers.

One form of mentoring is coaching. Caccia (1996) studied the use of linguistic coaching to help beginning teachers defeat discouragement. The main problem was the teachers' inability to cope with challenges to their authority. Linguistic coaching is a comprehensive approach to effective communication and focuses on teachers establishing authority for themselves in their teaching roles. Coaching is a partnership that hinges on two prerequisites: The person being coached must agree to be coached, and the coach must have an unswerving commitment to that person's performance. Trust, confidence, and a sense of purpose must exist as well. Often beginning teachers react to classroom situations based on their previous life and school experiences. This mentoring approach is designed to openly discuss and modify the teachers' perceptions in order to better communicate with their students. Interestingly enough, not only did those that were being coached (beginning teachers) benefit and improve, but the coaches (mentor teachers) also gained numerous benefits. As a mentor teacher, sometimes disillusioned with the teaching profession, coaching is an opportunity to revive their drive and peak their interest in teaching. This approach is very structured and systematic and not just random encouragement and support.

Another type of mentoring are programs being conducted as partnerships with colleges, universities, and schools. The University of Texas at Arlington, as part of a pilot program with initial funding from the state of Texas, used a restructured teacher preparation program known as "CREST." CREST stood for Collaborative Redesign of Educational Systems and was an intensive yearlong teacher preparation program that took place totally in the field. The purpose was to directly tie theory to practice. Included were extensive state-of-the-art technology packages used by both the students in school

and the college students. Students spent one full year, five days a week, in classrooms instead of the traditional 12-16 weeks of student teaching used in most other programs. Again, the mentor teachers were trained and had ownership in the program, which contributed to the program's success. Follow-up research indicated that CREST graduates performed better in the classroom, could work better with varying student ages and abilities and overall, were more successful in the early years of their teaching careers (Wilmore, 1996). Since original implementation of CREST and the end of the grant cycle, the program had to be institutionalized and merged with their traditional teacher preparation program. The field-based program currently being used is built on lessons learned from the CREST program (N.L. Hadaway, personal communication, October 29, 1999). The idea of a field-based model of teacher preparation is endorsed by others (Lynch & Griggs, 1989).

Mentoring is sometimes facilitated through the use of internships. Orientation visits, team teaching, release time for preparation, assignment of mentors, engagement of teacher assistants, workshops at the university, and the use of designated teacher development schools are normally part of the equation of providing combination fieldbased and school-based internships. The literature is clear that a systematic method of training mentor teachers, and providing the needed time and resources for implementation are key to the success of internships (Johnson, Ratsoy, Holdaway, & Friesen, 1993).

In some states, stipends and college credit hours are an incentive for both mentor and beginning teachers. Knowing that the mentor teacher is receiving compensation for the additional time to work with the beginning teacher eases the concern about it becoming an imposition. Also key for success is that the mentor teacher is not involved

in the evaluative process of the beginning teacher and does not determine if the beginning teacher will be offered a teaching contract for the next year. Specialized professional development, supportive principals and administrators, and careful matches between the mentor and the beginning teacher will also contribute to the program's success (Halford, 1998).

National Teaching Standards

The professionalization of teaching has led to the movement for teaching standards. Several reasons account for this movement. The public has lost faith with the educational system and is well aware of falling SAT scores and comparisons made with international countries. Social promotion occurs while we struggle with the technology of our world. Numerous reform efforts have missed the mark and we are productoriented rather than process-oriented. The focus has been on equity and not excellence. Because of this, the standards movement found fertile ground in our society (Galluzzo, 1996).

In its 1986 report, *A Nation Prepared: Teachers for the 21st Century*, The Carnegie Task Force on Teaching as a Profession called for the creation of a National Board for Professional Teaching Standards (NBPTS) which was formed the following year. A 63-member board of directors governs NBPTS – a majority of them K-12 teachers. This board also includes school administrators and curriculum specialists, state and local officials, union and business leaders, and scholars from colleges and universities. The certification system based on National Board guidelines represent the first formal structure to be introduced into public education. NBPTS has a three fold mission: (1) to establish high and rigorous standards for what accomplished teacher should know and be able to do, (2) to develop and operate a national voluntary system to assess and certify teachers who meet these standards, and (3) to advance related education reforms for the purpose of improving student learning in U.S. schools (Lynch, 1996). Proponents believe changing the way we think and operate in schools in relationship to our standards can leverage change. Exemplary teachers would be rewarded and the knowledge base of teaching would grow. The organization of schools would change and allow teachers greater authority and autonomy (National Board for Professional Teaching Standards, 1997).

National Board Certification complements, but does not replace, state systems of mandatory licensure. While mandatory state licensing is designed to assure that beginning teachers meet certain basic requirements; National Board Certification is voluntary. And unlike licensing standards, which vary from state to state, National Board Certification is uniform across the country. It also attests to a level of accomplishment far surpassing basic state licensing requirements (Shapiro, 1995). These standards have recently been expanded to include vocational teachers.

Two additional organizations have joined the battle for more stringent standards. Interstate New Teacher Assessment and Support Consortium (INTASC) and the National Council for Accreditation of Teacher Education (NCATE) have also made national efforts. These groups have identified and defined, from its own perspective, what teachers and children should know and be able to do. On a national scale, the efforts of some of these organizations are coming together in a more coherent approach. The next challenge is to design and test performance assessments for teachers. Systemic reform

must encompass standards, assessment practices, teacher education, and more.

Techniques must be found and developed to bring about the changes needed to provide high-quality education to all students. Standards, if educators implement them wisely and cautiously, can be the principal element that brings all students closer to excellence in education (Galluzzo, 1996).

Teacher Induction and Retention

One of the most critical issues facing vocational teacher educators in the area of trade and industrial (T & I) education is how to provide an induction program that will reduce the many problems confronting first-year teachers, many of whom have little or no previous formal teacher training or college education. All too often the teacher learns by trial and error which is not in the best interests of all. The underlying premise of this approach to induction is that teaching is based upon an abundance of common sense and intuition (Bass, 1973; Haberman, 1985). A closer examination reveals that such is not the case.

Being a teacher is a challenging task particularly if one does not have a pedagogical base on which to rely. Mastering teaching is a long and challenging route and can be viewed as a long-term developmental process. The three general stages of professional development of teachers are often referred to as (1) the preservice stage, (2) the induction stage, and (3) the continuing development stage (Camp & Heath-Camp, 1988). Fuller (1969) originally named the stages those of self, task, and impact stages. Ryan added what he called fantasy as a precursor to self and renamed the stages: fantasy, survival, mastery, and impact. The broad process by which a novice teacher becomes integrated into the profession of teaching has come to be known as "induction" (Waters, 1985). The teacher induction process typically begins well before the beginning teacher enters the classroom or shop for the first time as a paid professional (Roper, Hitz, & Brim, 1985). It does not end, if it ever ends, until the teacher is firmly established, competent, and confident as a professional faculty member (Fuller, 1969; Glickman, 1981; Huffman & Leak, 1986).

The literature suggests several conclusions regarding the induction of beginning vocational education teachers. The term "detractors" is more meaningful and descriptive of the wide range of frustrations experienced by beginning vocational teachers, rather than the term "problems." Beginning vocational teachers experience many of the same detractors as do other beginning teachers but with some obvious differences such as lack of pedagogical content knowledge. Relationships with and between students are the most important source of frustration for beginning teachers. The school system itself contributes many detractors with endless paperwork, heavy work loads, and undesirable teaching assignments.

For many trade and industrial education teachers who are non-teacher education certified (NTEC) the induction process is more "survival skills training." Programs may exist to help teachers (1st year, NTEC) but are not well documented in professional literature. NTEC teachers are plagued more by problems regarding curriculum and pedagogy and are quite insecure in their relationships with other teachers. This may be because they perceive themselves to be less well-prepared than their colleagues. They are coming from industrial or business settings where they were accustomed to structured settings with both resources and rewards based on productivity. The lack of structure often causes frustrations and the lack of respect shown to teachers by both school administrators and by students is a surprise. These teachers often express concerns about their acceptance by other faculty as a peer because of their lack of professional training (Heath-Camp & Camp, 1991).

A study conducted by Heath-Camp and Camp (1989) identified some differences in induction experiences depending upon their route of entry into teaching. NTEC teachers experience more frustration with the school system itself rather than the technical aspect of their job. They must learn how to function in a school environment, which may be very different from their previous work settings. Frustrations with lack of equipment, supplies and the size of the lab are more common with NTEC teachers. They also report time management problems and concerns of being unprepared to handle certain teaching responsibilities.

On the other hand, teacher education certified (TEC) teachers experience more difficulties with student motivation, student apathy, behavior, student discipline, and relationships with students. Concerns over taking the job home at the end of the day and robbing the family of much needed quality time were also expressed.

The two major sources of positive experiences were also the teachers' major sources of frustrations- the school system and the students. Students, predominantly at the secondary level for teachers, are the primary source of both disappointment and enjoyment of teaching. Even obvious forms of induction assistance may not be provided such as a mentor. Many do not have an assigned mentor or "buddy teacher" or receive a curriculum guide for organizing a course. Despite very obvious differences in their preparation, teachers coming directly from business and industry and teachers coming from teacher education programs do not appear to be treated any differently in regards to the induction process. It is often a 'sink or swim' mentality. Norton (1985) has suggested that one way to improve the preparation of trade and industrial education teachers would be

to establish more competency-based and performance-based teacher education programs, more competency-based staff development programs involving teacher educators as principal players, more field-based outreach programs, and more first-year teacher internships and other helping services. (p. 12)

Efforts such as internships and mentoring are designed to retain teachers in the classroom. The literature contains a variety of operational definitions of teacher retention. For example, in some instances, movement of a teacher to administration, to special education, or out of the school district or state, even if to another teaching position, has been considered attrition. Teacher retention, for the purposes of this research study refers to teachers remaining in the classroom regardless of the state or district.

Numerous strategies abound in the literature and in practice are designed to increase teacher retention. A composite of those would be as follows:

- Most critical to new teachers is emotional support provided by a colleague and peer. Emotional support can help new teachers retain their reasons for teaching. This is sometimes referred to as the 'heart of teaching', maintaining the ability to focus on the learner and their multiple needs and experiences.
- 2. Mentoring must be systemic and systematic. It must be much more than just chatting outside one's classroom at the end of the day.

- 3. Teaching schedules should be carefully selected. Often first year teachers get the most undesirable classes and most unfavorable rooms. In the area of trade and industrial education, it is easy for a NTEC teacher to become overburdened as they teach each day, attend class one or two nights a week to gain standard certification and often assist with business and industry specific training.
- 4. Good schools need to be designed that allow for professional development that is continuous and has adequate reflection time.
- 5. A broad based teacher preparation program for NTEC is best. Often a major in any discipline is accepted as a "proxy" for the kinds of understandings of the subject essential to helping diverse learners understand critical ideas and concepts. The preparation of certifying vocational teachers must be as equally rigorous as public schools so teachers can have equal footing with their colleagues.
- New methods of teacher testing need to be developed which measure qualities such as dependability, motivation, and perseverance.
- Teachers must use "positive politics" to benefit their students. All teachers should be about the business of empowering others to be more competent; students and colleagues alike.
- Conflict should be embraced as necessary part of change. Productive conflict brings differences into the open, shows sensitivity to opposing interests and positions, avoids false or premature consensus, and promotes

movement beyond early and perhaps unfounded anxieties about one's own threatened interests.

9. All educators need to challenge the business rhetoric that is consuming education and the way we think about it. Teachers are skilled at teaching students and telling them what they need to do but are often less skilled at teaching the public about what teachers do. (Blasé & Kirby, 1992; Hargreaves, 1995; Heath-Camp & Camp, 1990; Odell & Ferraro, 1992).

Teacher education should change to meet the needs of beginning teachers in regards to their preparation. Teacher education programs should model the teaching and learning approaches being advocated and be based on recognition of the prior and current experiences of teachers. Close connections with schools and the teaching profession should be maintained. Teacher education involves the personal, social, and professional development of teachers (Northfield & Gunstone, 1997). Loughran (1997) also maintained the importance of quality teacher education and contended the pedagogy involved in teaching teachers is very important.

Reflective teachers tend to be guided by "passionate creeds." Educators need to be thoughtful about their work, which means that they must question assumptions, consider multiple perspectives, avoid judgments, recognize complexity, and be primarily concerned with the needs of their students (LaBoskey, 1997).

Summary

Retention of high-quality, professional teachers is crucial. Of particular concern is the area of trade and industrial education. This review of literature discusses the overall nature of teaching including the issue of a real or manufactured crisis in education. The particular uniqueness of trade and industrial education teachers who are non-traditionally certified is explained. The current procedures for certification and the major design and delivery models are given. In conclusion, three major areas are reviewed which impact teacher education. These include the focus on mentoring, the development of national teaching standards and the efforts to strengthen teacher induction. This review of literature sets the background for a qualitative research study using face-to-face interviews to determine reasons why trade and industrial education teachers left the teaching profession.

CHAPTER III

RESEARCH METHODOLOGIES

The purpose of this study was to determine why beginning trade and industrial education teachers leave the classroom. Possible implementation efforts designed to lower the attrition rate were also identified. The rationale for a qualitative study was given. The sampling procedure, research design and instrumentation were described in this chapter. The methods of data collection and data analysis were also described.

Rationale for a Qualitative Study

Qualitative research is able to provide much more than pure numbers and statistical information. It enables both the researcher and the reader to examine the much deeper meanings of an individual's life experiences. The focus of sound research should be the question not the approach (Potter, 1996). Researchers who focus on the approach must continually translate their question into the limitations of the approach and as a result, their answers are less insightful. However, if researchers focus primarily on the question a greater contribution can be made. A great responsibility exists for researchers to use all research tools appropriately. "The more scholars in the field who are question focused, the less important the methods debate will become and the more interesting the insights about the phenomenon will be." (Potter, p. 332) The "gold standard" for

qualitative research is the standard for ALL research; presenting a problem that has theoretical and/or practical significance in a believable and meaningful way (Miller & Dingwall, 1997, p. 25).

