FACTORS INFLUENCING ADULT STUDENTS' DECISIONS TO ENROLL IN THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER AT MERIDIAN TECHNOLOGY CENTER

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CHAPTER I

INTRODUCTION

Background and Setting

During the 1800s it was traditional practice for youth to inherit their families' occupations instead of choosing an occupation for which they had preferences (Savickas, 2007). In a model of a self-sufficient community, that practice guaranteed that the service each family offered would be available to the next generation of people; as a result each youth's future would be secure (Savickas, 2007). Currently, many parents who engage in a career or a family business and share a collectivist culture view still agree with the traditional idea of occupational legacy (Hardin, Leong, & Osipow, 2001). Children do not make a decision about what they like; instead, they accept what their parents choose for them. Over the last century however, the view that parents should decide about their children's occupation has changed. Since the early 1900s the idea that youth are autonomous in making career choices has been realized and perpetuated. As a result, the concern about how youth make their career choices has arisen because of the impact that choice will have on occupational success, job satisfaction, and organizational tenure.

The importance of vocational career choice for individuals and society is revealed by the enormous amount of literature on counseling, career decision-making, recruiting, and exploration of the labor market. Focusing on individual and occupational characteristics from which the person has to choose has been the main approach in studying vocational choice (Sauermann, 2005). Counselors who are aware of the students' readiness to make career choices pay close attention to the difference between the content of occupational choice and the process of vocational decision-making. Concentrating on the student's abilities and interest because of the occupation a student chooses is referred to as content. Process concentrates on the student's decisional and developmental concern as to how a student makes a career decision (Savickas, 2007).

Another way to consider the area of career choices is by psychological and sociological factors. The psychological attitudes and competencies that influence when and how a person engages in career-making decisions that lead to an occupational choice are called career adaptability by vocational psychologists (Walsh & Savickas, 2005).

> Career adaptability for making occupational choices can be described basically as:
>
> 1. Showing *concern* about choices to be made in the future,
> 2. Increasing personal *control* over the decision-making process,
> 3. Displaying *curiosity* about possible selves and alternative work, and
> 4. Strengthening the *confidence* needed to make occupational choices (Savickas, 2007, p. 91).

The influences on career decisions are not only psychological; in fact there are many sociological aspects which influence occupational choices. Factors such as social

status, remote location, and economic advantages and disadvantages are considered as being sociological. These factors, as well as employment supply and demand, influence the occupational choices of people in different ways (Greenhaus & Callahan, 2006). Individuals both influence and are influenced by their contact with their environment. Regardless whether one examines career decision-making in terms of content and process or psychological or sociological factors, this decision making merits study and research.

As students make career decisions, they choose courses in their high school education they believe will prepare them for further employment. Those courses may be vocational (career and technical) courses and/or academic courses. According to Levesque, Laird, Hensley, Choy, & Cataldi (2008), approximately 92 percent of the students in 2005 at U.S.A. public high schools took at least one vocational course. About 21 percent of the students completed an occupational concentration which is, on average, equivalent to three year-long vocational courses during high school (3.0 credits). The credits earned in vocational courses were comparable in either fine arts or foreign languages as to the number of credit earned (3.0 vs. 2.0 credits each) (Levesque, Laird, Hensley, Choy, & Cataldi, 2008). Despite the fact that there are more credits earned by students in vocational education, there are circumstances that are negatively influencing enrollment in Career and Technical Education (CTE) courses. Because the objectives of the No Child Left Behind act (NCLB) are directed toward the core academic courses such as math, English, and science, perhaps many are assuming that the NCLB act does not have an impact on CTE. Phelps (2002) states that due to the focus on student achievement in academic courses, students are being forced to choose between career technical or academic education. The fact that schools must help students master

academic areas creates a challenge to CTE to enroll students in CTE courses. Therefore, it is important for CTE to identify the factors that influence students' decisions and find ways to motivate students to choose CTE courses, since NCLB has made their choices to take elective courses less flexible relative to time and availability.

To improve the interest level of students in CTE, it is important that educators from all levels, including superintendents, school board members, principals, and teachers be aware of the current levels of student enrollment in CTE programs. Enrollment is a big issue in schools because decreased enrollment will have a negative impact on programs and choices available to students. Obviously, decreased enrollment at the secondary level will have an impact on the post-secondary level because fewer students with CTE training will continue to be enrolled in CTE studies at the postsecondary level. Furthermore, lower enrollments can have an effect on the supply of, and demand for, CTE teachers. "It is certainly true that differences in student enrollment growth, coupled with teacher production rates and attrition, construct different levels of teacher demand that can affect the ease or difficulty of hiring within states" (Darling-Hammond, 1999, p. 15).

Research has shown that there are multiple sources of advice and support for various career-path decisions such as parents, friends, and counselors, and the future value and perceptions of the program in choosing vocational courses (Hannan, Fergurson, Pollock, & Reeders, 1995; Maxwell, Cooper, & Biggs, 2000; Mayfield, 2005; Sandford, 1997). Although these studies have described several factors influencing overall student enrollment in CTE, there have been minor investigative efforts which focus exclusively on adult students. Therefore, this research will contribute to increasing the existing

literature on adult students and the factors that cause them to decide to enroll in CTE courses.

Theoretical framework

The Social Learning Theory of Career Development (SLTC) provided the theoretical framework for this study. Career choice and the factors that influence career decisions can be understood through the Social Learning Theory of Career Development (Greenhaus & Callahan, 2006; Gunz & Peiperl, 2007; Krumboltz, Mitchell, & Jones, 1976; Mitchell & John D. Krumboltz, 1990). SLTCD elucidates how individuals obtain occupational skills and preferences and also shows how individuals make the selection of courses, occupations, and field of work (Krumboltz, et al., 1976). This theory describes the relationships between genetic factors, environmental conditions, learning experiences, cognitive and emotional responses, and performance skills in relation to career choices. It is proposed that each one of these factors plays an important role when career decisions are made; however, the combination and interaction of factors generate a variety of career choices for individuals (Krumboltz, et al., 1976).

The interaction between these influences produces three types of outcomes: Self-observation Generalizations (SOGs), Task Approach Skills (TASs), and Actions (ACTs) from which education and career selections can be explained. Self-observation Generalizations are made as a result of learning experiences. People are always observing themselves and evaluating their own performance that match their own standards or the performance of others (Mitchell & John D. Krumboltz, 1990). Task

Approach skills are cognitive and performance skills and emotional predispositions that individuals use when career decisions are made (Mitchell & John D. Krumboltz, 1990). Actions are the behaviors that result from the SOGs and TASs generating consequences that affect the future (Krumboltz, et al., 1976).

Krumboltz et.al. (1976) proposes three sets of testable propositions connecting the influences of SOGs, TASs, and ACTs on students' occupational decisions:

1. SOGs: Individuals are likely to show a preference for a course of study, occupation, or the task and consequences of a field of work if they experience or observe positive reinforcement associated with it;
2. TASs: Individuals are likely to express effective career decision skills and strategies if they are exposed to real or vicarious models and are provided with the necessary information;
3. Individuals are likely to be enrolled or employed in a given occupation or field of work if they have a stated preference for or have been exposed to learning opportunities in that area or have learned skills matching the job requirements.

SLTCD's three propositions will provide the theoretical base for this study. Since the center of the study is on the factors that influence students' enrollment decisions, Social Learning Theory's three propositions will be used to categorize the influences that are likely to either foster or inhibit the career planning for individuals.

Statement of the Problem

The problem addressed in this study was determining the unknown factors which lead to a decision to enroll in the architecture and construction career cluster programs at Meridian Technology Center (MTC). Without this knowledge, efforts to recruit students may be misguided and/or ineffective. Knowledge of these factors would allow instructors and others to wisely use resources to recruit students.

Purpose of the Study

The purpose of this study was to explore and describe the demographic, influence, and information factors that influence students' decisions to enroll in the architecture and construction career cluster at Meridian Technology Center.

Significance of the Study

Answering the question of who or what influences students' decision-making processes and guides their choice of CTE courses will be valuable. The results should help understand who and what does or does not influence students when making these choices. The results of the study can also provide useful information to those concerned with marketing and recruitment. By identifying the various factors, an effective marketing approach using resources wisely could be developed.

The results of this research study could also assist counselors in targeting the influencers that are accessible to the school. Identifying accessible areas will allow them to find strategies that can be used to provide more information and opportunities for those who are potential candidates for enrolling in CTE.

Research Questions

1. What are the personal and situational demographic characteristics of students enrolled in the architecture and construction career cluster at Meridian Technology Center?
2. What are the sources of information that lead to student awareness of the architecture and construction career cluster programs at Meridian Technology Center?
3. What are the factors that influence students to enroll in the architecture and construction career cluster programs at Meridian Technology Center?