Qualitative research using a bounded case study was chosen as the method of research for the following reasons:

- a. The desire of the researcher to view the phenomena of the high attrition rate of secondary trade and industrial education teachers holistically, and the knowledge that the phenomena is too complex to separate into factors (Wiersma, 1995).
- b. The researcher's concern to better understand human behavior and experience and the participants' perceptions of the vocational system and teaching in particular (Bogdan & Biklen, 1998; Wiersema, 1995).
- c. Merriam (1998) stated that, "The most straightforward examples of 'bounded systems' are those in which the boundaries have a common sense obviousness" (p. 46). The research study's population is bounded by several characteristics including: the level of teaching is secondary, the field is vocational, the specialty is trade and industrial education, and the situation for leaving is voluntary rather than non-renewal of teaching contract.
- d. Usually qualitative research involves data collection from multiple sources such as interviews, observations, and document analysis. In this particular study, only interviews have applicability. Observations are not possible as

the participants are no longer teaching and document analysis would have no relevance on the research questions (Merriam, 1988).

The Population and Sample

The population was secondary trade and industrial education teachers in Oklahoma who had left the teaching profession voluntarily. Consideration was given to individuals whose exit was voluntary and not under duress. Two different methods were used to obtain names of those individuals.

The first method was the sending of a letter with a self-addressed stamped envelope to vocational administrators throughout the state of Oklahoma. Thirty letters were mailed on October 22, 1998 by regular mail. Responses were obtained from 25 individuals. Two individuals did not submit names perceiving that to do so would violate the privacy rules concerning personnel. A letter was sent to each of these two individuals further explaining the research study and confidentiality procedures. No response was received from these two individuals. Thank you notes were sent on November 21, 1998 to those who responded.

The second method was to contact the Trade and Industrial Education Division at the Oklahoma Department of Vocational-Technical Education in Stillwater. The T & I state supervisor and his long-time administrative assistant also submitted names. The two lists were combined and checked for duplication. A total of 33 names were obtained in a purposefully-selected sample.

The researcher used a variety of methods to obtain phone numbers and last known addresses for the 33 individuals in the sample. Some administrators had also submitted phone numbers and addresses; while others did not submit either. The person search feature on the Internet was used as well as calling the last school they had worked for to obtain phone numbers and addresses. Former students, follow-up reports, and personal contact through networking were also done to develop a comprehensive list. Of the original 33 names, the following transpired: 19 interviews were conducted; one individual was scheduled twice to be interviewed but did not show up either time; five could not be located; one was located and repeated phone calls made but no response; three had moved out of state and were not able to be located and four were located but chose not to participate.

This population was chosen because as a vocational administrator, the researcher had found this population to provide unique professional development needs and retention issues. As a vocational educator for twenty years, the researcher had also found this population to become frustrated with the system and often to have a short length of service in vocational education compared to other specialties. This group possessed highly technical and specialized job skills and was in high demand but a low supply for the filling of positions within the system. Only teachers who had taught at an area vocational-technical center or technology center were considered as these locations have the highest percentages of trade and industrial education teachers. Very few public secondary schools (high schools) have trade and industrial education programs.

Data Collection

Qualitative interviewing is not only a tool of research but is also an approach to learning and a philosophy. Encouraging individuals to describe their world in their own

terms is one element of this philosophy. A relationship between the researcher and the participant develops which imposes certain obligations on both sides. This philosophy also defines what is interesting, what is ethical, helps provide standards to judge the quality of the research, the humanity of the interviewing relationship and the completeness and accuracy of the written report. Qualitative interviewers listen to people as they describe how they understand the worlds in that they live and work.

Face-to-face interviews were used as the method of data collection for several reasons. Because the participants were no longer teaching, it was impossible to observe these teachers in their work setting. It was impossible to replicate past events so the interviews were used to help the participants recall their teaching experience. The use of interviews also allowed for exploration of certain issues, clarification when needed, flexibility to meet the needs of the participants as well as give the opportunity for individuals who don't express themselves well in writing to tell their story.

Part of the initial contact with the participants was to gain permission to use a tape recorder and record the interview verbatim. The tapes were transcribed. The use of the tape recorder allowed no data to be lost, giving the researcher a level of comfort. The use of the recorder also allowed time for the researcher to form probing or follow-up questions for clarification.

The initial part of the interview was spent getting the participant at ease. As their comfort level increased, more difficult and more emotional issues were raised. Getting the facts and basic descriptions of their experiences were gained.

Part I of the interviews was highly structured to gain demographic information. Part II combined two techniques of interviewing. The semistructured technique was used

as specific, already formed questions were asked according to the interview schedule. Unstructured questions followed in order to clarify and gain new information and allow fresh insights to emerge. Linguists call such exchanges "conversational repairs" as the researcher strives to make the interview as clear as possible (Rubin & Rubin, 1995).

All of the participants seemed eager and willing to tell their story. The interviews seemed to serve as a form of self-analysis for them as well as an opportunity to clarify their own thoughts and experiences. Although some participants became very emotional and upset at times during the interviews, efforts were made to bring closure and a sense of completeness as the interviews concluded.

Context and Length of Interviews

As part of the scheduling of interviews, a mutually convenient location and time were selected. Each participant's location was different. In several instances participants requested to meet in a location besides the location for their work or home. Reasons expressed for their requests were the small town atmosphere and the possibility of repercussions from former schools or political concerns. Ten participants chose their work location or office as the setting for the interview. Four of these work locations were manufacturing plants or factories. One was held in an executive office of an urban manufacturing plant; two were held in a industrial development area of urban locations. One was held in an unused office of a manufacturing plant. The remaining six interviews held at the participant's workplace varied from a classroom of a training facility and the participant's office at a school district building. In four instances, the interviews were held at the business owned by the participant. These locally-owned business were an air conditioning business in a downtown shopping area, a camera shop in the process of liquidation in a strip mall shopping area, a computer shop in a small shopping plaza and a rural machine shop adjacent to the participant's residence.

Six interviews were held at eating/entertainment establishments. One was a small restaurant in a rural community in southwestern Oklahoma, one at a Chinese restaurant, and one at Denny's in a metropolitan area adjoined to a highly traveled interstate highway.

One interview was conducted at a favorite American food restaurant in an adjoining town to the participant's place of employment. One was conducted at a bar and saloon on a popular street in a university town and one was completed at a sports grill in a metropolitan city in an adjacent state.

The remaining two interviews were conducted in the participants' homes. In both instances the participants' families were present.

All interviews were at least 45 minutes in length with the longest interview being 1 ½ hours. The travel to different geographical areas as well as time spent interviewing makes this method of data collection not the most economical. These face-to-face interviews were expensive and time consuming. However, the depth and vividness gained by this method could not have been gained in any other method.

Mechanics of the Interviews

In all instances a tape recorder with a built-in microphone was used to tape the interviews. In one instance, the tape recorder malfunctioned and would not work

properly on the batteries. In this interview, both the researcher and participant moved to another location to make use of electricity.

Interviews held at the eating establishments were often noisy and at times, caused both the researcher and participant to become distracted. The mechanics of turning the tape over and the volume of the participant's voice caused challenges.

None of the participants were reluctant to be interviewed. Comments were made about the importance of their story, the need to be heard and not being afraid to talk. The emotional tone of the interviews was intense with the exception of one or two. In one case, the participant had prepared an index card of notes to be certain to remember all of the points he wanted to make. The emotions stirred by the interviews surprised the participants at times as well as the relief at being able to "tell the story." Ed Harmon stated his impression that research was only conducted on unimportant things and gave his reason for agreement to the interview was to provide input into the trade and industrial education teacher process.

Data Analysis

The purpose of qualitative data analysis is to organize the interviews and present a narrative that explains what happened or provide a description of the norms and values that underlie cultural behavior. The first step of data analysis began during the interviews when questions were rephrased for clarification. After the initial two or three interviews, the researcher chose to revise and modify questions that had seemed unclear or confusing to the participants.

The second step in data analysis was the coding phase that to some degree is continuous throughout the process. The data was reread and divided into smaller categories while looking for common themes. Concepts were recognized in several ways. Vivid vocabulary that is unique to the profession and that sounds different from the ordinary vocabulary was identified. Nouns and noun phrases often repeated also was an indicator of an important idea as well as those words clearly opposite of those nouns and noun phrases.

The researcher also heard many stories. Rubin and Rubin (1995), describe stories as "refined versions of events that may have been condensed or altered to make a point indirectly" (p. 231). Using Rubin and Rubin's analysis of the characteristics of stories, the researcher recognized those as such. These stories had common characteristics. They were told smoothly using familiar lines and were often adventures. They usually described a dramatic event and were reflected by a change in the speaking tone. Sometimes stories are used to answer a difficult or even threatening question.

Themes were also identified. Themes are descriptions of how people do or should behave and often filled with iconic statements and pithy summaries. Both compatible and contradictory concepts emerged as people in different circumstances interpreted their world.

The data was coded, grouping participants' responses using a numerical coding system. Each individual category was examined to refine what a concept means. Comparison across categories was also completed to figure which themes either go together or contradict each other.

Spradley's (1979) postulates the idea of domain analysis which is to form clusters of related ideas. The researcher used domain analysis to determine which concepts or ideas go together to form a cluster of related terms and processes. Each cluster then became a major coding category; the individual themes and ideas were treated as subcategories. The researcher organized these categories into groupings of ideas that were thematically related. This process is labeled *axial coding* (Strauss, 1987).

The final stages of data analysis included building toward overarching themes, letting people understand what happened, and stimulating theoretical and practical concerns about why things happened.

Issues of Rigor

A key characteristic of qualitative research is to assure rigor while not compromising the multi-faceted, rich descriptions. As the purposes differ, so do the methods of determining the trustworthiness of the research study. Krefting (1991) acknowledges the need to consider different measures than those used for quantitative research and the need to utilize varying measures depending upon the specific study in question. Krefting utilizes Guba's (1981) model of four measures to illustrate this point. Others such as Altheide and Johnson (1994); Anderson (1987); Howe and Eisenhart (1990); Penman (1992) and Gall (1996) use slightly different terminology (Leedy, 1997, p. 168). No single commonly accepted standard for judging validity and reliability of qualitative research exists. The aspects of Guba's (1981) model are truth value, applicability, consistency and neutrality. Each of these aspects were examined separately with the researcher's strategies to incorporate those into the study.

Truth Value

Truth value is also described as credibility. It is considered to be the most important criterion for qualitative research (Krefting, 1991). All of the multiple realities of individual respondents are reflected and the researcher is confident that the findings are true. One method to determine credibility is if others who share the experiences of the respondents could recognize the descriptions given.

Several strategies exist to ensure credibility of a study. Because of the nature of this study, some of these strategies were applicable and some were not. Strategies used include the use of a field journal and member checks. The field journal includes the daily schedule and logistics of the study, a methods log, and a personal reflection on the researcher's thoughts, feelings, ideas and frustrations concerning the overall research process. Members checks were used between the first and second interviews to allow for more accurate representation of the responses of the participants. Merriam (1988) described member checks as, "taking data and interpretations back to the people from who they are derived and asking them if the results are plausible" (p. 169). The participants also had the opportunity during the member checks to correct demographic information if needed.

The term "triangulation" is often used when discussing research methods. Bodgan and Biklin (1998) maintained the term is too abstract and imprecise to be helpful. Others such as Guba (1981) and Krefting (1991) refer to the need for triangulation in data methods, data sources, multiple researchers and different theoretical constructs. This researcher used triangulation in the sense of looking at multiple theoretical constructs in the data analysis and interpretation. Other forms such as triangulation of data methods and of data sources or the use of multiple researchers were not applicable in this study.

Following a logical rationale for the research procedure keeps the study internally consistent. Impartial colleagues who have experience with qualitative research were used for debriefing and to check categories for disconfirming or negative cases.

Transferability

Another term used to describe transferability is generalizability or applicability. Of all the trustworthiness criteria, the ability to generalize one's findings to other settings and situations has the least emphasis. Enough descriptive data must be provided to allow for comparison but the individual wishing to transfer the study's findings to another population has the primary responsibility. One of the main hallmarks of qualitative research is to describe the uniqueness of each situation rather than similarities.

The reasons trade and industrial education teachers leave the profession may or may not be the same reasons health teachers, elementary public schools teachers, or even higher education professors leave their respective professions.

Cronbach (1988) uses the concept of "working hypotheses" in relation to the issue of generalizability. This occurs when local conditions are given proper weight to form a hypothesis from which to work rather than a conclusion. Patton concurs by arguing that rather than truth, qualitative researchers are seeking perspective (Merriam, 1988). Qualitative researchers report the outliers, the deviant, the abnormal, the atypical cases as well as those considered to be typical or normal. The issue of generalizability then becomes not if the findings are transferable but rather to which settings and which respondents (Bogdan & Biklen, 1998).

Dependability

Dependability is also described as consistency. Literal consistency across different settings is not the goal but whether or not there is a close fit between what is reported and what actually occurred in the setting (Bogdan & Biklen, 1998). Researchers need to learn from respondents rather than try to make them fit into particular constraints. Variability was expected and welcomed.

Strategies to address the dependability of a study include the use of an audit trail. Could another researcher clearly follow the researcher's decision making process? Can variability in responses be tracked to identified sources such as the fatigue or changes in life situations of the participants or to greater insight by the researcher? The entire range of such experiences including outliers is reported in Chapter IV.

Confirmability

Confirmability is also described as neutrality. This criterion is freedom from bias in the research procedures and results. The nature of qualitative research is decreased distance between the researcher and the respondents. The emphasis for neutrality is based on the data rather than the researcher. Several strategies were employed to increase the confirmability of the study. Audit strategy was the major technique. The audit trail included the following; raw data such as field notes, data reduction and analysis products such as condensed notes, data reconstruction and synthesis products, process notes, field journal, and instrument development. Reflective analysis was important in the process of writing up the study so that the researcher was aware of personal influence on the data.

Rubin and Rubin (1995) in their book "Qualitative Interviewing: The Art of Hearing Data" suggest standards to use for qualitative research. They posited that using standards for qualitative normally used for quantitative distracts more than it clarifies. The credibility of qualitative work can be held to the standards of transparency, consistency-coherence, and communicability.

Being able to see the basic processes of data collection is transparency. Readers should be able to clearly follow the researcher's processes and assess their intellectual strengths and weaknesses, the biases, and the conscientiousness of the interviewer. Consistency refers to sameness among individuals and across cases. As a researcher, consistency is shown when outliers are considered and the theme is fully explored. When the theme does not remain consistent, the researcher determines under what conditions does it hold and under what conditions does it not hold. Communicability of research gives the reader the feeling they are present in the research setting. By the rich detail, abundant evidence, and vividness, a reader should be convinced that the research is real.

Summary

The purpose of the study was to determine why large numbers of trade and industrial education teachers leave the classroom and what measures could be implemented to slow the attrition rate. This chapter described the research methodologies used. The rationale for the use of qualitative study was given as well as the sampling procedure. The issues of rigor were discussed with information given to implementation in the study.

CHAPTER IV

PRESENTATION OF FINDINGS

The purpose of the study was to determine why beginning trade and industrial education teachers leave the classroom. Chapter III described the rationale for a qualitative study, the sampling procedure, the research design, instrumentation and the methods of data collection and analysis. The purpose of Chapter IV is to report findings of the qualitative interviews conducted and data analysis. Chapter IV gives a descriptive analysis of the sample and describes the context and mechanics of the interviews. The findings of both research questions are given as well as additional probing questions used by the researcher.

The following research questions guided this study:

- Why do beginning secondary trade and industrial education teachers leave the classroom?
- 2. What efforts could possibly be implemented to lower the attrition rate among these teachers?

Probing questions followed to further explain and describe the participants' experience of teaching. These questions described entry into teaching and induction efforts, the challenges associated with teaching, the rewards of teaching, perceived strengths as a teacher and their experience with the formal teacher education system.

Descriptive Analysis of Sample

The Participants

The population was secondary trade and industrial education teachers in Oklahoma who had left the teaching profession voluntarily. Consideration was given to individuals whose exit was voluntary and not under duress. Chapter III described in detail the method of determining the participants and the extensive efforts made to contact former trade and industrial education teachers.

Nineteen individuals were interviewed and the interviews were recorded and transcribed. Each participant was given a pseudonym that is used in this document. One participant was eliminated after the interview was conducted. This participant had taught three years and at the end of the third year, his contract was not renewed. He obtained legal representation and sought to keep his teaching position. As a result of these events, his profile did not meet the one for this particular study and his responses were disallowed.

All 18 participants were male (see Table I). The participants' ages when interviewed ranged from 36 years to 61 years of age; the mean age was 46.38 years. The number of years taught ranged from 1 to 18 years; the mean of years taught was 6.64 years. The age of the participants when they left teaching ranged from 28 years to 54 years; the mean age of the participants when they left teaching was 41.17 years.

The instructional programs taught by these former teachers were varied. While this makes the text more challenging, the researcher uses the common name used by the

TABLE I

Participant	Gender	Age At Interview	Teaching Experience	Age Left Teaching	Education
Andrew James*	Male	37	5	30	B.S.
Brad Davidson	Male	54	10	52	M.S.
Bob Brown	Male	53	1.5	52	Some college
Chris Farley	Male	41	8	40	B.S.
Ernest Mackey	Male	54	12	50	Some college
Ed Harmon	Male	55	1	54	B.S.
Gabe Little	Male	61	7	45	B.S.
Greg Thacker	Male	37	9	36	3 years of college
Harry Stephens	Male	45	18	43	M.S.
Keith Moss	Male	51	10	40	Some college
Ryan Evans	Male	41	5	38	M.S.
Lee Sellars	Male	36	1	35	B.S.
Shawn Graham	Male	46	5	.37	A.A.S.
Steven Kane	Male	40	6	30	A.A.S.
Tom Richards	Male	39	1	28	Some college
Wilfred Embrey	Male	55	16	48	Some college
Willie Dodd	Male	45	3	40	A.A.S.
William Stout	Male	45	1	43	Some college

CHARACTERISTICS OF SAMPLE

Note: * = Pseudonyms are used for participants.

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participants for their program in order to remain true to the interviews. For example, the participant refers to the program he taught as "auto body," while the Oklahoma Department of Vocational-Technical Education uses the term of "automotive collision repair technology." This principle is used throughout the research study. Three participants taught air conditioning. Diesel, auto body, machine tool, industrial technology and printing were programs taught by two participants each. The remaining programs were carpentry, powerline technology, computers, welding and computerized numerical control (CNC).

Educational attainment varied from some college to a master's degree. Seven participants had some college; three had A.A.S. degrees. Five had completed a B.S. degree with three participants who added a master's degree to their educational attainments. All participants held some type of teaching certificate ranging from provisional to a standard. Many of the participants also held national certification credentials appropriate to their trade. Participants taught at various technology centers in Oklahoma. A total of nine technology centers were represented by the participants. Four of the interviews were held at rural technology centers, five were held at urban technology centers, and nine were held at suburban technology centers within the state of Oklahoma. Some technology centers have a disproportionate number of teachers who leave the profession and as a result are disproportionately represented in the population.

Teacher Induction

The issue of entry into the teaching profession was highlighted in the review of the literature in Chapter II. As a result of the literature's emphasis on teacher induction,

additional probing questions were asked of the participants. The participants entered into teaching through networking, first teaching night classes for adults, a desire to change their residences, making a change in profession because of "burn-out," and moving from private to public education.

Tom Richards was recruited into teaching by his former technology center instructor. Ed Harmon, Andrew James, Willie Dodd, William Stout, Shawn Graham and Ernest Mackey all became teachers as a result of recruitment by an acquaintance, peer or a friend. Keith Moss was recruited into teaching by his brother who was already a teacher.

Beginning to teach night classes at the technology center and then moving to a full-time status in the daytime programs was the method of entry for Bob Brown, Wilfred Embrey, Chris Farley, and Harry Stephens. Desiring to change where they lived was the stimulus for Lee Sellars and Steven Kane becoming teachers. Both desired to move back to the Midwest part of the United States in order to raise their families and be close to family and friends. Because they felt unfulfilled and burned out, Brad Davidson and Gabe Little made the career change to teaching. Greg Thacker had been a teacher in a private technical college first before coming to the technology center.

Results of Question One

Why Do Beginning Secondary Trade and Industrial Education Teachers Leave the Classroom?

The researcher used the data collected in 1997 by the National Center for Education Statistics (NCES) as a conceptual framework. The data was reported in a publication entitled *America's Teachers: Profile of a Profession*. The researcher used two major surveys to analyze and report the data, the 1993-1994 Schools and Staffing Survey (SASS) and the 1994-1995 Teacher Follow-up Survey (TFS).

Section One details the use of the first part of the 1994-1995 Teacher Follow-up Survey (TFS). The first part of the survey detailed the percentage of leavers who left teaching for various reasons (see Figure 1). The researcher first took all participants' responses and compared them to Figure 1 (see Table II). The most prominent reason given was used for comparison although the researcher fully realized that two or more reasons could be connected. For example, participants jointly mentioned "Pursuing other career opportunities" and "Better salary or benefits." In some instances, the participant pursued other career opportunities in order to obtain a better salary or benefits. The researcher's findings concerning the first part of the survey are recorded in the findings.

Section Two uses the second part of the Teacher Follow-up Survey (TFS). This part of the TFS dealt with leavers who left because they were dissatisfied with teaching and the reasons they gave for their departure. In order to capture all relevant data, the researcher recorded every reason given by the participant in a category rather than limiting their reason(s) to just one category. All participants' responses were included in these findings as well; even participants who left teaching for other reasons besides being dissatisfied with teaching. The reasons stated by the participants for leaving are intertwined. The researcher felt a responsibility to report a compilation of all responses to provide the total picture. Because of including all responses and not limiting participants to giving only one reason for leaving teaching, it was not possible to analyze the participants' responses and calculate comparable percentages.

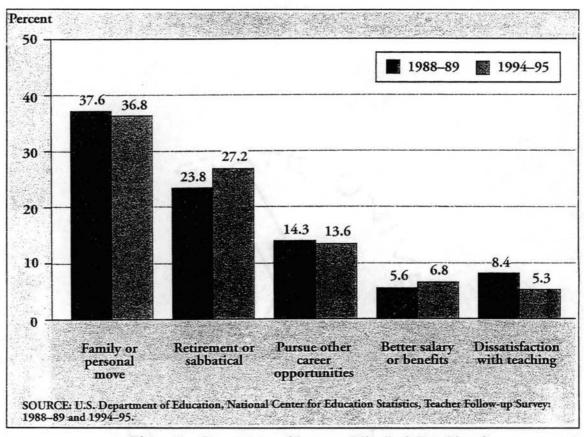


Figure 1. Percentage of Leavers Who Left Teaching for Various Reasons: 1988-89 and 1994-95.

TABLE II

Reason	Number of Participants	Percentage
Dissatisfaction with teaching	8	45%
Pursue other career opportunities	6	33%
Better salary or benefits	3	17%
Family or Personal move	1	5%
Retirement or sabbatical	0	0%

PARTICIPANTS' REASONS FOR LEAVING TEACHING

Section One

Reasons Participants Left Teaching

The Teacher Follow-up Survey gives five reasons why teachers left the teaching

profession: family or personal move, retirement or sabbatical, pursue other career

opportunities, better salary or benefits, and dissatisfaction with teaching. This research

study showed that 1 participant left because of a family or personal move and none for

retirement or sabbatical. Six left to pursue other career opportunities, three for better

salary or benefits and eight because of dissatisfaction with teaching.

Of the six that left to pursue other career opportunities, the researcher found all of

the participants pursuing business ownership. Gabe Little described the burning desire he

possessed to own his own business.

Hours were good. The pay was good. Everything was good. The reason why I left, I had a, for many, many years, I had a burning desire to own my own business; I don't know why. And I had been working many hours, had just finished my master's; I'd been going to Stillwater. I think I just kind of got burned out . . . Mr. Brown called me up, and said, come take over my business, no money down. Something just opened up, or else I would never had [sic] done it.

In Chris Farley's case, the business was family-owned and he felt the need to take

his place along with his brother coupled with a beginning frustration with his

administration.

It was time. I wasn't getting complacent with teaching but my dad's business was, he was wanting to get out. My little brother was wanting to jump in full board and he couldn't run it by himself and I was doing businesses on the side for people that you had to have, I want you type thing, and that had escalated to the point that I was caught at both ends. And it was just time. I was getting more brave with telling administration what I thought about them, and they were probably getting more brave about trying to find some way to fire me.

In Steven Kane's career, he had the opportunity to go into business with two other

individuals in their own company.

You are never going to make \$100,000 a year in the vo-tech system . . .I knew when I went there and this is certainly not going to be a twenty-five or thirty-year proposition that I will retire from. Ah, I think that George Bernstein knew that when he hired me. But we both went into it thinking that we will get the best of it for four or five years. Whatever it lasts. And we will both have been better for it and go whatever directions we want to go.

George Bernstein and I stayed in touch since I left and he told me that if you ever decide that is not where you want to be, you let me know, even if I don't have a position I will make one for you. Which makes you feel comfortable going out on your own the first time. If everything falls apart, at least, you have something to fall back on. And I think that was mostly what he was after, a feeling of comfort and support.

For Ernest Mackey, personal reasons led him to make the decision to quit

teaching.

I didn't feel like I could go on and do the kind of job that really needs to be done. I'm very picky on myself. It has to be right. And if I can't devote my full attention, and not do the job I need to do, then I don't need to be there. Moving on, over the next 30 months, basically I ended up losing my wife, my mother, my grandmother, my grandfather, three aunts, four cousins and 16 friends that I had known for 30-plus years. It was like everytime I blinked, someone died.

Section Two

Sub-Categories for Reasons Participants Left Teaching

The second part of the Teacher Follow-up Survey (TFS) further detailed specific

reasons those teachers who were dissatisfied with teaching and as a result, made the

decision to leave teaching. The eleven main aspects of teaching which caused their

dissatisfaction with teaching and led to their departure with the percentage distribution are:

- 1. Lack of recognition and support, 31.6%.
- 2. Student discipline problems, 16.6%.
- 3. Poor student motivation, 15.5%.
- 4. Poor salary, 10.3%.
- 5. Lack of influence over policy, 6.6%.
- 6. Lack of opportunity for advancement, 5.5%.
- 7. Lack of control over classroom, 4.4%.
- 8. Lack of teaching time, 4.2%.
- 9. Lack of preparation time, 2.7%.
- 10. Lack of resources and materials, 1.4%.
- 11. Large class size, 1.3%.

In order to not lose any rich qualitative data, the researcher has reported a compilation of all the data collected by the research study. The researcher added two sub-categories in the findings: lack of administrative vision and proactivity and overemphasis on appearances and paperwork. The researcher has sequenced the presentation of findings in the order of percentage distribution on the Teacher Follow-up Survey.

Lack of Recognition and Support

Lack of recognition and support was cited in numerous ways such as unclear leadership in their responsibilities, the administration's lack of interest in their program, and an unwillingness to provide needed technical support. Andrew James said, I taught for five years, and the first two were probably really good, as far as my satisfaction doing my teaching, but after the first year, they hired another teacher, Charles Brooker, to do some other things, and at that point in time, it was kind of hard to figure out who was responsible for what, and we just didn't have a lot of direction as far as what the responsibilities were . . . I could see the handwriting on the wall. You know, it was, you know, the evaluations for the first probably three or four years were pretty generic and pretty noncommittal on anything, and the last year, I could really tell, I mean, they were nit-picking every little thing . . . So I could tell at that time things were going downhill pretty quick, and I'd better start looking around and find something to get out of there pretty quick.

Trade and industrial teachers interviewed felt they were craftsmen first and then

teachers. When their expertise was not recognized and they were pushed to become a

teacher, they felt unappreciated. According to Lee Sellars,

This is probably the one very important reason why I left. The professional development for me as a teacher was all banked into the education department. You are going to become a teacher now. But see I am an engineer and they had to come to me as an engineer to get someone capable of doing the training that was necessary for industry. not to a teacher.