Limitations of the Study

The Participation in the research study was voluntary. Self-reported data are always accepted, subject to three basic assumptions: Participants correctly understand the questions as intended, participants know the correct responses, and participants will answer truthfully. Moreover, the research study was limited to the current adult students enrolled in the architecture and construction career cluster at Meridian Technology

Center due to the availability of the subjects and due to the fact that these programs represent similar programs from the researcher's teaching experience. Therefore, the results from this research study cannot be generalized to other populations. Another limitation was the fact that the research study was only a cross sectional descriptive study, and as such, the results will only reflect the perceptions held by the respondents, based on the circumstances which existed at the time of data collection.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this literature review is to provide a theoretical base of previous research findings linked to this research study. The process of career development is important in a student's life and has considerable impact upon educational and occupational attainment (Hotchkiss & Borow, 1996). The transition from school to work is the first adjustment that young people have to make in their careers. Therefore, to make a smooth career start it is important to assess student's vocational interest to determine that a student makes the right career choice. By identifying the factors that influence students' career decision-making, schools will be provided with valuable insights into the sustainability of CTE programs. Furthermore, understanding students' enrollment issues is crucial since this information can be used in recruitment and retention efforts.

Potential Influences

Career exploration is a problem-solving behavior, the main purpose of which is to get information about oneself and the surrounding environment in order to decide, plan

for, enter, adjust to, or evolve in a profession (Jordan, 1963). Interacting aspects influence individuals when they are considering possibilities and moving toward a career choice, such as: expectations and belief, exploration, investment, competing forces, and interim evaluation (Grotevant, 1987). The exploration process refers to all the information collected or the hypothesis-testing behavior performed by the individual. Grotevant (1979) points out the importance of the depth and extent of the exploration. Depth refers to the diverse approaches used in order to explore a specific option while breadth is about how many possibilities the individual has evaluated.

Research has been conducted to identify the potential factors that influence students' enrollment in secondary programs (Diemer, 2007; Esters & Bowen, 2004; D. P. Gaunt, 2005; Gibson, Griepentrog, & Marsh, 2007; Grotevant, 1979; Johnson, 1987; Maxwell, et al., 2000; Sandford, 1997). Many factors have been theorized to have an effect when students engage in the career field decision-making process. Factors include parents/guardians, schools, families, friends, teachers, counselors, CTE center staff, student interest, observing someone performing a job task, anticipated ease of finding employment, projected earning, distance from home to the CTE center, work experience, advertising booklets, performance in school subjects, personal experience, employers, open day institutions, information sessions, and advertising.

Parents and Schools

The literature on career education identifies parents and schools as the most important sources of guidance and support in reaching a decision about which career path to follow. However, there is no consensus about the relative influence of the sources; every situation has its own application. Generally, findings point out that families have a

fundamental role in setting students' expectations. Parents provide young people, with not only emotional support but also material support even when students pursue an opposite direction than the parents expect. Parents are more experienced than their children and can provide them with contacts, guide their exploration, and help them with job applications and interviews. Moreover, parents usually boost confidence instead of criticizing their children, and this means they tend to be generous with their economic support.

Diemer (2007) studied the impact of relational and instrumental parental support and instrumental school support upon vocational expectations and work among poor youth of color. His findings suggest that prospective sources for career development in poor youth of color are parents and school support. According to this study, parental support can foster emotional links to profession and job, while relational parental and instrumental school support could help students look forward to higher status and well-paid occupations. Esters and Bowen (2004) identified parents and/or guardians as being the most influential persons causing students to make a decision to enroll in an urban agricultural educational program. However, students indicated that their mothers or female guardians had strong influence in their decisions. Parents' influence on students' enrollment is often the result of the consultative role where students and parents discussed options of various career paths. In other cases parents insist that students enroll in courses that, according to parents' perceptions, will be meaningful in the children's future.

Although many studies conclude that parents and family are the main influence on student decisions to enroll in a CTE program, many studies identify different factors.

This can be due to perceptions that students have about their parents' perceptions of current conditions. Even though students can be grateful for the support given by their parents, they hesitate to believe that their parents can give them legitimate and helpful advice and assistance in their career option decision because they think their parents lack knowledge or appreciation of today's conditions. Other close relatives can be influential because of their experience and knowledge of the job market, and their opinions may be more impartial than those of parents.

Friends

Gaunt (2005) found parents and friends to be important influences in students' decisions to be enrolled in CTE. There was not a difference between mother and father about whose influence was the greatest; moreover, the influence of friends versus parents was only slightly different. Friends can influence their peers' decision to enroll in CTE by providing positive feedback concerning their own experiences with CTE courses that they have taken or by relating information about their jobs and future outlook. Teachers and Career Technical Center staff were also significant influential persons in decision-making with regard to CTE.

Other Influencing Factors

Also, the findings of Ester and Bowen (2004) show that there are other factors affecting decisions to enroll, such as specific events and experiences. They concluded that there were several social, educational, and occupational factors influencing decisions to enroll in an urban agricultural education program.

Johnson's (1987) findings indicate that the most important factors influencing enrollment in a vocational oriented course are student interest and persons close to students. However, observing someone performing job tasks, anticipated ease of finding employment, projected earnings, friends, other family members, counselors, and teachers play an important role in students' decisions to enroll in CTE courses. However, the degree of importance, ranked by teachers and students, of the influence of the various factors on decisions to enroll were different.

Gaunt (2005) also identified other factors that influence a student's decision-making in regard to CTE. Those factors include the distance a student must travel to attend a career technical center and the issue of being away from home to attend school. Those factors might have an influence on students' decisions because of economic issues and also because of the necessity of being absent from the home school for part of the day. Both factors can persuade or discourage students to be enrolled in a CTE program. Another important factor found in this study was the opportunity of receiving college credits. Obtaining college credits for CTE programs not only legitimizes the breadth and depth of the curriculum taught but also provides students with a significant benefit when moving to the college level.

Maxwell, Cooper and Biggs (2000) reported the most influential factors on students' enrollment in vocational education and training to be the work experience or employment opportunities followed by the influence of parents or guardian, advertising booklets or handbooks from institutions, performance in school subjects, personal experience, study at a college or university, personal friends and employers. This study shows that there is not one overwhelming particular influence for each person; instead

there is a combination of influences, each contributing but not singularly conclusive. The choice to be enrolled in a vocational course is a personal decision related to individual goals, making it vitally important to identify, comprehend and establish those goals. Moreover, the study identified additional influences regarding enrollment in CTE such as open day institutions, information sessions held by the supplier of CTE, information received through the mail, media advertising, and the individual participant.

Perceptions of Career Technical Education

The educational context is having an impact on CTE. The participation of students in CTE is changing. School reform, developing social and economic circumstances, and additional issues are shaping the accessibility of interest in CTE programs. A general concern in the CTE community has been that rising college aspirations and stress on academic improvement might decrease students' participation in CTE (Levesque, Lauen, Teitelbaum, Alt, & Librera, 2000). Traditionally, students have taken CTE courses as the way to be prepared for entry-level jobs after high school. Trying to achieve this goal called for acquiring abilities in a specific area. Students were motivated to focus on taken courses to fully attain training and have more opportunities for their potential employers. This goal has been supported by federal law, specifically in Perkins II and III that support school implementation of and student participation in sequences of CTE courses; however the trends in CTE course enrollment has been toward exploring instead of concentrating (Silverberg, et al., 2004). In recent decades,

students leaving high school have completed at least one CTE course and some have taken several (Silverberg, et al., 2004).

CTE is offered at the high school level in three main sites: Comprehensive high schools, full time CTE high schools, and area or regional CTE schools serving multiple high schools (Silverberg, et al., 2004). CTE schools are considered to provide a superior quality of vocational education than comprehensive schools because of their quality equipment and services and the variety of training that these particular institutions offer. Full time CTE high schools and comprehensive high schools served by area CTE schools offered more programs, on average, than comprehensive schools not served by area CTE schools. Moreover, full time CTE high schools offered the largest number of on-site occupational programs (Levesque, et al., 2008).

Currently, CTE is optional for high school students. Motivated by parents, students make the decision to be enrolled in vocational high school or area vocational school courses if one of the options is available. In comprehensive high schools, students make the decision of taking CTE courses instead of other elective offerings such as art, music, or more advanced academic courses (Silverberg, et al., 2004). The optional character of CTE has significant repercussions for policy because efforts to improve the rigor or structure of vocational education will likely affect how many and which students participate.

> All students, including CTE students, will be impacted by adequate yearly progress (AYP). The goal that all students will be able to perform at a proficient level by 2014 means that states and locals will be intensely focused on student achievement. Some have forecasted that this focus on academics will result in a

> reduction of CTE programs. In some states we are already seeing increased courses required for graduation, therefore reducing the time available to students to take career technical courses. This falsely assumes that simply taking academic courses will increase academic achievement. It also reinforces the unfortunate belief that students must take either career technical or academic education (Phelps, 2002, p. 6).

Negative Perceptions

CTE is a significant educational opportunity for high school students; however, the value of CTE is not fully appreciated because of the negative perceptions that people have about CTE. Negative perceptions about CTE impact students' enrollment decisions. From the limited amount of information available, it seems that people support the idea that CTE is suitable for non-college bound students (Cohen & Besharov, 2002). However, findings from research show that 60% of students from CTE concentrators are going to college after high school as compared to 72% of students in a college preparation program (Gray, 2004). The prejudice regarding CTE sometimes is supported by parents who seem to prefer that their children receive the traditional academic curriculum. Part of the dilemma is the prejudice against blue collar jobs, and the idea that CTE is suitable for someone else, but not for their own children.