A change in administration and a lack of emphasis on the instructional area led

Keith Moss to leave teaching. The rural farming area provided the need for his diesel

program but his program was closed to begin one in antique cars because of the

administrator's interest.

It was like a tornado blew into town. A man that was newly hired on, wanted to close the program. And so when I found that out, I thought I better start doing something where I knew I would have income. And so I talked to the administration about it. No, and they said that the enrollment wasn't that good. We are going to close it to start this other program. In that same shop, and that is what happened . . . The last year I had 16 students in the morning and 14 in the afternoon. So, I didn't personally think that enrollment was the problem. I just think that they wanted to change to antique auto. When complaints and questions went unanswered, Lee Sellars questioned the

level of support. He cited this example.

Getting administration to just listen to what I wanted to do. Getting funding and things like that. Having a handle on your budget. As an engineer I have always known what we are going to do and how much money we have to do it. So I can tailor what I wanted to do with the budget that was available. There was [sic] no answers in that area at all. You didn't know what your funding was going to be, what equipment you could get, things like that, it was very frustrating, you knew there was [sic] shortcomings in the lab, machinery you wanted to get in there, training equipment you wanted, but you couldn't prioritize.

In Ryan Evan's case, his wife taught at the same school and lost her job when she

refused to support the candidate endorsed by the administration. Describing the politics

and lack of support to have a different political choice, he said:

The biggest experience I had with that was at Southland. And the superintendent had a clear choice in the political race, and you're expected to line up and support that person, and I don't agree with that. So, and to be real honest with you, she was told to support his choice, she said she wasn't going to, and it cost her her job about 16 years of working there.

Not knowing where the administration stood in support of the air conditioning

program he taught caused insecurity on the part of Chris Farley. He saw his supervisor as

inconsistent and partial to certain employees.

There was [sic] a couple of people that, it was almost like a, what do you call it, ostracized? It was almost like he had a vendetta against, and he was out to get this person. He was so up and down. One day he would pat you on the back and how you are doing? The next day down the hallway, he'd rip you for dirt in the corner. So you never knew where you stood.

Harry Stephens described the technology center where he taught as not

recognizing the knowledge and expertise of the faculty. Speaking of a discussion with his

supervisor at a faculty meeting he said:

Well, Bill, I guess my biggest problem is that you're not listening to what I am saying. If you don't want an answer, why did you ask the question? Why are you trying to openly ridicule me right here in front of all these teachers?

He also described the work environment as a "Club Med." He said, "It seems as

though it's a Club Med. If you're in the club, you're in the club. But if you're not, we'll

use you for as long as we need you, and then you're out of here."

Chris Farley felt that the administration did not understand the complexity of his

job because they had not taught in a trades-related program.

Having 30 different students at 30 different levels asking 30 different questions and needing 30 different answers every day. I had a hard time with my administration, not the head guy, but the assistant guy, because he had never taught at the vo-tech level; and he didn't know what it was like to have those questions. And he didn't have a trade, he came from public education. And he didn't have a trade; so he couldn't relate.

Others saw the lack of support in the manner that faculty members were treated

and the trust level between faculty and administration. Willie Dodd described it in this

manner:

One was, you know, I believe thoroughly in professionalism, I don't have a problem with that. But they took that to an extreme, and then treated you like a child. I mean, they check [sic] up on you. They looked over your shoulder. So they hire you as an adult, as a professional, as a craftsman, and treat you like you're somebody that they cannot trust, and you don't know how to act, and so it was just kind of the whole image of the school that I certainly was fed up with.

Ed Harmon saw the lack of trust evidenced by a "punch the clock" mentality.

The thing that irritated me more than anything else is that that particular school says <u>you will be here until 5:00 p.m.!</u> I have, I can be responsible for my actions. You know, I'm used to being in management where I make the decisions. I have enough knowledge in my field that no one can snow me, and yet I get treated like I don't know what's going on.

Lee Sellars saw a similar work environment and used manufacturing terms to

describe his reaction by saying:

The product you manufacture is education, the most important people that are supposed to be involved in that are supposed to be teachers. I didn't feel like the administration really cared what the teachers did.

In his business, Bob Brown asks his employees every week how things are going

but certainly did not experience the same question when teaching.

Nobody ever sat down and said, "Hey how are things going? What do, is there anything we need to do, do you got any problems?" I was never asked that once. That is kinda a sore spot to me. Because every week, I talk to my employees, I say, hey we are on a team, if there is something we can do better by you telling me or that kind of thing, tell me about it.

Lee Sellars couldn't understand how an administrator could know about a

program and support it, if they had never spent time in the program.

Most of all, I had a few complaints and I didn't feel like those complaints were addressed. For example, my boss was never even in my program. Not even one time. He is supposed to be the principal of the school and I didn't feel like he was really involved in what was actually going on with the school. He was more involved with other projects, which had nothing to do with what we were trying to do.

Lee came to the conclusion that he had to leave because he was becoming

something he did not want to be. He explained by saying:

I wanted to do things. I didn't want to become the teacher that was, do just what is required and that is it. And that was one of the things that made me decide to well . . . I will be back in industry where performance is expected and accepted. The more you can do, you ask for support you will get it. Where there (at the school) you didn't know what you would get. You know.

Willie Dodd saw the lack of support in passing the buck between administrators

when questioned by faculty.

Well, what I saw was a lot of smiles up front, but stab [sic] you in the back. You know, I got ripped on a couple of times on things, and then you couldn't tell who was responsible. They'd pass the buck, well, so and so did this, and so and so did that.

Other participants viewed the lack of support as pertaining to legal aspects of their

job. Lee Sellars stated it in this way:

Another thing that really bothered me was the litigation risk. Anything you would be involved with in a conflict with a student of any type, the school would immediately clam up and you were on your own. Whereas when I worked in industry, and the corporations I worked for, would back me up on problems. As I didn't feel that if there was ever a problem between a student and me and I couldn't handle it, a need for litigation or lawyers or anything like that, the school wouldn't have backed me up. And that was a pretty important thing. The first thing when I got there, you got to get this insurance. You could be involved in some kind of problem with a student and you will have to hire lawyers and so that was something that really bothered me. Luckily I never had any problems, or any students injured or anything like that even though we were in a highly industrial type training. Where there are machines that could easily hurt someone. There is a risk of injury in that type of teaching. I cited this before, a lack of administrative support. Generally it was hard to get anything done. Anything I asked for was just ... I finally just guit asking for anything at all. I don't care what the administration does, I am down here doing my thing and they are doing their things and that is kinda a bad thing.

Student Discipline

Student discipline and lack of support were closely connected in the perceptions

of the participants. Often when a participant would mention one, he would mention the

other.

Tom Richards, while teaching his first and only year, had this experience:

The kids were pretty rowdy. It was hard to make them behave. To make them do what you wanted them to do. The discipline. It was hard to do that. For example, they would get up on top of the paint booth while I was helping other kids and they would get up there and smoke and do things they weren't supposed to do. I had some that got in fights and just a lot of problems.

The issues of student discipline increased when the teacher followed another

teacher who did not enforce a code of behavior in the program. Willie Dodd followed

another teacher who was "just playing playhouse." He said:

These kids were doing all, no structure, weren't studying anything. They hated me right off the bat, my students, because I came in there teaching it the way I understood I was gonna be doing it. To industry standards. We're gonna learn something. And I had all kinds of hell. I mean, the first two weeks, I didn't know that I was gonna make the transition.

Wilfred Embrey had a similar experience and he used a metal trash can to get the

attention of the students. He told this story:

It was before school started, and I mean, there were horseplaying. And they were scuffling and they was this, that and the other. How do I get their attention? How can I approach this class and get this over to where they will listen? And the shop was out here, and there was door going into the classroom, into the back of the classroom, so when I went in that door, everybody's back was turned. Well, we had metal trashcans. Well, I had conveniently placed that trash can one step inside that door. And there it is, time, I opened the door, it's just chaos. I take one step in, and make like that trash can is a football. And it goes plumb to the front of the room, and bounces around. Total silence. Everybody is looking at me. And I says, now, bein' that I have your attention, I'm gonna tell you how it's gonna be. If you don't want it to be this way, when you go back to your home schools, you can stay there. I didn't have anybody leave.

After an incident with two students he felt was not properly handled, Chris Farley

lost respect for his supervisor.

I'm not an aggressive person, but that day I changed. That's when I became, I don't give a flip about what they say, as far as, they were not, my trust in them dropped. And they, my trust in them dropped (emphasis). It changed my philosophy on how to handle them. I guess by losing respect and losing care, I lost, it didn't matter anymore, okay? I can do something else. It wasn't until the last year that I didn't care anymore. I

took every discipline problem across the street. That's what they are paid for; they can handle it.

Greg Thacker considered discipline as the toughest part of the whole job. He said:

I see that students seem to be more and more challenging every year. And that's gotta be the roughest part of their job is dealing with the new students that are maybe a little more difficult to discipline, or keep focused on the subject at hand. You know I think more and more kids are growing up doing whatever they wanna do, you know. And a lot of it has to do with, who cares if you're a teacher? I'm gonna read my book or do whatever I want to, or horse around during class. That's the toughest part of the whole job.

Greg learned that the more of the discipline he could handle in his program the

more successful he would be. He said:

I tried to handle as much of it as I could in the classroom, you know, without involving anyone else, parents or administrators, because usually if you can keep it under control yourself, you have a lot better chance of having a good class. I mean, if you send somebody to the office every time they goof up, everytime, they make a mistake, you know, you're gonna spend half the time in the office. I was able to handle most of it. Occasionally you'd get a student that you'd just have to draw the line, and say, okay, after I've dealt with you so many times, you're going to the next step up. And a lot of times, I would talk to the parents about it. You know, it's amazing what a kid will do once you make a quick phone call to the parents, saying, you know, he's not in big trouble, but I want you to talk to him about this, you know, and the next day, he comes back and the problem is over with.

Bob Brown found one of the most effective methods to be to take students outside and talk to them privately and ask them why they were in class and what was their purpose in class. This seemed to help students refocus. Chris Farley had the most difficulty with the "adult wanna-bes." The name was coined for these students who were right out of high school and weren't really adults yet. To Chris, the "adult wanna-bes" were his biggest discipline problem. On the other hand, Shawn Graham didn't consider discipline a challenge. He

gave his experience with discipline to the researcher by saying:

Not really, because I would just set the rules, and if they broke the rules, I would tell them when they crossed the, give them one warning, and the next one, they would be, I would treat them just like a job; well, just like if they were working for me. They can't continue to come in late. They must come prepared when they do come. The deal I was told was, if you have a discipline problem, for goodness sakes, don't go up front, because that tells them you can't handle it, so you deal with it anyway that you can.

Although he struggled with discipline at the beginning of the year, Lee Sellars

knew it was something a teacher had to learn on the job. He said:

Probably one of the hardest things first off is establishing a relationship with students. Not being a teacher, I had never experienced that type of a relationship. How to get along with the kids and stuff like that and how to maintain discipline. Things that over time I became accustomed to. Those things were kinda tough at the beginning. There wasn't, I guess there isn't any way for someone to really prepare you for that.

Poor Student Motivation

For many of the participants, a strong relationship existed between the amount of

motivation the student had and the need for external discipline. Often poor student

motivation caused misbehavior and the result was disciplinary action. Participants

struggled with trying to help all students; in some cases, even when the student did not

ask or want to be helped.

Wilfred Embrey articulated this lack of motivation in these terms:

Biggest obstacle I had was being overly concerned about all of the students that I couldn't help. I wanted all of them to be successful, and there's some you can just do so much for, and you can't help them, in spite of theirself [sic].

Greg Thacker saw the lack of motivation in a different light and felt that he could not give all of the personal attention a student might need because of time constraints. He stated:

Probably the biggest challenge was handling the students. You know, there was a challenge in presenting the information, but the classes helped you with that, and you learned how to do that. But the biggest challenge were the students that really needed a lot of one on one. It was challenge to take a student who really didn't wanna be there, and make them wanna be there. Make them enjoy coming to the school instead of dreading the next three hours.

Chris Farley cited the lack of student motivation specifically as one of the main

reasons he left teaching. He said:

A lot of it was, I felt like there were too many kids that really didn't want to learn. They were just there to be there. A free hour or a free half-day or whatever it was. I thought about it. It was a hard decision. I debated. I would like to have stayed sometimes. Other times I am glad I got away from it. I enjoyed working with kids. It just seemed like there was too many of them that just didn't care if they learned or not. There were those that did and that probably made up for it. I guess.

Making it particularly difficult to accept the lack of interest in work by students

was the fact that the participants, based on their years in industry, knew that students

would be unsuccessful in the workplace. Steven Kane stated:

Yeah, but this probably comes from having been in industry for awhile. I always had the philosophy of "lead, follow, or get the heck out of the way." I don't care what you do. You can be a follower. But pick one or the other and do it. Don't just stand around and get in the way. Ah, for the biggest part, that is the philosophy I used in the classroom. And it didn't take very long for individuals to figure out that I was never rude to any one or I was always very tactful and very professional, but it didn't take long for them to get the message that this guy has absolutely no time for me and isn't going to make any effort until I do. And they figured out that they didn't want to make any effort and they found another program they could get into where the philosophy was a little different. That was o.k. with me.

Gabe Little shared this concern and discussed dealing with students who really did not want to be there. He said, "The majority of students weren't interested. You only had a handful out of the class that was really interested in what you were teaching. And that was the hardest part."

Poor Salary

Both in practice and in the literature, low salaries are often given as the reason T&I teachers leave the profession. The researcher found this to be true. Changing life circumstances and the need for a higher income forced Wilfred Embrey to go back to the industry. He said:

Well, to be right honest with you, I was tired and the money. I was tired of working two nights a week to pay for two nights a week of school, and I was to the point that I had other interests that were expensive interests, like raising horses, and I saw that I couldn't keep it all going.