Another negative perception is that CTE offers a poor quality education (Cohen & Besharov, 2002). The perception that the curriculum offered by CTE is of inferior quality is affecting CTE because it has been seen as appropriate only for those students who are unable to satisfy the demands required for college preparation. There is a general belief that CTE, instead of improving student's future career and educational

options, will be an obstacle in reaching a promising future. However, the potentially enriched environment that CTE has to offer students with significant learning through real world learning experiences is underestimated by this prejudice against CTE. Research shows that the image of CTE is improving. The course-taking pattern of high school graduates between 1999 and 2005 revealed that about 91-92% of students took at least some CTE coursework, and graduates received, on average, 2.9-3.0 CTE credits, which is comparable to three year-long courses (Levesque, et al., 2008).

Programs offered by CTE often were directed to students with specials needs, students with low levels of academic achievement, or those having behavioral problems (Silverberg, et al., 2004). As a result, CTE has been labeled to be appropriate only for those students. Numerous studies have demonstrated how effective CTE is for students with special needs. Special needs students enrolled in CTE have more possibilities to graduate from high school, get well-paid employment, or to be enrolled in college (Gray, 2004). Furthermore, CTE is helping to decrease the dropout rate of high school students by providing meaningful learning experiences that help students to be engaged in the coursework (Gentry, Peters, & Mann, 2007). Over time, this stigma has gradually been changing to a more inclusive attitude. Findings provide evidence as to how CTE has a positive image with high school seniors in that about 80% consider that the career-technical curriculum is designed for students of all ability levels (D. Gaunt & Palmer, 2005).

Positive Perceptions

Research has identified positive aspects of CTE. For instance, Silverberg, et al (2004) found, in a focus group discussion with CTE students, that students' participation in CTE programs helped them to select or prepare for a college major, to gain career exposure, to provide a fallback strategy, to enrich everyday life, and to balance the pressure of academic course work. Gentry, Peters, and Mann (2007) compared the perceptions of general and talented students. The main finding from this study shows that both talented and average high school students have positive perceptions of CTE. The four main topics emerging from this study include autonomy, effective caring teachers, students with similar interest, and relevant content in an applied setting.

Perceptions about MTC

An important area for this study is the student attitudes toward Meridian Technology Center (MTC). The MTC purpose statement explicitly identifies areas in which it is offering training and meeting the needs for career and personal growth in the community. A student's perceptions and attitudes toward MTC are prospective factors that might influence a student's decision to enroll in the architecture and construction career cluster programs. Since students are members of the community where MTC is located, this might be considered a significant influence in a student's decision to be enrolled in CTE. The vision for MTC states:

> Meridian Technology Center is an adaptable, quality-driven technology training center dedicated to improving the future for everyone in the communities we serve. We will work together to: identify the needs of the communities and deliver the best programs possible to meet those needs, assist our clients to

> envision and achieve their life goals, be the leader for economic development, be the most efficient and valuable public resource to the communities, establish Meridian Technology Center as the employer of choice in North Central Oklahoma, ensure that we are responsible stewards of all funds available to us, achieve our vision and fulfill the mission to make dreams become realities at Meridian Technology Center (Center, 2008).

This study is not intended to explore or describe to what extent the services offered by MTC are beneficial to the community, but the results may show how the reputation and the variety of educational services offered by MTC have an impact on student decisions to enroll in CTE.

Summary of Literature Review

Career and Technical Education is an important career preparation option for students because it provides knowledge and skills aligned with academic standards that are required in higher education and occupations in current developing careers (Education, 2008). CTE provides a wide range of possibilities to students that can assure students' success. Currently, one issue of great concern is the enrollment in CTE programs. Therefore, it is important to describe the main factors that influence students' decisions in order to understand how these factors influence curricular decisions when students engage in their career field decision-making process.

Many of the studies that were examined in this literature review identified both influential and informational sources as important in the decision-making process. The literature on career education identifies parents/guardians, schools, family, friends,

counselors and teachers as the main influencers in enrollment decisions (Diemer, 2007; Esters & Bowen, 2004; D. P. Gaunt, 2005; Johnson, 1987; Maxwell, et al., 2000). Although there is no consensus about the relative influence of the sources, every situation has its own application. However, there are other factors that have an influence on a student's decision to enroll in a CTE program such as: interest and persons close to students, observations of someone doing the job tasks, anticipated ease of finding employment, projected earnings, the distance a student must travel to attend the career technical center, the issue of possibly being away from home, advertising booklets and handbooks from institutions, performance in school subjects, personal experience studying at a college or university, and personal friends and employers (D. P. Gaunt, 2005; Johnson, 1987; Maxwell, et al., 2000).

Students' perceptions and attitudes toward CTE are prospective factors that might influence students' decisions to enroll in CTE courses. The educational context is having an impact on CTE. The participation of students in CTE is changing. School reform, developing social and economic circumstances, and additional issues are shaping the accessibility of an interest in CTE programs. Currently, the access to CTE is being challenged because of the accountability goals of the No Child Left Behind Act (NCLB). Schools need to meet the adequate yearly progress (AYP), but that is only possible if students have a score of proficiency at or above state assessment levels which NCLB mandates by 2014 (Phelps, 2002). Although this is required only for core academic courses, it is causing students to be focused on academic courses, reducing the time available for students to take CTE courses. Currently CTE is optional for high school or area vocational school courses if one of these options is available. The optional character

of CTE has significant repercussion on policy because efforts to improve the rigor or structure of vocational education will likely be affected by how many and which students participate.

The perception toward CTE is another factor that is affecting CTE. Career and Technical Education is a significant educational opportunity for high school students; however, the value of CTE is not fully appreciated because of the negative perceptions that people have about CTE. Negative perceptions about CTE impact students' enrollment decisions. From the limited amount of information available, it seems that people support the ideas that CTE is suitable for non-college bound students; that CTE offers a poor quality education (Cohen & Besharov, 2002); and that CTE is suitable only for students with specials needs, students with low levels of academic achievement, or those having behavioral problems (Silverberg, et al., 2004). Positive perceptions of CTE are being overshadowed by the negative perceptions. Research has identified several positive aspects of CTE. For instance, Silverberg, et al (2004) found that students' participation in CTE programs helped them select or prepare for a college major, gain career exposure, provide a fallback strategy, enrich everyday life, and balance the pressure of academic course work. Gentry, Peters, and Mann (2007) found that students consider that CTE helps to boost students' autonomy, that CTE teachers are effective and caring teachers, that students share similar interests and relevant content in an applied setting of CTE.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this research study was to explore and describe the demographic, influence and information factors that influence students' decisions to enroll in a CTE course at Meridian Technology Center (MTC). The justification for using a descriptive survey approach is provided. The sampling procedure, research design, and instrumentation are described in this chapter. The process of data collection and the data analysis are also described. The research questions that are the focus of the study are:

1. What are the personal and situational characteristics of students enrolled in the architecture and construction career cluster at Meridian Technology Center?
2. What are the sources of information that lead to student awareness of the architecture and construction career cluster programs at Meridian Technology Center?
3. What are the factors that influence students to enroll in the architecture and construction career cluster programs at Meridian Technology Center?

Research Design

The problem was analyzed using a descriptive design and a cross-sectional survey methodology. Unlike experimental studies that test an idea (or practice or procedure) to establish its effects on an outcome, surveys are descriptive in nature and are used to obtain information from larger groups of participants (Stringer, 2008). The cross-sectional survey design which collects information from people at one point in time is useful to describe current attitudes, beliefs, opinions, and practices of the population studied (Creswell, 2007). Through the cross-sectional survey variables, such as the enrollment and demographical information, and influences on students' enrollment decisions and attitudes toward the MTC were studied. Defining the status of the targeted population in this study, with respect to certain variables, with the purpose of measuring and describing what currently exists, was compatible with the purpose of the study.

A cross-sectional survey methodology was chosen as the method of research for the following reasons (Creswell, 2007):

1. The ability to use consistent information to allow the researcher to better describe the problem;
2. The need to have consistent results to enable the researcher to understand trends about the population studied;
3. The goal of the researcher to utilize a data collection approach that will result in drawing appropriate conclusions when the data are analyzed, and;
4. The availability of the population.

Access and Permission

The school selected as the place to conduct the study was MTC, due to the variety of CTE courses offered at the school and the convenient accessibility for the researcher of the school. After obtaining the proposal approval from the research committee, obtaining the Institutional Review Board (IRB) approval (see Appendix C) was the next step. IRB required a summary of the procedures in the research and evidence that the research study will offer certain protection to participants. Moreover, to obtain the IRB approval it was necessary have the written approval from the MTC Superintendent (see Appendix D). Once the IRB approval was acquired, the MTC Superintendent delegated the Assistant Superintendent the task of providing the necessary assistance to continue the process of gathering data. The Assistant Superintendent had the MTC Curriculum Specialist contact the teachers and explain the research project to them. After completion of these steps, the researcher was able to contact the teachers and their adult students for the completion of the survey.