Having a growing computer repair business and teaching full time combined to be

too heavy a load for Greg Thacker and he decided to pursue his business full time. He

told the researcher:

The only reason that I chose to leave teaching was because of the business, and the potential that it had, you know, to provide for the family. I really didn't start the business with the intention of leaving teaching. I was looking for something to do in the summertime, something to spend my spare time with, and it just exploded into something I couldn't handle and work at the same time, and I knew I had to give up one or the other, and the rewards for being in business were just fantastic. I couldn't ignore it. So that's what we did.

After a divorce and resulting financial concerns, William Stout chose to quit

teaching in need of a higher salary. He cited:

It was mainly all the pay scale that has to go along with it. But at the same time, That was a pay scale that I negotiated when I first went in on the board, too, so I really couldn't have any complaints about it. It's just that at that time, with the divorce, personal problems and things like that, with that in mind, it was more a personal deal and not a school deal as far as why, anything like that.

Ed Harmon also considered salary in his decision to leave teaching.

There was a couple of reasons. Money was one. Then looking down the road at any kind of retirement I would have had to teach until I was 69. And along with that, I would have had to take more college. Money talks. As an example, I'm making \$12,000 more a year now than what I was making up there. I'm shortly gonna be making a lot more than that.

Brad Davidson saw poor salaries as a detriment to attracting skilled individuals to

teaching. He said:

We are not paid near what we need to be paid. We're not gonna be able to attract the quality educators with the background, technical backgrounds. We're out there competing with industry, and we're not doing a very good job of it. We're gonna have to get that salary up. There was, well, I was offered a job at a technology center and one at another location and both of them were over \$10,000 a year more than I was making at my school.

Accustomed to receiving merit raises or bonuses in industry, Bob Brown struggled

with across the board raises.

That is one of the things that drives me crazy with the way that they operate. It is not normal with everything else in the real work world. I am glad you asked me that. They are preaching we want good employees and all of the things that we are doing is to get a good employee and who has a little knowledge about the trade. Employers say they will train the people. O.K. That is fantastic. I believe that. But they don't operate their business as a learning situation. It is not merit raises. It is just "Hey, we got some money this year", let's give everyone a \$1,000. It is not a good employee deal. It is we got money or we don't. If they had come to me and said, "We will give you \$5,000 more a year." That might have been a factor in the thing. As I said my consideration is the well being of my family.

Brad continued his comments with a discussion of the lack of recognition of the

instructor as a highly skilled craftsman, low salary and the push to take college classes.

He said:

I felt there was a definite move to professionally emasculate the professionals that came in. You know, they were sought after, and on, you're great; you're the best in the field, and on and on, until they get you signed on the contract. Oh, but you don't have a degree. I heard this so many times, and it drove so many people off. One of the best welders, he was a state inspector, welder, this guy could do anything with a welder. And they drove him off, basically. Low salary. Professionally emasculated him. They said, "Well, you know you are a teacher now. You've got to work on that degree, because you're basically not worth anything until you get that degree. I disagree with that strongly. I've seen a lot of people, enough paper they could paper a wall, but when it came to, push came to shove, in the real world, they couldn't do anything. They couldn't carry their own weight.

Harry Stephens summed up both the lack of recognition and low salaries when he

said,

Well, then you were a public educator. Oh. Lowest-paid profession, you pay me less money, you tell me I'm in public education, you look down your nose, and now you're telling me I'm no longer there. That's good. Thanks. Appreciate it.

He continued by saying:

Teacher's retirement is okay, but the salary that they pay me, plus I get 15% a year's profit sharing put into stocks and bonds. Stock market; I can do with it whatever I wish. That's why we all work. I mean, I love my job, but if they quit handing out a paycheck, I'm gonna quit showing up.

Willie Dodd probably summed it up most succinctly of all the participants when

he said:

To me, this is personal opinion, money is a token of respect. It should be based on what I do, and if I'm not any good, then don't pay me. But if I'm very good, then pay me according to that. I do a lot better for that than I do for hand clapping.

Lack of Influence over Policy

Having no control or any influence over school policies causes several

participants to leave teaching. Harry Stephens related the following story as his evidence:

It was the administration that was a real challenge. And the board. I felt like the board was not, they were not a board that functioned alone. They were a board that was directed and led by the administration; primarily the superintendent. As a matter of fact, I had a superintendent tell me that anytime I thought for an instant that he did not have three of the five board members in his back pocket, I was sadly mistaken. And I learned real quick, that was true, because there were several instances when we would go to a board meeting, especially for a termination, with local industry there in attendance, supporting continuing the program, they would shut it down. It was my opinion that that's why we were there was to support local industry with personnel.

The combination of secondary and adult students in the same program and one set

of rules applicable to both was unfair to Chris Farley. Efforts to change this policy were

unsuccessful. He said:

They called me a rebel, as far as the other administrators, called me a rebel. I understand that they had high school students and they had adult students. And I understand that they had rules and regulations they had to go by as far as set down by the school board and all that kind of stuff, but they treated the adults so bad. They had a high-school mentality toward that, and they wouldn't, I told myself several times. If I was an adult student going to the school, I'd either own the school or way quit. Because they did stuff that was liable. Gross negligence.

Another example that Chris Farley gave was a simple case of two students sitting

in their truck and eating their lunch. This was not allowed according to school policy.

I had a student, his father-in-law was in electronics. They, one time were sitting out in their pickup eating lunch. They were both all day students. An administrator walks by and says, "What are you all doing?" They're eating their lunch, listening to Paul Harvey. What are you all doing. We are eating lunch. You can't do that here. Yeah, we can. No, you're gonna have to go in the cafeteria. No, we're eating out here. And I mean, it escalated to a full slam-the-pickup-door, argue-in-your-face type thing, and a security guard had to come over there and basically separate them before she kicked them both out. They were just sitting in their truck.

In one instance, the failure to change a policy was over a seemingly minor item;

the number of rings on the telephone. Lee Sellars told this story:

I always cite this example of the telephone ring thing as an example of how lame the administration was. I wanted a very, very minor thing changed. I wanted the telephone to ring a few more times so I could get to it. Because it was a big lab and it was hard to get to it in three rings. I went round and round with the administration. I think it took a month before I could get the telephone to ring 5 times instead of 3 times. You know that gave me such a level of frustration, why would I even bother to ask for a real problem because I just got the administrative run around. And they basically weren't interested in my problem until I went to the assistant principal for something that the receptionist should have taken care of. That was really frustrating.

Greg Thacker saw a need for administrators to seek input from instructors. He

related:

I guess there might be one or two administrators that need to investigate a problem thoroughly before they come up with a solution and decided on a solution, and seek the teacher's input, and see if we might have something to say about some of the big decisions being made.

Two participants felt that with a union, teachers would have a voice in

policymaking.

Chris Farley said, "I don't think they would have been able to have the bully

mentality toward their teachers if we had had a union." Harry Stephens, when asked by

the researcher why he felt a union was needed, stated:

We had some teachers that were very outspoken, and they'd take up for themselves, and I was one of those. Then we had some that would just take the back seat, and whatever happened, happened. And I saw many instances where living increases were given to individuals that I felt like weren't necessarily deserving. And others, that were deserving, didn't protect themselves, so they were somewhat passed over. When a policy was inconsistently enforced, Lee Sellars felt that the real world

experience for students was being compromised. He said:

These dogmatic rules. This is the rule and you will obey the rule and there is no flexibility to change around that. An example of that is one of our students had a car that had a brake line fail. Well that is a hydraulic thing. What better way to teach somebody to form up some hydraulic lines which is something you do in industry, you know. We brought this guy's car in and we took off his old hydraulic lines and we fixed up some new ones and installed some new ones better than any mechanic's shop in town. I was reprimanded for doing that. Because we worked on a student's car. I said that is kinda stupid. Then immediately after that a Southland vehicle came in that needed repair. And we repaired that. There was no rules about that. You know, I was trying to get real world experience for these kids because when they leave there they have to do the real stuff for real. For me to just show them this is how you do it is not good enough. You have to install it to actually see that it works, test it, and it was hard to do, that very inflexible with rules. Things like that. I was always afraid, jeez. I was going to break a rule and get fired or something. When I finally decided to leave, I felt a great deal of relief because I didn't have burdens, silly rules.

Lack of Opportunity for Advancement

In Willie Dodd's career, he was interested in moving up to a higher level. He said, "I'll take it to one more level, and this is it for me. If this isn't what I want, I'm going back to industry, and I've tried it all." Brad Davidson had aspirations higher up at the technology center where he worked. He said:

See I was on the track for superintendent, and my superintendent told me that I'd never make it, basically; a blackball. Which was partially my fault, because I saw things wrong, and I'd never been one to keep quiet. That was one of the reasons I got out. It got to the point where I was becoming part of the problem, and not the solution.

Lack of Administrative Vision and Proactivity

Brad Davidson felt the administration did not have a clear vision of vocational education and as a result, was not proactive. He stated:

I just got fed up with butting my head against a stone wall, trying to get these administrators off of dead center. Basically, the comment was, they were tired, this one superintendent was tired of cheerleaders and football moms and whatever, and wanted a place to retire. Basically, well, my impression of a technical institute is something that's hopping all the time. There should be something going on all the time. Because that's the way industry is. And we ought to be out there looking for new things, because if we are not, we are already behind. As I said, I started becoming part of the problem instead of the solution, and that problem was getting into there.

Harry Stephens discussed how industry can not rely on vocational education to supply their workforce. He said, "It is much easier just to go find somebody who has a good work ethic, and train them himself, than to try to rely on vocational education to provide a certain type of employee." When he decided to leave the technology center, Shawn Graham tried to give them a 30-day notice, as he would have in industry. He was told to clean out his office and leave that day.

Overemphasis on Appearances and Paperwork

Not having a vision and also emphasizing unimportant things proved to be frustrating for most of the participants. Paperwork, endless meetings, strict dress codes and lack of planning were sources of disappointment and finally disillusionment. Steven Kane developed a computer program to try and get a handle on the paperwork. Bob Brown discussed the emphasis on having a "strategic plan" for the school but saw it as a mindless activity, unrelated to the actual school environment. He commented that his

strategic plan would have been to just get a lesson plan turned in.

Bob also talked about the endless paper trail. He said:

If you have an employee that is doing a great job, I have an employee that does a great job, and his paperwork skills aren't quite what they need to be, that is a bad deal. But I am not going to get rid of him or really get on him too bad. I can do the paperwork. He messes up on the job? That will cost me a lot of money! Not the paperwork!

Keith Moss also struggled with the paperwork. He communicated his story:

That many students keeping up with their testing, the paperwork, their follow-up, that was pretty difficult. Because you had to actually grade the students. And that was a little difficult. Because I thought of them as all equal. And if I had a slow reader or something like that who couldn't understand test questions or something like that I would take that student in my office and ask him the questions personally. And they would understand it that way. They couldn't some of them couldn't read and understand it. That didn't bother me any. Not a bit. Because they were all equal. And when it came grading time, so to speak, it was real difficult. You have to give your honest opinion, you know of that student, and I did. I would write up a report on EACH student and that worked out real well. But the administration, kinda frowned on that a little bit, because I was trying to treat them you know, exactly the same. And I graded them that a way. I graded them the way they worked in the shop, the way they performed their duties. To me, that worked just super, but I got a little bit of flack from the administration. Not all that much but some.

The slowness of the system to work was a surprise and an adjustment to Brad

Davidson. He commented:

One of the bad challenges, I guess was being able to go from an industrial setting where if I needed something, I got on the phone and said, I needed it yesterday, and it was being hot-shotted there, to being in a classroom situation to where if you needed something, it was, you know, fill out a requisition and go through the paperwork, and this is one of the big problems with all T & I teachers is that they all get really exasperated at this. And I understand, there is a system you have to follow. I understand that. It's state money, it's public money, and so forth. But it's a real adjustment problem to go from that situation. We have a lot of large

pieces of equipment, and if they break, you know, you really can't wait a month or two months to get the parts to fix it, because you're in a training schedule, and everything is scheduled to where this follows this, follows this. And it's very difficult to teach in that kind of situation.

In addition to the paperwork issue, participants felt a strict authoritarian dress

code was not productive. Ed Harmon was not allowed to wear jeans in his program but

they didn't provide uniforms. Lee Sellars communicated that the kind of clothes he wore

had nothing to do with his teaching. Andrew James discussed "playing the game" all of

the time, not just during the school day, at the technology center where he worked:

Being a teacher at that school was to play the game, so to speak. Dressing a certain way appropriately, and that's not only while you're at school, or while you are under contract, but that's 7 days a week, 365 days a year, you're an employee of that technology center, and you're expected to, I felt like you were expected to look like you were their employee. When you were downtown on Saturday afternoon or wherever you were, middle of summer, when you're not on contract, or whatever. Didn't make any difference; you were theirs.

Lee Sellars described the lack of vision and being proactive coupled with

emphasis on the unimportant things in this manner:

I come back to this, *bureaucratic inertia*, and in general I found it really hard for me to get things done. The bureaucracy is very lethargic. It is paperwork heavy. And an example is the manual that they had at Southland. The Operations Manual. Nobody reads the Operations Manual. No one. It is kinda useless to have it. It is a giant document that really has nothing to do with the teachers and teaching. It has to do with lawyers and bureaucracy. It gets away from what you are really trying to do and that is to teach. Bureaucratic inertia. A real problem.

The researcher asked a probing question to determine the participant's meaning of

the phrase "bureaucratic inertia." Lee Sellars was asked to define the phrase and did so in

this manner by saying, "A body at rest tends to remain at rest. And a body in motion

tends to stay in motion. They were at rest and I was in motion. I wanted to do things."

Remaining Categories

The remaining categories were lack of control over classroom, lack of teaching time, lack of preparation time, lack of resources and materials, and large class size. The participants infrequently mentioned these categories. They seemed to perceive that these items would take care of themselves if the first items were adequately addressed and resolved.

Results of Question Two

What Efforts Could Possibly Be Implemented to Lower the Attrition Rate among These Teachers?