Participants

Creswell (2007, p. 152) defines population as "a group of individuals (or a group of organizations) with some common defining characteristics that the researcher can identify and study." The target population for the present study was the morning and afternoon adult student body enrolled in the architecture and construction career cluster at Meridian Technology Center, a total of 54 adult students. Convenience sampling was

used due to the proximity of the technology center to the researcher. The researcher's teaching background is in welding and drafting and MTC has similar programs which are very strong programs. Specifically one career cluster, architecture and construction, was chosen for the research study due its correlation with the researcher's teaching experience and the implementation of career cluster in the state of Oklahoma.

Career cluster are grouping of occupations and broad industries based on commonalities. There are 16 career clusters being implemented which are modeled after the "U.S. Department of Education" world of work map and the framework based on the ACT test. Career clusters are both instructional models as well as guidance component. Within the architecture and career cluster there are the following courses at MTC: welding technology, air conditioning & refrigeration, electrical technology, masonry, computer-aided drafting, and precision metal fabrication. These courses are representative of the designing, planning, managing, building and maintaining the building environment pathways of the architecture and construction career cluster.

All respondents were enrolled in a CTE course within the architecture and construction career cluster. A total of thirty-seven students (n=37) enrolled in eight courses participated in the research study and served as convenience sample based in the availability and willingness to complete the survey. Provisions were made to assure that every one of the adult students taking the class was present at the time the survey was administered. Multiple efforts were made to increase the number of surveys completed. The researcher visited the classrooms of MTC eight times.

Instrumentation

Instrument selection

The survey instrument that was used in the research study is titled: “Factors influencing students’ decisions to enroll in the architecture and construction career cluster programs” (see Appendix A), which was previously used in the study “Factors perceived to influence students decisions for entering the welding technology program” (Sandford, 1997). Written permission (see Appendix B) from the original author was obtained prior to using it in this study and the instrument was not modified or changed. The test is a 49-item instrument designed to assess the main influences in students’ decisions to enroll in a CTE program. The test contains five sections: enrollment status, influences, attitudes toward MTC, open-ended questions, and demographic information.

The first section addresses enrollment status of the respondents. The aim of this section was to provide information to describe the participants’ previous experience with MTC and the program selected, student educational and career goals, and general information awareness. The checklist format was used in this section (Sandford, 1997).

The second section was an inventory of the areas of influence and information which may influence students’ decisions to enroll in a CTE program at MTC. Fifteen potential influences and an “other” influence item were ranked using a Likert-type scale, ranging from “not influential” to “very influential.” The “other” item encouraged respondents to identify additional influences that may not have been listed in the questionnaire. This format was considered proper and practical in order to obtain information on the degree of influence which may have affected students’ decisions to enroll in CTE courses at MTC (Sandford, 1997).

Section two also incorporated two checklist format questions. A list of potential sources of information that the participant could have accessed or been exposed to was shown, with directions to check all that apply. Also, a list of potential sources of influences that have influenced participant decisions was listed, with directions to check the strongest source. In both questions an "other" source of influence was added to provide extra opportunities for participants to answer (Sandford, 1997).

The third section was designed to measure attitudes of participants toward MTC. A Likert-type scale ranging from "do not agree" to "strongly agree" was used. Participant regarding the accessibility of MTC, the importance of students to the success of MTC, and educational opportunities MTC provides after high school, were some of the attitudes surveyed (Sandford, 1997).

The fourth section contained two open-ended questions that prompted students to identify sources of information and influences not previously mentioned. Open-ended questions were ideal because they allowed participants to create their own responses according their own experience instead of the researcher's experience.

The fifth section addressed students' demographic information. Demographic information was collected for descriptive purposes. Gender, ethnic or cultural status, income, age, and highest level of education were some of the demographic data gathered in the survey (Sandford, 1997).

The instrument was designed in a booklet form (5 ½" X 8 ½") and included instructions for responding to the survey, a concise explanation of the purpose and need for the questionnaire, and the significance of participants' efforts to provide complete responses to the best of their ability.

Validity and Reliability

The validity and reliability of the survey instrument used was established its author Ph.D., Brian Sandford using known and accepted methodology for establishing both validity and reliability as described below (Sandford, 1997).

Validity

Internal validity of the items on the instrument was established by designing a questionnaire that was representative of all the possible questions the researcher could ask about the content. Special attention was given to both unclear questions that could lead to subjective interpretation, speculation, and ambiguity, and unclear instructions that could lead to some non-random or systematic errors. A panel of experts (n = 6) reviewed the instrument and checked content and face validity. Face validity was addressed by designing a questionnaire that had the "look" and "feel" that it would measure what it was intended to measure (Sandford, 1997).

Reliability

Reliability of the instrument was addressed by the original researcher using a test-retest procedure to examine to what extent the scores from one sample are constant over time from one test administration to another (Creswell, 2007). The pilot test group was a group of 13 students that was very similar to the target population. The test was applied twice on different occasions using the same instruments and the same environment. Percentage of agreement for the first section, which addressed enrollment status, varied from 77% to 100%. Percentage of agreement in the second part of the instrument,

addressing influences, varied from 77% to 100% with the exception of the item "cost" that achieved a 69% level of agreement; however, this item was left in the instrument based on the researcher's premise that the term "cost" was self explanatory and could not be clarified to any beneficial degree by additional direction or the inclusion of descriptive objectives. In part two, concerning sources of information, percentage of agreement was 85%. Internal consistency was established to ensure items are of the same domain, using a Cronbach's coefficient alpha for the summated scales. For part three, concerning attitudes of respondents toward the institution, the alpha coefficient was 0.79 (Sandford, 1997).

Data Collection Procedures

The survey was administered to the adult students in MTC enrolled in the architecture and construction career cluster, with prior authorization from the MTC Superintendent and instructors (see Appendix F and G) of all courses. In some programs, adults attend the same class all day and in other programs attend class only half day. Adult students, both full-time and part-time, completed the survey only once. The courses surveyed were the following: welding technology, air conditioning & refrigeration, electrical technology, masonry, computer-aided drafting, and precision metal fabrication. Teachers were contacted by the researcher in order to describe the project to them and obtain their authorization to apply the survey. After obtaining their authorization, the time to administer the survey was scheduled. The survey was administered by the researcher. Student participation was voluntary. Since there was no

follow-up study and the study was anonymous, no signed consent was necessary; however, an information sheet (see Appendix E) was provided for each student to read where the purpose of the research study was described and pertinent information about the research study was given. Also described were students' rights to protect themselves as participants. By completing the survey, students gave their consent to participate in the research study.

Each student's participation involved completing a questionnaire, which took approximately thirty minutes. The survey was administered in their instructional classrooms. A brief description of the questionnaire, as well as instructions for completing the survey, was provided (see Appendix H). Students were free to choose not to participate or to withdraw from the research study at any time without penalty. Students were told that by completing the survey their grades in that course or any other course would not be affected. The instructors were present in the classroom only during the introduction and not during the data collection.

The researcher remained in the classroom to answer possible questions that could aid in a better understanding of the content of the survey. However, special attention was given to not provide assistance that could manipulate or guide the participants on how to answer or how they should feel about the question. Once completed, the survey participants returned the survey to the researcher. No second visit was necessary because provisions were made to assure full attendance on the day the survey was administered.

In the architecture and career cluster there are eight programs with a total of 54 students. Two instructors chose not to participate. The researcher was successful in

collecting data from 37 students representing six programs for a participation rate of 68.52%.

Explanation was given to the students that, although there might be no personal benefit for them, the possible benefit of their participation would be to contribute to the understanding of who and what does or does not influence students when making educational choices. Moreover, results from the study could also provide useful information to those concerned with marketing and recruitment.

Data Analysis

The aim of this research study was to explore and describe factors influencing student decisions to enroll in the architecture and construction career cluster; descriptive statistics were appropriated as the analysis method for the data collected. Descriptive statistics are appropriated only to the members of a sample or population from which data have been collected (Urdan, 2005). Descriptive statistics were used to summarize the general tendency of the data and to offer an understanding of how varied the data might be (Creswell, 2007). The data were analyzed using SPSS 17.0. The analysis included frequencies, percentages, means and standard deviation. A summary of how each survey's section addressed the research questions follows.

Section I of the survey, which addressed enrollment status of the participants enrolled in the architecture and construction career cluster at MTC, was summarized using descriptive statistics. This analysis included frequencies and percentages.

Section II, that identified the influences on student decisions to enroll in a CTE course at MTC and the sources of information, was also summarized using descriptive statistics. The analysis included frequencies, percentages, means, and standard deviations.

Section III, that described student attitudes toward MTC, was summarized using descriptive statistics. However, the analysis included percentages instead of frequencies, means, standard deviations, and a summated mean under the assumption that every item contributed to the single variable of attitudes toward MTC.

Section IV, was two open-ended questions that asked students to name sources of information and influences not previously mentioned. The procedure used to analyze the data was a theme analysis as follows:

1. The data was divided in small categories while looking for common themes.
2. Later, results and emerging themes were described. This process demanded examining the data in detail; it was performed using domain analysis to organize clusters of linked terms.
3. The results were displayed in tables and a narrative was constructed to explain what was found based on the research questions.
4. The meaning of the findings was interpreted, allowing the researcher to move toward identifying predominating topics, and creating meaning about the topic studied.

Section V, which addressed the personal and situational demographic characteristics of students enrolled in the architecture and career cluster at MTC was summarized using frequencies and percentages.

CHAPTER IV

FINDINGS

Summary of Data Collection

In chapter three, the methodology was described to explain how the research questions were addressed. A total of 54 adult students are enrolled in the architecture and construction career cluster at MTC. There were 37 (68.52%) students who completed the survey. In this chapter the findings are presented. The analysis summarized the data collected from the target population. A description of the statistical analysis performed to address the research questions of the study is given. Data are reported per question in the survey in the same sequence it was presented. The survey consisted of five parts.

Part I - Enrollment Status

This section contained 10 variables. The variables and their descriptive data are presented in table 1.

1. Are you a first-time student at the Meridian Technology Center (MTC)?

   A total of 67.6% (n=25) indicated they were first-time students at MTC and 32.4% (n=12) answered they were not first-time students. A follow-up question was provided for those whose answer was no.

They were asked in what other program(s) they have taken courses. Eleven of the twelve students answered the follow-up question as follows: five students reported they had previously taken computer-aided drafting (CAD), two students said they took business, two reported industrial technology, one student reported masonry, and one student had taken automotive technology and welding.

2. Is this the first time you have taken a course in this program at the MTC?

   A total of 81.1% (n=30) indicated they were first-time students in the program. 18.9% (n=7) stated they were not first-time students in the program.

3. Are you planning to obtain a:

   □ One year certificate □ Two year certificate □ Short-term course

   □ Undecided

   Alternatives were provided and a total of 29.7% (n=11) responded they were planning to obtain a one year certificate, 54.1% (n=20) planned to obtain a two-year certificate, and 16.2% (n=6) were undecided. None were taking a short-term course.

4. In your opinion, was sufficient information about the programs available to you in order to register for the correct classes?

   A total of 83.8% (n=31) reported that sufficient information was available to them at the time they registered in the course and 13.5% (n=5) stated that the information available to them at the moment they registered was insufficient.

5. Did you receive any assistance with course selection during registration?

   A total of 78.4% (n=29) reported having assistance during the course registration and 21.6% (n=8) stated they did not receive assistance during the registration process.

6. Will it be difficult to attend this class at the time it is currently offered?

   A total of 86.5% (n=32) of the participants stated that they do not have difficulties in attending the class as it is currently scheduled and 13.5% (n=5) stated having difficulties attending the class at this time. A follow-up question was provided for those who stated difficulty attending class. Students were asked to identify the cause of the difficulty in attending the course at the time it is currently offered. Four students identified their job as being a part of the conflict and one student reported school as the cause of the conflict.

7. Were the programs at MTC your **first** choice for getting additional education during or after high school?

   A total of 67.6% (n=25) indicated that MTC was their first choice for getting additional education, while 32.4% (n=12) indicated that MTC was not their first option. A follow-up question to this item asked what their first choice for receiving additional education after high school was, if not the MTC. Eleven students responded their first choice was college over MTC. Oklahoma State University was the first choice of three students; two students indicated their first choice as Northern Oklahoma College (NOC) over MTC; one of them

specified the Farm and Ranch Management program as his choice over MTC; one student responded his option was Highland Community College; one student indicated his option was DeVry University of Kansas City; and three others indicated that MTC was not their first option but they did not state their first option.

8. Do you plan on pursuing a career in the program you selected?

   A total of 75.7% (n=28) of the students intended to pursue a career in the program they currently selected, 24.3% (n=9) stated they might possibly pursue a career in the program in which they are enrolled, and none of them selected the option of not intending to pursue a career in the program selected.

9. Are you aware of other technical study programs at MTC but chose to enroll in your current program?

   A total of 89.2% (n=33) indicated they were aware of other technical study programs at MTC but chose to enroll in the program in which they are currently enrolled, and 10.8% (n=4) indicated they were not aware of other technical study programs at MTC. For the 33 participants who had knowledge of other programs but chose this program, various reasons were given. Four students indicated their interest in learning welding, fourteen students liked or enjoyed the trade in what they were enrolled, two of them indicated the use of the computer to build and design was their criteria in choosing their program, one stated that by learning the trade he can go into business with his family, one student stated the availability of jobs in that trade, one indicated the desire to further his education, one responded that the

program was the trade he works in every day, one responded that the program does not require math and computer skills, one indicated that his other options were already at its full capacity, and six students responded being aware of other technical study programs at MTC but failed to provide an answer to the follow-up question.

10. Will you decide to change programs based on how well you like this class?

    A total of 21.6% (n=8) chose “yes”, 62.2% (n=23) chose “no”, and 16.2% (n=6) were unsure.

Table 1

Enrollment status of participants (N=37).

Characteristics	*f*	%
First-time student at the MTC		
Yes	25	67.6
No	12	32.4
First course taken in the current program		
Yes	30	81.1
No	7	18.9
Participant is planning to obtain:		
One-year certificate	11	29.7
Two-year certificate	20	54.1
Short-term course	0	0
Undecided	6	16.2
Sufficient information about the programs available to register for courses		
Yes	31	83.8
No	5	13.5
No response	1	2.7
Received assistance with course selection during registration		
Yes	29	78.4
No	8	21.6

Continuation Table 1

Characteristics	*f*	%
MTC programs as the first choice for getting additional education after high school		
Yes	25	67.6
No	12	32.4
Participant planning on pursuing a career in the program selected		
Yes	28	75.7
No	0	0
Possibly	9	24.3
Participants aware of other technical study programs at MTC but chose to enroll in their current program.		
Yes	33	89.2
No	4	10.8
Will participants decide to change programs based on their experience in the present course		
Yes	8	21.6
No	23	62.2
Unsure	6	16.2

Part II - Influences

1. Influential factors on student decisions to enroll in the architecture and construction career cluster at MTC

Data about the potential influences on student decisions to enroll are provided in Table 2, giving percentages, means, and standard deviations of the potential factors that may have influenced student decisions to enroll in the architecture and construction career cluster at MTC. Degrees of influence were categorized using a Likert-type scale with the following categories: 1= very influential (VI); 2= moderately influential (MI); 3= somewhat influential (SwI); 4= slightly influential (SI); 5= Not influential (NI). Influences on student decisions having notable response characteristics (means above of 3.75 or below 1.75) are identified.

The influence "interest in learning about this occupation" had a total of 67.6% (n=25) of the responses in the very influential category. The mean is 1.46 with a standard deviation of 0.84. "Challenge to learn a new skill" which is closely related to this influence received 48.6% (n=18) of the responses in the very influential category. The mean and standard deviation that correspond to this influence is 1.68 and 0.78 respectively. The influence "want to work in industry" had 59.5% (n=22) of the participants deciding on the very influential category. The mean for this influence is 1.59 and standard deviation of 0.98.

The influence "better job opportunities" obtained 54.1% (n=20) of the responses in the very influential category. The mean for this influence is 1.73 with a deviation standard of 1.045. On the contrary, the influence "friends also enrolled in this program" had 64.9% (n=24) of the responses in the not influential category. The corresponding

mean and deviation standard for this influence is 4.00 and 1.51. "Family pressure" yielded 59.5% (n=22) of the responses in the not influential category with a mean of 4.11 and a standard deviation of 1.265.

The "other" item was added with the purpose of encouraging participants to identify additional influences not previously identified. This item received seven responses. One student indicated as very influential that MTC was more time/cost effective than other options. One student stated that having more time for family was moderately influential. One student indicated that the possibility of making personal contacts with leaders in his field was very influential. Another student considered very influential the range of skills learned at MTC. One indicated the good job pay level was very influential, and one indicated that the loss of his right leg was very influential.

Table 2

Influences on participants to enroll (n=37)

	Percentage						
	VI	MI	SwI	SI	NI	Mean	Standard Deviation
Influences	%	%	%	%	%	$\bar{X}$	SD
Interest in learning about this occupation	67.6	24.3	5.4	0.0	2.7	1.46	0.84
Want to work in the industry	59.5	32.4	2.7	0.0	5.4	1.59	0.98
Challenge to learning a new skill	48.6	37.8	10.8	2.7	0.0	1.68	0.78
Better job opportunities	54.1	32.4	2.7	8.1	2.7	1.73	1.04

Continuation Table 2

	Percentage						
	VI	MI	SwI	SI	NI	Mean	Standard Deviation
Influences	%	%	%	%	%	$\bar{X}$	SD
Courses offered in the program selected	40.5	40.5	16.2	0.0	2.7	1.84	0.90
Location	54.1	18.9	18.9	0.0	8.1	1.89	1.22
MTC instructors	43.2	27.0	18.9	0.0	10.8	2.08	1.28
MTC reputation*	32.4	29.7	24.3	8.1	2.7	2.17	1.08
Hope to start own business	35.1	29.7	16.2	5.4	13.5	2.32	1.37
Cost	40.5	10.8	24.3	10.8	13.5	2.46	1.46
Time that courses at MTC are offered	24.3	24.3	37.8	2.7	10.8	2.51	1.22
One year certificate available	32.4	18.9	27.0	2.7	18.9	2.57	1.46
Two years certificate available	24.3	13.5	21.6	8.1	32.4	3.11	1.59
Friends also enrolled in this program	10.8	13.5	5.4	5.4	64.9	4.00	1.51
Family pressure	5.4	8.1	16.2	10.8	59.5	4.11	1.26
Other	16.2	2.7	0.0	0.0	0.0	1.14	0.38

Note. 1= very influential (VI); 2= moderately influential (MI);

3= somewhat influential (SwI); 4= slightly influential (SI); 5= Not influential (NI).