When asked this question, the majority of the participants commented something like this, "Just fix all of those things we just listed." For example, with support and recognition from administration, the job of the T & I teacher would have been more productive, more fulfilling and as result, the teacher would have been happier and would have stayed in teaching. The participants perceived the answer to this question to be so obvious it didn't even need an answer! When pressed for comments and specifics, they did give some examples and ideas to consider.

Keith Moss felt that diesel mechanics would still be in existence if the administration would have just put their foot down and said no, we are keeping this program. Tom Richards felt a real need for the administration to help him more as far as his first year of teaching. He stated: I feel like I would have had the administration help me more. Learning what I needed to do for as far as teaching. Like I said, we did go to classes but I felt like I needed more help. Maybe I was a special case. I don't know. I just felt like I needed more help than I was getting.

Lee Sellars described the ideal teaching situation in this manner, "Having control

over the budget, a stronger relationship with business and industry, more work study,

responsive administration, listening to the teachers, helping me with my problems and to

quit worrying about the new building being built on campus.

Clearly, the issue of higher salaries was one effort that would have literally paid

off as far as the participants were concerned. William Stout had a family and really felt

the cost of insurance. He said:

The cost of insurance is just outrageous, especially for a person with family. I think probably if they was [sic] able to, I mean some of the benefits were expensive, as far as the insurance. That ate my lunch as far as that was concerned. And with that in mind, that and a higher pay scale range, I probably would have been able to stay there.

Bob Brown was very specific in what he felt should have been done to keep him

and others like him in the teaching profession. He stated:

\$5000 a year and you get down to that curriculum thing I talk about. You take time away from your class and the things that they want you to do trying to develop something. It has already been done. It probably has been done exceptionally by someone. More than one time. Why not put it together and give it to the guy and let him tweak it to his own thing?

Greg Thacker said:

I don't know. I think if the pay was just a little bit higher. you know, it would have been up in the forties, it would have been a little harder to give up. And I really, I made pretty good money teaching, you know, certainly nothing to complain about, but my wife wasn't working. She hasn't worked, basically since we started having kids. And it's just tough you know with three kids to keep it going. I was pleased with teaching, and that was really one of the hardest decisions I've ever made, to leave. But I'd go back in a heartbeat if something happened here to where I would no longer have a business or something like that.

Wilfred Embrey would have stayed if he had not had to take anymore college hours. He had received his American Welding Society (AWS) national certification and felt that was all he needed as a teacher, not a college degree.

For five of the participants, nothing could have been done that would have made them remain teaching. Brad Davidson was moving out of the classroom anyway, hopefully toward administration. Gabe Little, Ryan Evans, and Steven Kane all wanted to start their own business. For Steve Kane teaching had lost its allure and he needed a change. He said, "Probably not anything would have kept me teaching. It was far more me than it was anything else. I still had some things I wanted to do and to accomplish and try for myself." Ernest Mackey personal circumstances were the determining factor in why he left teaching and no efforts on the part of the school could have kept him.

The crushing blow for some participants was when nothing was done to stop their departure and no discussions were held to bring closure. It seemed to be the final stroke of a frustrating experience. Lee Sellars talked about the fact that no one approached him and asked what could be done to keep him teaching. Andrew James sent his letter of resignation and was never talked with about his decision by any administrator.

Additional Probing Questions

After the first few interviews the researcher added some additional probing questions to ferret out more issues about T & I teachers who left the teaching profession.

According to the literature, a satisfied teacher is one that can answer affirmatively to three decisions.

- 1. If they could do it all over again (choose to be a teacher), they would.
- 2. They intend to keep teaching as long as they are able.
- 3. They strongly disagree that teaching is a waste of their time.

Upon analysis of these questions, the researcher came to the conclusion that question Two would be irrelevant to ask since they had quit teaching. Question One and question Three were asked in this manner: Would you do it all over again if you could (choose to be a teacher)? What do you consider to be the rewards of teaching?

Concerning whether or not they would consider teaching again, the participants were divided in the yes/no categories. Eight participants said that they would definitely choose teaching again, while four said they would not choose teaching again. Ernest Mackey, after the researcher had interviewed him, has since returned to teaching. William Stout currently teaches night classes at a local technology center. Ed Harmon stated, "I can put up with a lot of crap from administration for the rewards of the classroom." Ryan Evans described his willingness to make the same choice again in this way, "You can make a bigger difference in somebody's life as a teacher than you can in most other occupations. You know, you can really, if you wanna help people, that's a good way to help them."

On the other hand, the participants that would not make the same choice again were adamant in their responses. Andrew James is doing maintenance work for a large school district, which is what he really wants to do. Chris Farley would not want to miss the opportunity to work with his brother. Tom Richards has teenagers at home and certainly doesn't want to work with them during the day! Steven Kane said the following

in response to this question:

I can't go there from here. My real answer is I just don't see that happening. I can't see myself back teaching in that program again. I can't go there from here . . . not in the near future. Maybe twenty years from now but certainly not on an everyday basis. Maybe an adjunct basis in night classes or something like that. Not on any kind of a full time scale at all.

Interestingly enough, all participants, upon reflection, could see the positives of

their teaching experiences and give examples of the rewards of teaching. Not one

participant felt that teaching was a waste of time. Keith Moss said that students are still

coming out to see him after 10 years. Lee Sellars related the relationship he had with

students in this manner:

The relationship between students and me. That was really something. I almost would have stayed as a teacher because of that. Because of the things we did do, and I had students three hours a day, and I probably spent more time with the students than their parents did. Get to know them. That is really a neat thing. And also seeing them learn new stuff. Get their interest. And you could teach them something. They just go, "Oh, now I understand." That is worth putting up with a lot of stuff.

Steven Kane was pleasantly surprised one morning as he got to work by a former

student. The story was told like this:

Probably one of the most rewarding things I had came six months ago. I had a guy stopped me in the parking lot out here when I came in at 7:00 in the morning. He got out and came over and said, "Are you Steven Kane?" I said yeah. As he got closer I recognized him. I couldn't figure out where. Then he introduced himself and I recognized his name. He had been one of my students at Time Technology Center. He was one that wasn't sure what he wanted to do. You know. Didn't really know if he wanted to be there. During the course of his time there he was in a motorcycle accident and lost part of one of his legs. He was out quite a long time. Came back to get back into the program just before I left. And finished. He finished with a little more sincerity than he started with. But not a whole lot. But he stopped me and said, "I just wanted to tell you I

just wished I had taken more advantage of the opportunity when I was in your class. He said, "I am working in the manufacturing industry now and every day I run on to things and I tell myself I had just paid closer attention I would know what is going on. That was kinda interesting that he took the time when he saw me drive down the highway out here and followed me off the highway. Kinda interesting that he would take time to stop and say thanks for what I did get. Certainly those kind of things make it rewarding.

Tom Richards told about seeing the kids learn when he said, "After I quit teaching, there was some that, I had a shop afterwards, they came and worked for me. To

learn the skills and actually use them. Being interested enough to follow through." Bob

Brown said his greatest reward was when you got the students that wanted to learn and

you could see them learning.

Ernest Mackey told about the relationships he had developed through his teaching

experience. He stated,

I have some wonderful relationships with everybody. Everybody from the superintendent to the janitor. Wonderful people. Few problems. That's life. And the students. The students are the main thing. Always have been.

He told two stories similar to Steven Kane's about seeing former students years after they were in his program. One such story took place at an all-night diner in Arizona when he was returning from a car show and the other at a doughnut shop. The coincidence of meeting former students at two very different locations and their positive reflections upon his influence as a teacher reaffirmed his knowledge that teaching was important work.

William Stout told about the satisfaction of knowing a former student was now able to provide for himself and his family. He said:

I always enjoyed teaching with people, period, and being able to see the what I call the *LOOK*. It's when the light clicks on, and being able to see it, and they realize the new, a new idea and they've learned something

completely useful in their lives. And just like Dave, he learned a whole new trade, and he wasn't pushing carts any more for Wal-Mart. He's actually running machines now and supporting his family. It's kind of enjoying to be part of that life-changing stuff. Being able to be part of a person's life and see it change for the positive is great. And being able to show people that there are possibilities out there, being able to get jobs, and a good career, and being able to make a life for yourself, instead of negative that they usually get bombarded with all the time.

Ryan Evans described the rewards of teaching like this:

Working with the students. You take young adult that really doesn't, I mean, they don't have a clue what they're doing. They don't know what they want out of life, and you can get them some training and kind of get a direction, and getting employed, and that's real satisfying to me. They feel better about theirselves [sic] and they're a useful, functioning part of society, so that was the best part for me.

Ed Harmon said, "I'd have to say that the actual teaching the kids, working with

the kids, was absolutely great. I absolutely loved working with the kids." Wilfred

Embrey said a similar story, "The ones that come back and thank me for helping them,

and told me their salary, and they was making more that I was, that makes you feel good."

Andrew James talked about the good relationships he had formed while teaching with

some of the boys that came through his program. Chris Farley compared teaching with

coaching in this story:

I enjoyed taking the knowledge that I had back to the kids. I miss that, from the coaching level, and teaching at Vo-tech was basically like being a coach. It wasn't in the classroom only. You know, we had district contests and state, that kind of stuff. I enjoyed it, and I've got probably 60 students out doing this industry work now. I've got several contractors, own businesses, and running crews. It was very, very positive for me. It's taking someone that knew nothing about the industry, and taking them to a level that they can earn a living for their family and be an asset. Be a taxpaying citizen. Greg Thacker and Harry Stephens agreed with Chris Farley and gave the

researcher the same perspective. In Ed Harmon's case, he was the dad the student had never had.

Brad Davidson said that even some of the students he had had the worst troubles with have called him and thanked him for helping. He agreed with the others in that the greatest satisfaction was seeing the successes of students. Bob Brown told what appealed to him about teaching by saying:

The thing that would appeal to me is to be able to impart the knowledge I have got to younger people. And it is just get down to the old experience thing. I've got the experience. And if I can help someone out and give them some of that stuff. I think that is pretty neat. That is really the one thing. If I had one thing to say about why I would teach, to help with young people.

The participants also wanted to give suggestions and advice to current teachers.

They possessed the realization that if their trades are to continue and flourish, education

must go on. They wanted to give advice to others who were now in the same situation

they had been in previously. Gabe Little stated it this way:

I had spent a lifetime learning the skill, and I was passing those things that I had learned. In the workplace on to other people, and the few people that I did reach, you know, you feel like you're accomplishing something. Whether you're teaching or whether you're in an occupation, I had mentors that taught me things. I feel if you go through this life, you've gotta pass something back to the younger generation. I think most people feel that way. That's part of teaching, whether you're in the formal classroom teaching, or whether you're in the business teaching, I teach every employee I've ever had. It's just a different situation.

Ryan Evans encouraged current teachers to be as organized as possible and to

spend every minute in your program prior to your first day of teaching, because you're

gonna need every minute of it. Lee Sellars suggested watching a veteran teacher when he

said:

Spend some time with somebody who has been there for awhile. If a guy could spend a couple of weeks with a teacher that was already teaching and see how they do it, just be there and watch, you know. In industry I taught seminars and things like that. I had pretty much a captive audience. Professionally they had to pay attention to me and participate. Students on the other hand, they do or do not participate, based on whether or not they are interested or not.

Harry Stephens suggested that teachers develop self-paced programs. He said:

Develop a self-paced, individualized learning package and let people go through it at their own pace. Students don't like to be compared to another. Students recognize when one student excels, and they're not quite there. So I think you have got to develop it such that they can grow on their own.

Greg Thacker suggested:

Just try to survive the first year. Don't try to change the world. You know, go with the flow. Don't go in and change the entire teaching system your first year. Get used to the system. Go through the classes. Learn the ropes, and then take it one step at a time. I think the mistakes that I saw with new teachers coming were they just threw the whole teaching system out the door that the previous teacher had and tried to do it all over again, and it's just overwhelming. You know, you've got to go in and really learn how the vocational system operates, and then adjust to it a little bit at a time.

Ernest Mackey said:

Learn to relax. Learn to not take life so seriously. Understand that a lot of times, kids don't do things to you. They're bucking the system or something like that. Get to know your students. I had a wonderful relationship with our kids. A lot of people think they need a buddy. Students don't learn from a buddy. Students learn from teachers, so you have to establish yourself as a teacher. You have to establish yourself as being the one in charge. And never let that slip. As far as that goes.

Steven Kane suggested reflection on your desire to teach before you signed a

contract would be the most helpful. He said:

Oh, I don't know if there are any suggestions I can make. If I was going to make suggestions to someone, I would want to talk to them before they accepted the job. Not after. And basically say, think about the reasons you want to take it and make sure you understand what is expected out of you by the administration and by the students. I probably see more, the people that I see that I think are poor instructors, and they don't ever consider it from the standpoint of the student as to what they expect out of this. And then they ask themselves, "Am I giving them what they expect?"

William Stout participated in a faculty skit at a students' assembly and felt it was

important to participate with the group. He stated:

The biggest suggestion I'd say is to make sure you get involved. Get involved with all the activities you can. Just like, we did the skits on the stage and stuff like that, it's a little, you feel a little apprehension in wanting to do those kind of things, but I think the more you participate, and the more you're part of the whole thing, it just becomes, you become more informed about whatever is going on. You're just with the whole group better. You're part of it rather than just being a worker. You're actually working in the group now.

Willie Dodd discussed the need to set high standards when he said:

One would be try to decide where you're gonna set your standards. If you don't expect anything, they won't do anything. If you set them high, or what you perceive they should be, then you'll end up with a good program. But stay on top of what you're doing as the day-to-day business of teaching. The details. To me, one of the things that helps me do that is to be organized.

Willie Dodd discussed how the instructor sets the tone for the program when he

stated:

The instructor sets the tone for the program. If it's excellent, that's the key. If it's mediocre, there's your same key. And I think that if you have a way to get people to perform to their higher level, and if you have a way of doing that, if you could structure that correctly, then I think it's great. Because I know that my performance was based on the kind of job that I'm capable of doing, and how hard and how high I reach.

Both Ed Harmon and Andrew James encouraged faculty to remember their

students. Ed said, "Just care about your students. That's more than anything else is.