*Percentages not totaling 100 are due to missing data.

2. From which of the following sources, if any, did you obtain information about your program?

For this question 12 potential sources that may have been accessed by the participants to obtain information about their program were given. Moreover, an 'other item' was provided to encourage participants to identify another source not previously mentioned. Instructions for this question were to choose all that apply. The descriptive data are show in table 3.

Participants, in choosing from the options given, said they had accessed sources of information about the MTC programs as follows. "Internet" was identified as the main source of information with 45.9% (n=17) of the responses. "Friend" and "MTC student (either past or present)" both received 32.4% (n=12) of the responses. A total of 29.7% (n=11) indicated that "high school counselor" was their source of information. A "parent" was listed as their source by 18.9% (n=5) of the respondents. "Career day or event", and "letter from the MTC" both obtained 13.5% (n=5) followed by 'other relative' with 10.8% (n=4), "newspaper" with 8.1% (n=3) and "television" with 2.7% (n=1) of the responses of participants. For the "other" item a total of 21.6% (n=8) indicated they accessed other sources besides those listed in the questionnaire. Two students identified "workforce Oklahoma in Stillwater" as the source of information, two students indicated "myself," one stated "vocational rehabilitation program," one said "MTC instructor," one noted "MTC counselor," and "short-term course" was indicated by one student.

Table 3

Sources of information accessed by participant (n=37)

Sources of information	*f*	%
Internet	17	45.9
Friend	12	32.4
MTC student (either past or present)	12	32.4
High school counselor	11	29.7
Parent	7	18.9
Career day or event	5	13.5
Letter from the MTC	5	13.5
Other relative	4	10.8
Newspaper	3	8.1
Television	1	2.7
Co-worker	0	0.0
Radio	0	0.0
Other	8	21.6

3. Who has been the single strongest influence in your decision to enroll in your program?

In relation to the single strongest influences, ten options of potential influences concerning their decisions to enroll in the architecture and career cluster programs at MTC were given to the participants. Instructions of choosing only one option also were given. Also an 'other' item was included to this item to encourage students to identify a source of influence not previously mentioned that was relevant to his/her decision. Table 4 presents the data related to single strongest influence on student decisions to enroll. "Myself" was the single strongest influence identified by participants with 56.8% (n=21). "Parents" received 21.6% (n=8) of the responses of the participants. 5.4% (n=2) indicated that "Other relative" was their strongest influence. "Friends," "spouse," "employer," and "MTC student (either past or present)" received one response each. "Co-worker," "MTC faculty of staff member," "high school counselor" did not receive any responses. The "other" item received 5.4% (n=2), one who indicated that his "physical disability" was his strongest influence and the second "other" respondents provided a response that was considered as not related to the question.

Table 4

Strongest source of influence on participant choice to enroll (N=37)

Strongest source of influence	*f*	%
Myself	21	56.8
Parents	8	21.6
Other relative	2	5.4
Friend	1	2.7
Spouse	1	2.7
Employer	1	2.7
MTC student (either past or present)	1	2.7
Co-worker	0	0.0
MTC faculty or staff member	0	0.0
High school counselor	0	0.0
Other	2	5.4

Part III - Attitudes Toward MTC

Data about the attitudes of participants toward MTC are shown in Table 5. Ten potential attitudes which participants may have toward MTC that may have influenced their decision to enroll in the MTC were provided. Percentages, means, and standard deviation are presented. Under the assumption that each item contributes to the general attitudes toward MTC a summated mean and its corresponding standard deviation is provided. Degrees of influence were categorized using a Likert-type scale with points ranging from a high (1= strongly agree) to a low (5= Not agree). Percentages reported are the largest percentage of respondents choosing that answer. Table V presents the data about student attitude toward MTC.

1. The MTC does a good job in providing educational opportunities after high school.

   A total of 45.9% (n=17) of the participants responded they strongly agreed with that statement. The mean for this attitude is 1.65 with a corresponding standard deviation of 0.68.

2. Students are important to the success of MTC.

   54.1% (n=20) of participants indicated they strongly agreed that students are important to the success of MTC. The mean for this item is 1.68 with a standard deviation of 0.91.

3. MTC is open to anyone who wants to attend.

   There were 62.2% (n=23) of the respondents who strongly agreed that MTC is open to anyone who wants to attend. The mean and standard deviation for this item is 1.70 and 1.10 respectively.

4. MTC staff personnel are helpful

   A total of 51.4% (n=19) of the participants moderately agreed that MTC staff is helpful. The mean for this item is 1.73 with a corresponding standard deviation of 0.65.

5. MTC is meant to fill the educational needs of the local community.

   A total of 48.6% (n=18) of the participants strongly agreed with the statement "the MTC is meant to fill the educational needs of the local community". The mean and standard deviation for this item is 1.76 and 0.86 respectively.

6. MTC faculty members are helpful.

   48.6% (n=18) of the participants indicated they moderately agreed that MTC faculty is helpful. The mean for this item is 1.81 and 0.70 of standard deviation.

7. A person who gets an education from MTC is more likely to receive higher wages.

   In responding to the statement that a person who gets an education from MTC is more likely to receive higher wages, 43.2% (n=16) of the participants moderately agreed, with a 1.95 mean and 0.81 of standard deviation.

8. Employers in the community like to hire people who attended the MTC.

   35.1% (n=13) of the participants strongly agreed with this item. The mean and the standard deviation for this item was 2.03 and 0.90 respectively.

9. The MTC provided me with information about the different programs available at the MTC before registration.

   A total of 54.1% (n=20) moderately agreed with this statement. The mean for this item is 2.03 with a corresponding standard deviation of 0.90.

10. The MTC is less expensive than other institutions.

    35.1% (n=13) of the participants moderately agreed that "the MTC is less expensive than other institutions." The mean for this item is 2.35 and 1.23 of standard deviation.

Table 5
Attitudes toward the MTC (n=37)

Item	Percentage					Mean	Standard Deviation
	SA	MA	SwA	SyA	NA		
	%	%	%	%	%	$\bar{X}$	SD
1. The MTC does a good job in providing educational opportunities after high school	45.9	43.2	10.8	0.0	0.0	1.65	0.68
2. Students are important to the success of MTC*	54.1	32.4	5.4	8.1	0.0	1.68	0.91
3. MTC is open to anyone who wants to attend*	62.2	18.9	8.1	8.1	2.7	1.70	1.10
4. MTC staff are helpful	37.8	51.4	10.8	0.0	0.0	1.73	0.65
5. MTC is meant to fill the educational needs of the local community	48.6	29.7	18.9	2.7	0.0	1.76	0.86
6. MTC faculty are helpful	35.1	48.6	16.2	0.0	0.0	1.81	0.70
7. A person who gets an education from MTC is more likely to receive higher wages	32.4	43.2	21.6	2.7	0.0	1.95	0.81
8. Employers in the community like to hire people who attended MTC	35.1	29.7	32.4	2.7	0.0	2.03	0.90
9. MTC provided me with information about the different programs available at MTC *before* registration	27.0	54.1	8.1	10.8	0.0	2.03	0.90
10. MTC is less expensive than other institutions	27.0	35.1	24.3	2.7	10.8	2.35	1.23

Note. 1= strongly agree (SA); 2= moderately agree (MA); 3= somewhat agree (SwA); 4= slightly agree (SyA); 5= Not agree (NA).

Demographic characteristics of participants-personal (n=37)

Summated mean = 1.87 SD = 0.50

*Negative items were reversed scored

Part IV - Open-ended Questions

Two open-ended questions were provided to participants. These two questions were related to participant attitudes toward MTC. The purpose of these two questions was to provide the opportunity for participants to bring their own words into the study and produce responses that perhaps related to their decision to enroll in a CTE course at MTC based upon their attitudes toward MTC. Answers to these questions are verbatim including any spelling or grammar error. Three main aspects emerged as reasons for why they decided to enroll at MTC:

1. High wage jobs and job security,
2. Relevant context for learning and accessibility, and
3. Career objectives and personal goals.

High wage jobs and job security.

High wages and job security was mentioned in several ways such as the possibility of having high wages at their jobs after completion of their training, the availability of job opportunities, and the chance of establishing their own business as a way to secure their future. Participant number two stated,

> I just received my AA and was looking at all my options, welding offered the most money. I wanted to be making a lot of money so I could get a solid foundation for myself, so money and my future living is why I came here.

Adult students felt encouraged by the opportunity to develop knowledge and skills in a specific occupation that would increase the range of opportunities for getting a well paid job. Participant number eight said, “I like working with my hands. I studied art

before masonry and it is like learning a new medium. Job opportunities are also available with good pay." Also participant number nine confirmed that opinion: "I know that they're important jobs that will always be around."

Students saw in MTC courses an opportunity to prepare for a career that would allow them not only to earn the income needed to cover their needs but also would provide the possibility of having their own business and guarantee them a secure future. Participant number thirty-six stated,

> I needed a career I can be interested in and I will be able to make more money than before I came to MTC, also I chose to try and take a career here so I could have my own business.

Relevant context for learning

Adult students at MTC are also aware of the importance that real learning must take place when they decide to choose a career. For instance, participant number five stated,

> I was not happy sitting in a classroom at OK State. The classes were boring and I could not understand the foreign teachers. I then took a year off from school to decide what I wanted to do with my life. I decided that in high school I excelled at welding I have heard of all the money to be made in pipeline welding.

Moreover, participant number fourteen indicated, "Because NOC didn't work for me. I was more interested in what MTC offered me and still get college credit from NOC for 8.00 hr."

The knowledge of a person understanding his/her own learning style is an important factor in deciding what courses to take. Participant number seven indicated, "The hands-on learning is very helpful in the way I learn."

Teachers can capture the interest of students and motivate them to choose a certain path. To participant number thirteen, teachers were important when he made the decision to come to MTC. He said, "I wanted to learn a new skill from a qualified instructor; having a good teacher was very important to me."

The variety of programs offered by MTC is appealing to students when they are looking for career options. Participant number eighteen said, "I went to one year of college and decided I didn't like it. MTC had a program I was interested in more than college."

The good reputation that MTC has created through the years of serving Career and Technical Education to the Stillwater community and surrounding areas, has influenced students to decide to come to MTC. Participant number thirty-four indicated, "It has a good reputation. Completing a course will get me on to a new career."

Career objectives and personal goals.

For many of the participants, the reasons why they chose to come to MTC fit their career objectives and personal goals. Participant number seven indicated, "My future plans required me to be licensed in the trade before going into business."

In the case of participant number eight, he already knew what he wanted to study, so learning about MTC and the masonry program was what motivated him to choose MTC. He stated, "I wanted to study masonry I found the school online then met with the

instructor. I was very impressed with the facilities and the school. Tuition was also affordable and I have family in Stillwater."

The need of getting a career or changing their career was the underlying reason for deciding to enroll in the MTC. Participant number twenty-six indicated, "I need a good career and this is what will help me learn it." Participant number ten stated, "I needed to change careers and needed introduction to field." Also participant thirty-five said, "I wanted to change careers and thought this would be a good jumpstart to a new career."

Reasons to Enroll in the Architecture and Career Cluster at MTC

The second open-ended question provides reasons specifically why students chose to enroll in the architecture and construction programs at MTC.

Three main reasons emerged from the answers of participants.

1. Occupational commitment and achievement motivation,
2. Expressed interest, and
3. Using unplanned events as career opportunities.

Occupational commitment and achievement motivation.

The relationship between the individual and his or her occupation led them to have positive feelings about their occupation. Moreover, their strong implicit achievement motive resulted in wanting to improve their knowledge. Participant number thirteen said, "I was already working in this field but I wanted to specialize in one trade. I heard the masonry program at the MTC was great and the teacher very helpful." Participant number twenty said, "I want to pursue career in welding."

Because he not only has experience in but also enjoys what he is doing in the construction field, participant number thirty-five expressed, “I have experience in construction and enjoy the field, and would like to continue working in the construction field.”

Participant number thirty-six is motivated to seek new, better, and more efficient way of achieving his goal. He said, “I would like to learn more about what is done and learned in the mason and construction field.”

Expressed interest.

Participants also indicated the reasons for their occupational choices aligned with their interest in choosing a career or work that closely matched their personal style and interests. Participant number fourteen said, “Because I enjoy working with my hands and I just enjoy making things. To help other or make their job easyer [sic].”

Participant number twenty-five is satisfied with the choice he has made, and he is looking at a future based on what he is doing now. He said, “I am interested in what I am taking and want to pursue a career in it.”

For participant number twenty-seven, pursuing a career in his field seems very clear. He stated, “It’s wat [sic] I wanna [sic] do when I graduate.”

The selected program for participant number 37indicates that he is satisfied with his choice, and masonry is what he wants to do. He stated, “I like the houses that they build so I chose masonry because it’s a good career.”

Using unplanned events as career opportunities.

Participants saw in MTC a great opportunity for getting a career after unplanned events that have had an effect in their life. Participant number one said, "I suffered a dibilitating [sic] injury. MTC offered a way for me to be productive. And job ready." Also, participant number four stated,

> I wanted to pursue a career in the welding field as a short term occupation, maybe get on an oil rig somewhere make some good money and go back to school for something I would like to pursue more. But because of the changing economy I have had to change my plans because welding jobs are currently hard to get.

Part V - Demographics

Table 6 presents the demographic characteristics of participants enrolled in the architecture and construction career cluster at the MTC. Questions were presented as follows:

1. Are you : □ Male □ Female

   A total of 91.9% (n=34) of the participant were male and 8.1% of the participants were female.

2. Do you consider yourself as belonging to a cultural or ethnic minority?

   18.9% (n=7) of the participants considered themselves as belonging to a minority while 75.7% did not consider themselves as belonging to a minority.

3. Are you: □ Married □ Single

A total 18.9% (n=7) of the participants responded they were married and 81.1% (n=30) responded they were single.

4. Are you presently working: □ Full time □ Part time □ Not working

Regarding their employment status, 18.9% (n=7) of the participants indicated they were working full time, 62.2% (n=23) responded they were working part time, and 18.9% (n=7) were not working.

5. What you would say is your total gross annual income?

Total annual gross income was categorized using $10,000 increments starting at the under $10,000 category up to the $50,000 and over category. A total of 43.2% (n=16) of the participants responded less than $10,000 total gross income. 29.7% (n=11) of the participants stated having a total gross income of $10,000 - $19,999, 8.1% (n=3) declared a total gross income of $20,000 - $29,999, 8.1% (n=3) were in the $30,000 - $39,999 category, 2.7% (n=1) in the $40,000 - $49,000 category, and a 2.7% (n=1) in the $50,000 and over category of total gross annual income.

6. What is your age?

The average age of the participants was 24.62 years with a corresponding standard deviation of 6.99. The minimum age recorded was 18 years old and the maximum was 46 years old. The range was 28 years between the oldest and youngest participants.

7. How long (in years) have you lived in Stillwater or the surrounding areas?

   The minimum years of residency in Stillwater were one half year and the maximum was 30 years, with a range of 29.5. The average years of residency in Stillwater and the surrounding areas was 11.10 with a standard deviation of 9.73.

8. What was the highest level of education you have completed?

   A total of 64.9% (n=24) of the participants indicated they had a high school diploma or equivalent, 16.2% (n=6) had a certificate at technical school or community college, and 8.1% (n=3) had completed two-year associate's degree. Two students responded to the 'other' category, one has a master degree in International Studies and the second has a degree related with the army but failed to specify his degree.

9. Are you receiving any type of financial assistance while attending MTC?

   45.7% (n=17) of the participants indicated they were receiving financial assistance while attending MTC, while a 48.6% (n=18) claimed they were not receiving financial assistance.

Table 6

Demographics characteristics of participants (n=37)

Characteristics	*f*	%	Range
Gender			
Male	34	91.9	
Female	3	8.1	
Do you consider yourself belonging to a cultural or ethnic minority*			
Yes	7	18.9	
No	28	75.7	
Marital status			
Married	7	18.9	
Single	30	81.1	
Employment status			
Full time	7	18.9	
Part time	23	62.2	
Not working	7	18.9	

Continuation Table 6

Characteristics	*f*	%	Range
Total gross annual income*			
Under 10,000	16	43.2	
10,000 – 19,999	11	29.7	
20,000 – 29,999	3	8.1	
30,000 – 39,999	3	8.1	
40,000 – 49,999	1	2.7	
50,000 and over	1	2.7	
Age [a,b]			28.00[c]
Residency in Stillwater (yrs)[d,e]			29.50[f]
Highest level of education completed*			
High school diploma or equivalent	24	64.9	
1 year certificate at a technical school or community college	6	16.2.	
2 year associate's degree	3	8.1	
Other	2	5.4	
Receiving financial assistance while attending the MTC*			
Yes	17	45.9	
No	18	48.6	

[a]Mean = 24.62
[b]SD = 6.99
[c]min. 18, max. 46
[d]Mean = 11.10
[e]SD = 9.73
[f]min. 0.50, max. 30.00
*Frequencies not totaling 37 are due to missing data

On the last page of the survey document a space was provided for those students who wanted to express their ideas or comments that were related to their decisions to enroll in MTC. Many of the comments they provided can be seen as strong support for their school. For instance, one of the participants stated, "Meridian Technical College has been very helpful in attaining help and information. The teachers here really seem to care about students." Other students said,

> It is my opinion that MTC can fully train anyone who is willing to learn, at least in the masonry program. So far I have been extremely impressed with the masonry program and my teacher. It all depends what the students chooses to take away from this school,

Other comments:

- "MTC prepares you for the work force," "I believe that schools should promote it more that they do. You can learn more here than what some will lead you to believe," and "MTC is a great school, instructors are great I have learned a lot. I don't know what I would of done if I did come here. Great instructors and school. Please get MTC to have this CAD program in the pm for working adults to survive."
- Three students stated, "MTC did not inform me that I would be taking this class with a lot of high schoolers [sic]"

"Financial aid needs to do a better job of helping students support theirselves, [sic]" and "I would like for it to be easier for the people who do pay for everyone to get assistance, when it was their turn maybe they could have a chance to get some financial aid too."