Sincerity has got to be the key to unlocking minds." Andrew James said:

Do whatever you can to make sure the kids are taken care of the way they need to be taken care of. And that's what you gotta keep on your mind. Focus on your students, and do the right thing for them, whether it's perceived as the right thing from the administrative standpoint or not, I guess. You have to do what you have to do, but focus on the kids.

Some of the participants also had advice for administrators. Brad Davidson said

to let the teachers have room to operate. He encouraged administrators to become

facilitators and not dictators. Harry Stephens reinforced the Golden Rule when he said:

Treat people like you wanna be treated. Put yourself back in that position. If you're an administrator, you came up through the ranks somewhere. So you put yourself in that place and treat them like you're human. If you have criticism, make it constructive. Don't make it just criticism. Just treat people nice.

Tom Richards said:

Come in here and show you more what you should be doing. How to prepare for classes. How to prepare a lesson possibly. They showed us some when we went to our classes and maybe I was a slow learner. I just feel like it would have helped if we would have had more on how to prepare for a lesson. I don't know. Working with you more as far doing that part of it. Try to work with them more in the beginning. Be patient with them. Be there for them more. If not them, maybe someone else. Maybe they could work with another teacher. Maybe an experienced teacher. To help them through some of it.

Bob Brown emphasized the importance of a team by saying, "I think you have to

have a team. To accomplish something and for everyone to be ... I don't think

everybody is going to be happy, no matter what you do."

Ryan Evans, Keith Moss and Lee Sellars emphasized the need for administrators

to be easily accessible to teachers. Ryan said that administrators needed to be available as

much as possible. Keith said, "When an administrator comes in they need to understand

before they start talking to the instructors what is going on around them, before they start

talking." Lee expanded on that by saying:

Listen to the teachers. Be involved in what they are doing. Not just hi, how you are doing. Go down and look. See what is going on in the lab. Visit with the students you know. The main thing is to listen to the teachers and act on the teachers' suggestions.

Steven Kane summed up what he considered to be the ideal administrator; one

who would hire the best possible individual and then stay out of the way so they could do

their job.

Probably the biggest recommendation I would make to anybody that was an administrator would be exactly what Jim did. Set the broad boundaries of what an instructor can and can't do and leave them alone. Other than evaluating and making sure things are going in the right direction and you don't have bad things going on. But don't try to dictate this is how this should be done. If you want to dictate how this is done, get out of the office and go in the classroom and do it. I use that philosophy in running my departments. I don't tell anyone in my departments what to do. I say here is what we have to accomplish this week, this month, this year. Here is the part of it I expect you to accomplish. To the degree that you have troubles getting there, come and see me. Other than that, here is what you have to do, go do it.

Summary

Chapter IV gave the findings from the two primary research questions as well as

data from follow-up questions. Chapter V contains a summary, conclusions, and

recommendations for practice and further research.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of the study was to determine the reasons secondary trade and industrial education teachers leave the teaching profession at a higher rate than any other group of vocational educators. A qualitative research design was chosen for the study to provide the rich thick data needed to accurately reflect all of the nuances of teachers' departures.

The population was secondary trade and industrial education teachers in Oklahoma who had left the teaching profession voluntarily. Consideration was given to individuals whose exit was voluntary and not under duress. This population was chosen because as a vocational administrator, the researcher had found this population to present unique professional development needs and retention issues. This population has also been found to become frustrated with the system and often to have a short length of service in vocational education compared to other specialties. This group possessed highly technical and specialized job skills and was in high demand but a low supply for the filling of positions within the system.

Face-to-face interviews were used as the method of data collection for several reasons. Because the participants were no longer teaching, it was impossible to observe

these teachers in their work setting. It was also impossible to replicate past events so the interviews were used to help the participants recall their experience teaching. The use of interviews also allowed for exploration of certain issues, clarification when needed, flexibility to meet the needs of the participants as well as give the opportunity for individuals who don't express themselves well in writing to tell their story.

Conclusions

The first conclusion addresses the first research question: "Why do beginning secondary trade and industrial education teachers leave the classroom?"

Comparing the research study's findings to the Teacher Follow-up Survey (TFS) conducted by National Center for Education Statistics, the researcher found that of the eighteen participants, one participant or 5% left because of a family or personal move. The TFS showed 36.8% leaving because of a family or personal move. None of the research participants left teaching to retire or take a sabbatical leave. The TFS had 27.2% leaving for a sabbatical or retirement. The researcher found six participants or 33% who left to pursue other career opportunities. The TFS had 13.6% who left to pursue other career opportunities. The TFS had 13.6% who left for better salary or benefits compared to 6.8% who left for better salary or benefits according to the TFS. Eight participants or 45% left teaching because they were dissatisfied with teaching compared to 5.3% in the TFS.

The researcher found that participants often gave multiple reasons for leaving the teaching profession so there was difficulty in limiting their response to one category. This could account for the differences in the research study and the one conducted by the National Center for Educational Statistics. There also might be a difference because the NCES survey was national in scope while this research study was limited to the state of Oklahoma.

The Teacher Follow-up Survey gave specific reasons why teachers who were dissatisfied with teaching made the decision to leave teaching. Because participants were not limited to just one reason, percentages are irrelevant for comparison to the TFS. The sub-categories used by the researcher were: lack of recognition and support, student discipline problems, poor student motivation, poor salary, lack of influence over policy, lack of opportunity for advancement. Two sub-categories were added by the researcher: lack of administrative vision and proactivity and overemphasis on appearances and paperwork. Chapter IV gives detailed findings of the interviews.

Other findings included:

- Participants considered themselves to be a craft or tradesman first and then and only then a teacher.
- All participants had a "story to tell" and displayed no hesitancy at being straightforward and honest concerning their experiences. Several participants commented that they agreed to be interviewed in hopes that someone who read the research study and make a change in the teaching experience for trade and industrial education teachers.
- The term "challenges" was unclear to many of the participants. They saw challenges in two very different ways. Steven Kane asked, "Challenges can be a polite way of saying what are the items that were a pain; or challenges can be the real positive challenging aspects of it."

- The length of time taught by the participant varied greatly. Participants who had taught five or more years seemed to have a different perspective on teaching than those who taught for a short time such as one or two years.
- The recency of their teaching experience affected the ability to recall specific events.
- The intensity of their teaching experience also deepened their remembrance of events.
- Many left the field not because they didn't find the role of teaching meaningful but rather that the bureaucracy was overwhelming to them.
 Several participants had found ways to be a formal teacher without the bureaucracy. Willie Dodd is teaching at a technical institute, William Stout is teaching night classes at an area technology center and Harry Stephens is developing computerized compact disc (CD) training.
- The participants knew they possessed a marketable skill. Bob Brown remarked that you could throw me out of a plane today and I could have a job by the next day.
- Steven Kane commented that not everyone has the skills to be a good teacher. He said,

I think you are a lot better off in the vocational environment if you take someone who knows industry first and then train them to be a teacher. I know individuals who are very competent in their industry and I would not even hope to ask them to train anybody. Because they don't have the personal skills or whatever it takes to be a good teacher. Participants recognized the differences in being a "teacher education teacher" and being an industry person who is trained to be a teacher. They defined a "teacher education teacher" as a teacher who went to college straight from high school to become a teacher and then got industry experience as needed to be a T & I teacher. They defined an industry person trained to be a teacher as one who first had a craft or skill and then went to college as needed to become a T & I teacher.

- One finding by the researcher was that life changes such as death and/or divorce within the family had a major impact upon whether or not the participants remained in teaching. The aspect of change in a teacher's personal life and the resulting professional changes was evident in several interviews. Participants stated that health insurance plans often did not consider licensed mental health services as an allowable expense.
- Participants were uncomfortable with structured school settings that did not base rewards and resources on productivity. This seemed in conflict to them with the work world.
- Clearly, trade and industrial education is a highly skilled area of instruction. Participants felt that administrators with no trade background were unable to adequately evaluate their teaching performance in T & I. The participants stated that the administrator could evaluate their teaching skills but not their "trade skills." One could be an effective "teacher" but not be an effective "teacher of current industry skills and competencies."

- The researcher became more skilled at watching for verbal and nonverbal cues during the interviews. On several occasions participants were asked to explain what they meant when they used a certain word or phrase. The literature refers to this as a "world of meanings" and clarifies the need to be as precise as possible concerning the meanings of words and phrases used. One example was the use of the word "challenges." Steven Kane discussed how "challenges could just be a polite way of saying what the items were that were a pain or challenges can be the real positive aspects of it."
- The researcher found it most difficult to ask the participants questions and allow the silence necessary for the participant to reflect and answer. With practice, the researcher was able to count silently to allow the person time to respond.
- The researcher found arrangement of both a mutually convenient for a location and a conducive environment for the interview difficult. The environment in some cases was too loud to tape easily and provided distractions to the interview process.
- The researcher found it best to spend a few minutes at the beginning of each interview to provide information about the researcher's teaching background. This seemed to set the participants at ease and allowed for more candid and clear responses from the participants.
- Many areas that were detractors to T & I teachers staying in the teaching profession were strategies that are low-cost yet effective. The strategy of

just being recognized for doing a good job was mentioned by a majority of the participants.

Recommendations for Practice

The researcher makes the following recommendations for practice in vocational education:

The administration would do well to remember that not only are teachers teaching students who are at a volatile time of their lives (adolescence) but that teachers also undergo major personal life changes that affect their teaching experience. The ability to access competent, licensed professional mental health services at a low cost would be an added benefit to teachers and might mitigate the exodus of teachers from the teaching profession.

Developing methods to allow non-teacher education teachers to gain needed credentials and certificates without highlighting the differences in certifications would be helpful. Perhaps the very fact that there are differences in the way that a T & I teacher becomes certified leads to the perception that they are inferior in some way.

The professional development division of the Oklahoma Department of Vocational-Technical Education has developed a number of "New Teacher Survival Modules." Administrators would benefit from their implementation in addition to local efforts to assimilate teachers into the profession.

As an administrator, all teachers, not just T & I, would appreciate informal and formal efforts to recognize their work as a teacher. Over and over again in the interviews, the participants mentioned their need for simple, low-cost measures such as spending time in their programs, listening to them, and providing support for curricular and extracurricular activities.

The Supervisory Behavior Continuum suggested in <u>Supervision of Instruction</u> by Glickman, Gordon and Ross-Gordon (1995) has practical applications. Developmental supervision provides teachers with as much initial choice as they are ready to assume, then fosters teachers' decision-making capacity and expanded choice over time. New teachers would benefit from the clusters of behaviors with minimum teacher responsibility and maximum supervisor responsibility. As the teacher gains experience and expertise, the supervisor could move to less responsibility with the teacher assuming greater responsibility. The developmental supervisor can change supervisory behaviors in order to adapt to a change in the teacher or group's situation.

The traditional teacher education track should consist of internships that begin in the third semester and gradually become longer in length with student teaching being the culmination. A professional growth plan should be in place as well as emphasis on skills to practice reflective analysis and use of journals. Teacher educators and state supervising staffs should spend one week every three years teaching in the classroom to remain current in the profession.

Both traditional teacher education and alternative teacher education should focus on implementation of the National Association of Industrial and Technical Teacher Educators (NAITTE) teacher preparation and certification standards as discussed in Chapter II. A multilevel professional development program (career ladder) would allow for continued growth and development of quality teachers. This model would allow teachers to progress through three levels of certification with the culmination of a

master's degree with five years of successful teaching experience with permanent trade and industrial education certification, with state reciprocity.

All methods of teacher education would include a professional growth plan which includes needed certification(s), demonstration of competence, and licensure requirements. All teachers would be assigned a mentor teacher and participate in a teacher network using technology to communicate with each other.

Quality teacher education would, regardless of which track, do the following:

- Lead teachers to successful certification as a Board Certified Teacher through NBPTS, appropriate licensure, and demonstration of occupational competence;
- Incorporate throughout the process the human element of teaching, the
 "heart of teaching;"
- Provide an intellectually sound and challenging program of study;
- Realize differences in the knowledge, skill, and commitment among teachers;
- Create working partnerships between schools and universities, teachers, administrators, and college faculty; and,
- Assist in building a learning community in the school for teachers and students.

Instructional leaders either at the local level or assigned a region of the state would work to incorporate solid principles of professional development. In some cases, one school might have an instructional leader while others might form a consortium or partnership to share an instructional leader. The school itself would have clearly stated expectations for teachers along with merit pay for increasing levels of competence and responsibility with solid, fair, and consistent methods of teacher dismissal when warranted.

The school would have a clearly stated vision and mission that impacts day-to-day operation of the school. Blocks of time and adequate resources to accomplish professional growth goals would be provided. Extensive use would be made of mentors, small collaborative groups, and teacher networks. Teaching consultants would also be available as needed. New methods of teacher evaluation would be used that include peer reviews, self-review, and administrative reviews. Recognition of the impact of the career stages of teachers would exist. First year teachers would be supplied with a "handbook" that gives pertinent information such as meanings of acronyms, who to call for what, and everything a new vocational teacher needs to know. First year teachers would also have a planning period and no additional or extra duties for the first few years.

Recommendations for Research

The researcher makes the following recommendations for further research:

More demographic information could have been obtained which would have broadened the scope of the research study. This information might include size of school taught in, race or ethnic group of the teacher, type of administration (vocational background versus non-vocational background), kind of benefit packages were provided, professional development opportunities that were available, and kind of certificate/college degree possessed by the teacher. Further investigation is needed into whether or not a true teacher shortage in Oklahoma exists or rather is the shortage in teachers who are not equipped to deal with the demands of higher levels of technology or initiatives such as School-to-Work or Tech Prep. National and state reports and additional anticipated legislation addressing reform in work-based or school-based education imply that teachers must be prepared, for example, to (a) implement programs of tech prep, (b) integrate academic and vocational education, (c) operate apprenticeship and other school-work connected programs, (d) serve at-risk learners effectively, (e) use computers and technology throughout the instructional programs, (f) design new and innovative curriculum and instruction for contemporary workplaces, (g) provide for leadership development among students, and (h) inform students of multiple career options and career paths. An important research question to be asked is, "How are vocational teacher education programs incorporating the national initiatives into the curriculum and what methods are being used to keep teacher educators on the cutting edge of change?"

The researcher used a national survey conducted by NCES for data analysis. Possible research could explore if there would be any differences in Oklahoma as compared to the national survey.

Other research studies might limit the participants based on the number of years taught. Differences existed in the participant's responses and might be attributable to the length of teaching experience.

Since implementation in Oklahoma of renewed professional development opportunities such as the "New Teacher Survival Modules" a follow-up research study would be helpful to show the effectiveness of such opportunities.

Future research studies might ask these former teachers if they would currently hire students from a program similar to theirs and what relationships exist between them and their former instructional program.

One area in which additional investigations are needed is the development of pedagogical content knowledge. It has been assumed in the past that an individual with a firm grasp of subject matter and pedagogy was fully equipped to teach. A better understanding is needed in how these two areas are blended together in practice and would lead to how teacher preparation and teacher induction programs should be revised.

Another intriguing question relates to the relationship between adult development and learning to teach. Depending upon the maturity level of the teacher, shortcomings in teaching may have less to do with teacher preparation and induction programs than with their level of development.

It is also crucial that research on learning to teach focus on the conditions of schools as well as on the individuals entering them. If schools operate in ways that are unresponsive to the needs of the students, it is unreasonable to expect novice teachers to learn to operate effectively in them.

Other important research needs to be conducted on the relevance of the induction program presented to alternatively – certified teachers in comparison to traditionallycertified teachers. Extensive mentoring with peer professionals, continued university support, and specifically constructed inservice classes during the first three years of preparation may be a model that would enhance the teaching abilities of all teachers.

Currently in Oklahoma, the majority of technology center superintendents come from a non-vocational background. A solid research study regarding the effect of nonvocational administration might lend some insight into teacher induction programs.

The traditional teacher preparation model needs to be researched in detail so that alternative models can be compared to the traditional model. A critical implication from the alternative preparation models is the danger that states may actually reduce resources and efforts for traditional teacher preparation programs to in order to fund unproven and competing alternative programs. A teacher shortage can often be dealt with more cost effectively by strengthening the traditional programs rather than by creating competing alternative models.

Research on the lives of teachers is an ongoing field of applied research. In order for this research to be optimally effective and suggest appropriate change, many aspects of educational research must be discipline-specific. It is also apparent that the nature of the educational enterprise changes over time suggesting that no avenue of educational research is likely ever to be exhausted.

Other studies could analyze the number of aspects that are within the realm of policy making and if adjustment of those could possibly increase teacher satisfaction.

In addition to standards, other directions are emerging. These new directions include more responsibility placed on the teacher, more emphasis on professional development rather than one-session staff development, and teacher mentoring in an interactive setting.

Reynolds (1992) believes that a false assumption is often made. We assume that experience and expertise are equal. It is possible that teachers with greater experience may be more expert in teaching, but it is not necessarily a causal relationship.

Licensure is instituted to protect the public from harm; therefore, it is critical that we define competent beginning teaching in a way that satisfies this charge. If teachers come to the teaching/learning enterprise with an inadequate knowledge base, they place their students at risk of educational failure. Teacher education and induction programs must be restructured to ensure that beginners have an adequate knowledge base before they take on full-time responsibility for students. Licensure assessments must act as a catalyst to improve teaching, not as just a reflection of the status quo.

This research study explored the reasons trade and industrial education teachers leave the teaching profession and what efforts could be made to lower the attrition rate among these teachers. Across the nation, the areas represented in trade and industrial education are experiencing a shortage of skilled workers. Unless efforts are made to slow the attrition rate of these teachers, schools across Oklahoma will also suffer from a shortage of skilled, qualified trade and industrial education teachers.

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APPENDIXES

APPENDIX A

CONSENT FORM

CONSENT FORM

"I, ______, hereby authorize or direct Mary Jo Crawford to perform the following treatment or procedure."

The procedure will be as follows:

1. A semi or moderately structured interview will be held

at a location and time mutually conducive. A second interview will be done to allow for member check of the first interview and to allow for any follow-up questions. All interviews will be recorded on a tape recorder and then transcribed by the researcher. Personal interviews will be done when possible with telephone interviews used as needed. No part of the procedure is experimental in nature.

- Duration of respondent's participation: The duration of the participation will be approximately one hour in length for the first interview with the second interview expected to last from 30-45 minutes.
- 3. Confidentiality of records: All records will be kept confidential with the use of pseudonyms for respondents and schools being coded by letter. Only aggregate data will be reported. All tapes and field notes collected by the researcher will be kept in a safety deposit box for a period of five years. After five years, all transcripts will be shredded and all tapes and computer disks will be burned.
- 4. Possible discomforts or risks: The researcher will be asking the participants to share with her the reasons they voluntarily left the field of teaching. The reasons they left may be professional as well as personal. The researcher will reiterate her commitment to maintain anonymity for the respondents and their responses.

5. Possible benefits for subjects/society:

- ✓ documentation of reasons teachers leave the classroom which can direct future policy making,
- improvement of secondary trade and industrial education programs by longer retention of those instructors,
- ✓ slowing the movement of trade and industrial teachers from the classroom,

- ✓ wiser expenditures of resources designed to retain teachers,
- \checkmark implications for future research in this area.

"This is done as part of an investigation entitled On Retention of Oklahoma Secondary Trade and Industrial Education Teachers: Voices from the Field.

The purpose of the procedure is to promote a deeper understanding about why secondary trade and industrial education teachers leave the profession and to gain insight into what can be done to lower the attrition rate among them.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project director."

I may contact Mary Jo Crawford (405) 377-7159 or Dr. James Gregson (405) 744-9200. I may also contact Gay Clarkson, Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number: (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: ______ (a.m./p.m.) Time: _____

Signed: _____

Signature of Subject

I certify that I have personally explained all elements of this form to the subject or his/her representative before requesting the subject or his/her representative to sign it."

Signed:

Mary Jo Crawford, Researcher

APPENDIX B

.

FOLLOW-UP LETTER

December 16, 1999

Dear Darrell,

Thanks again for agreeing to be interviewed for my research. Included with this letter is a copy of the transcription of the interview tape. Please review and check for accuracy. If I have not heard from you by December 30, 1999, (two weeks from today), I will assume the notes accurately reflect the interview. If you wish to make any changes, contact me at (405) 377-7159. At the conclusion of all my research, I will mail to you a summary of my findings. I will also mail you a copy of the bound dissertation.

Your willingness to participate in my research and your honest and candid responses are greatly appreciated. I enjoyed meeting you and getting to know you. Thanks again.

Sincerely,

Mary Jo Crawford

APPENDIX C

TELEPHONE SCRIPT

The first contact with the participants in the study will be by phone. The telephone script will be as follows:

Researcher: Hello, my name is Mary Jo Crawford from Stillwater. I am a graduate student at Oklahoma State University. I am trying to contact (name). Are you (name)?

If the answer is Yes - proceed with the script. If the answer is No – thank them for their time and terminate the call.

"I am contacting you because I am conducting a research study of secondary trade and industrial teachers who are no longer teaching. Do you fit into that category?

(If yes), My purpose in contacting you is to find individuals who fit into the category mentioned above (at one point taught trade and industrial education) and are no longer teaching and to interview them to determine the reasons why they left the teaching field. Your name was an individual from the Oklahoma Department of Vocational-Technical Department or in some cases from an individual who works at the school you once worked at. I am hopeful you will be able to help me.

I would like to visit with you a few minutes and explain my study and if possible, obtain your commitment to participate. The purpose of my study is to promote a deeper understanding about why secondary trade and industrial education teachers leave the profession and to gain insight into what can be done to lower the attrition rate among them.

I would like to conduct one interview face —to- face with you. The interview would be taped and I would then transcribe the tape. You would have the opportunity to review the transcription and make any needed changes. All of your answers will be kept confidential as well as your identity. If you would be willing to participate, we would need approximately one hour. I will be willing to meet you at a convenient location and a date and time that would fit into your schedule.

I would ask questions such as "Why did you leave teaching?" "What were the challenges of teaching?" "What were the positives of teaching?"

Do you have any questions? Are you willing to participate in my study? If so, set a time, date, and location for the interview. If not, thank them for their time and terminate the call.

Second Contact:

If the participant has agreed to participate and a date and time has been set, a written confirmation letter will be sent.

See Appendix D for a copy of confirmation letter.

APPENDIX D

CONFIRMATION LETTER

917 E. Brooke Stillwater, OK 74075

Date

Recipient Address

Dear Sir or Madam:

Thank you for taking the time to grant me an interview. Together we have the opportunity to make a difference in the field of vocational education. Having been a vocational educator for the last nineteen years, I am hopeful my research will shed light on the retention of trade and industrial education teachers. As I stated in our recent telephone conversation, I am a graduate student at Oklahoma State University. I am conducting a study to identify those reasons why teachers like you decide to leave the teaching profession.

The face-to-face interview I have arranged with you should take about 45 minutes to complete. The contents of the interview are completely confidential. However, with your permission, I would like to record the interview. When the interview is written up in the form of a paper, fictitious names will be used to label you and the school in which you worked and community where you are located.

The interview will consist of two parts. Part 1 will focus on background

demographic questions such as number of years teaching and your field of expertise. Part 2 will focus on open-ended questions to discuss and describe your teaching experience in the classroom. Your experience is very valuable and can serve to help current and future trade and industrial education teachers.

Per our phone conversation, we will meet on ____Date_____ at____Time____. We will meet at ___Location_____. If you need to reschedule our appointment, please call me at home: (405) 377-7159 or at work (580) 242-2750. Please feel free to contact me if you have any questions concerning my research project.

Sincerely,

Researcher's Name

APPENDIX E

INTERVIEW SCHEDULE

 1. Date and Time: _____/__/1998/1999 ______ AM PM

 2. Interviewee's name______

 3. Gender ______

 4. Former School _______

 5. Location _______

 6. Occupational Area ________

 (Start)

Hello Mr./Mrs.______. I'm Mary Jo Crawford a graduate student from Oklahoma State University. From our previous communication, you are aware that the interviews I am conducting focus on why trade and industrial education teachers leave the classroom. With your assistance, this study should assist in identifying the reasons teachers leave and give information that will be helpful to current and future teachers.

The interview should take about 45 minutes to complete. If we are running short on time, we will discuss our next step.

Before the interview actually begins, I would like to remind you that your responses will be kept completely confidential. However, so I may accurately reflect your answers, I would like to record our conversation. Is that acceptable to you? (yes/no) I assure you no one else, other than myself, will hear this tape. At any point, there is something you don't want me to record, just let me know and we can turn off the recorder. And please feel free to interrupt, ask for clarification or even comment about a question.

Do I have your permission to turn on the recorder?_____(turn on the recorder and begin interview) Part One: Now, Mr. /Ms. I would like to ask you a few demographic questions. 1. How many years have you taught? years 2. How many years did you work in industry before becoming a trade and industrial education teachers? years 3. What is your highest level of educational attainment? A. GED B._____High School C._____ Some college studies D. Associate degree (2 year degree) E.____College Graduate(4 year degree) F.____Some graduate work 4. What is your age? vears What year did you leave the classroom? (Year) 5.

Part Two

This part of the interview will be semi to moderately structured. The following grand questions will be used with additional probing questions as needed.

- 1. Tell me about your teaching experience.
- 2. How many years did you teach?
- 3. Where did you teach?
- 4. How did you enter the teaching profession?
- 5. What did you find to be the challenges of being a teacher?
- 6. What did you find to be the positives of being a teacher?
- 7. Why did you chose to leave teaching?
- 8. Could anything have been done to keep you in the classroom?
- 9. What would it have been?
- 10. What suggestions would you make to a beginning teacher? To administrators?To current teachers?

Thanks so much. Mr./Ms._____we have reached the end of the interview. I would like to express my appreciation for you taking the time from your busy schedule. I've certainly enjoyed talking with you today. What you have contributed can help current and future trade and industrial education teachers. When I have finished transcribing this tape, I will contact you and either mail or give you in a person a copy of the transcription. You will have a period of time to review the transcription and make additions/deletions as you desire. I want the transcription to accurately reflect your experience and comments to me. Thanks again. Good-bye.

APPENDIX F

INSTITUTIONAL REVIEW BOARD

APPROVAL FORM

OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD

DATE: 12-14-98

IRB #: ED-99-064

Proposal Title: ON RETENTION OF OKLAHOMA SECONDARY TRADE AND INDUSTRIAL EDUCATION TEACHERS: VOICES FROM THE FIELD

Principal Investigator(s): James Gregson, Mary Jo Crawford

Reviewed and Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

Signature X

Date: January 21, 1999

Carol Olson, Director of University Research Compliance cc: Mary Jo Crawford

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

VITA

Mary Jo Jackson Crawford

Candidate for the Degree of

Doctor of Education

Thesis: ON RETENTION OF OKLAHOMA SECONDARY TRADE AND INDUSTRIAL EDUCATION TEACHERS: VOICES FROM THE FIELD

Major Field: Occupational and Adult Education

Biographical:

- Personal Data: Born in Anadarko, Oklahoma, on August 28, 1957, the daughter of Paul and Dosia Jackson.
- Education: Graduated from Apache High School, Apache, Oklahoma in May of 1975; received Bachelor of Science in Home Economics Education from Oklahoma State University in Stillwater, Oklahoma in May of 1979; received Master of Science in Home Economics Professional Services from Central State University in Edmond, Oklahoma in July of 1982. Completed the requirements for the Doctor of Education in Occupational and Adult Education from Oklahoma State University in Stillwater in May 2000.
- Experience: Taught commercial food service and coordinated worksite learning program at Caddo-Kiowa Technology Center in Ft. Cobb, Oklahoma; employed as curriculum specialist at Meridian Technology Center in Stillwater, Oklahoma; currently employed as consortium coordinator for the Northwest Oklahoma Postsecondary Consortium.
- Professional Memberships: Association of Career and Technical Education (formerly AVA), Oklahoma Vocational Association, Kappa Delta Pi.