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter contains a summary of the research study of factors influencing student decisions to enroll in the architecture and construction career cluster at Meridian Technology Center. Implications of the findings and recommendations for further research are also discussed. The purpose of the study was to explore and describe the demographic, influence and information factors, which influence students' decisions to enroll in the architecture and construction career cluster at Meridian Technology Center. Since the purpose of this research was to describe factors influencing student decisions, the results of the study can offer valuable information to those concerned with marketing and recruitment. Moreover, the results could also help counselors in targeting the influences that are accessible to the school. Identifying influential areas will allow counselors, teachers, and others to find strategies that can be used to make more information and opportunities available for those who are potential candidates for enrolling in vocational education.

The population of the study consisted of all adult students enrolled in the architecture and career cluster programs at MTC (N=54). The selection of courses surveyed was based on the criteria that these courses were representative of the

designing, planning, managing, building and maintaining the building environment pathways of the architecture and construction career cluster. This population was chosen because of its availability and the students' willingness to complete the survey and due to the fact that these programs represent similar programs from the researcher's teaching experience. The sample (n=37) was a convenience sample based on voluntary completion of the survey. The problem was analyzed using cross-sectional survey methodology. The survey was administered by the researcher to the adult MTC students enrolled in the architecture and construction career cluster. Findings of this research study were described in detail per questions in chapter four.

Major Findings

The following section presents the major findings from the research study and compares the findings to the theoretical framework SLTCD proposed by Krumboltz, et al. (1976). The purpose of this research study was not to test every component of the propositions relevant to SLTCD; however, these hypotheses are relevant to interpret the results from this study.

Enrollment status

1. Two-thirds of the participants indicated they were first-time students at MTC. Also 81.1% of the participants indicated that the course they were currently attending was the first course of the program in which they are currently enrolled. Some relationships may exist with Krumboltz's ACTs proposition. Students may have acted and enrolled based on being exposed to learning

opportunities in that area, but that conclusion is unclear since this study did not explore the level of exposure to CTE programs by the students.

2. Sufficient information about the programs available was provided to students in order to register for the correct class, as 83.8% indicated they had adequate information. More than two-thirds (78.4%) of the participants indicated they received assistance with the course selection during registration. A very small percentage of the participants (13.5%) stated not having enough information in order to register for the correct course. This result is congruent with Krumboltz's TASs proposition which indicated that persons are likely to express effective career decision skills when they are provided with the necessary information. The development of TASs, at least the ability to search information, could be promoted through the application of positive reinforcement for this skill.
3. The way that classes are scheduled does not represent a problem for participants to attend classes. No difficulties attending the courses as they are currently scheduled were indicated by 86.5% of the participants. Participants having a problem attending classes indicated the major cause of the conflict was their work schedule. This finding is compatible with Krumboltz's TASs proposition. TASs are learned cognitive and performance abilities that individuals use to cope with the environment and allow them to assess if the decision-making is worthy of the time and effort. It appears that these participants have been able to learn the necessary skills to cope with their environment.

4. Despite the fact that students were aware of other programs offered at MTC, 89.2% chose to enroll in the program in which they are currently enrolled. Data which addressed the career objectives of the participants indicated that 54.1% are planning to obtain a two-year certificate; 29.7% are planning to obtain one-year certificates. 75.7% of participants indicated they have plans to pursue a career in the program in which they are currently enrolled. Also 62.2% of participants stated they would not decide to change the program in which they are enrolled at present, based on how they like the class they are currently taking. These results may have connections to Krumboltz's TASs proposition. Krumboltz recognized as important in career decision-making the capacity of recognizing important decision situations, of defining the decision or task conveniently and pragmatically, and the ability to create a wide variety of choices. Participants may have decided their career objectives according the Krumboltz TASs proposition.
5. Approximately two-thirds (67.6%) of the participants indicated that MTC was their first choice for getting additional education after high school. Krumboltz's ACTs proposition suggests that an individual is more likely to be enrolled in a given occupation if that individual has expressed preference for that course or occupation. It is important to consider the fact that for two thirds of the participants their final vocational choice was determined by their initial choice.

Influential Factors and the Single Strongest Influence

1. Factors that were very influential in the decision of participants to enroll in a CTE course at MTC were their interest in learning about the occupation in

which they are currently enrolled, the desire to work in the industry, the challenge to learn a new skill, and better job opportunities. These results lend support to the Krumboltz's ACTs proposition, which states that individuals are likely to be enrolled in a given occupation if they have been exposed to learning opportunities in that area or have learned skills matching the job requirements. Educational and economic factors seem to influence the career decision making of adult students. SLTCD states that individuals should not expect to identify precisely what they are going to do nor where they are going to do it in the future (Greenhaus & Callahan, 2006). Nobody knows how interests will change, what new occupations will arise, or how new opportunities will be created. Therefore, adult students may have acted based on ideas about how to create new opportunities by enrolling in the architecture and construction career cluster at MTC.

2. Influences such as friends also enrolled in this program and family pressure indicate that those items were not influential in the decisions of participants. This finding might be related to the SOGs proposed by Krumboltz. Adult students may have decided for themselves if they fulfilled or exceeded their own expectations. Thus they knew about what is important to them and what they believe would bring them the most personal satisfaction. This also may be related to the fact that adults identify themselves as the person who was the strongest influence in their decision. The influence of knowing personally what career path they want to follow is stronger than the influence of others. Therefore, if they knew what career path they wanted to follow, the influence

that other people have on their decision can be not effective. However, without the information that supports that fact, the likelihood that is what occurred cannot be automatically assumed. This study was a snapshot of the students' career decision-making, and does not provide definite data to support this conclusion.

3. Other decision-making influences such as occupational commitment, achievement motive, expressed interest, and using unplanned events as career opportunities were identified by participants when asked about the reasons they enrolled at MTC. These results may be related to Krumboltz's SOGs proposition; vocational preferences are more likely to be articulated after persons have been positively reinforced for actions relevant to those occupations. A possible relationship is participants may have acted under the assumption that they developed new interests and want to learn how to adapt their skills to fit into the current employments needs. For many of the participants the decision to enroll at MTC may be influenced by the previous knowledge in that specific area or the previous positive reinforcement for activities pertinent to the occupation in what they are currently enrolled. Moreover, the SLTCD orient individuals to see past experiences as opportunities that can be used for present actions (Greenhaus & Callahan, 2006). Unexpected accidents or events can open new opportunities in life of individuals.

Sources of Information and the Most Common Source of Information

1. Krumboltz's proposition concerning TASs indicates that individuals are likely to express effective career decision skills and strategies if they are provided with the necessary information. This proposition may be congruent with the results obtained when participants were asked about the sources of information they have previously accessed before taking the decision to enroll at MTC. Participants identified as the main source of information the Internet, followed by friend and MTC student (either past or present). Other sources of information chosen by students with high response rates were high school counselor, parent, career day or event, and letter from the MTC.

Attitudes Toward MTC

1. Overall, students strongly to moderately agreed that MTC reputation and other factors did influence their decisions. Attitudes toward MTC were generally positive. Participants seem they are supporting the work that MTC is doing as CTE suppliers. Moreover, students identified high wage jobs and job security, relevant context for learning and accessibility, and career objectives and personal goals as relevant factors for being enrolled in the architecture and construction career cluster at MTC which was related to the attitudes toward MTC. SLTCD analyzes the impact on the career decision-making process of such factors as genetic predispositions, environmental conditions and events, learning experiences, and cognitive , emotional and performance response and skills (Mitchell & John D. Krumboltz, 1990). The interaction between these factors creates a variety of career options for individuals. Environmental

conditions and events include factors such as the nature and number of job opportunities, the number and nature of training opportunities, social policies, rate of return for various occupations, technological developments, educational systems and others (Mitchell & John D. Krumboltz, 1990). These factors may have influenced student decisions, leading them to take the decision to be enrolled at MTC based on the positive image that MTC has, or considering MTC as an opportunity to be trained in the occupation they selected.

Demographics

1. Participants in this research study were mainly male, single, part-time employed, with a high school diploma or equivalent as their highest level of education attained, with a gross annual income less than $10,000, and not considering themselves as belonging to a cultural or ethnic minority. Characteristics of the participants indicate adults who are striving to achieve and succeed educationally. Some relationship may exist with Krumboltz's ACTs; persons are more likely to take actions that lead to employment in a given occupation if they have been exposed to learning or employment opportunities or have learned skills matching the job requirements in that occupation. Being enrolled at MTC may be the product of their own estimation of their abilities and what they need to succeed in their chosen occupation.

Conclusions

1. The first conclusion addresses the first research question: What are the personal and situational demographic characteristics of students enrolled in the architecture and construction career cluster at Meridian Technology Center?

   The group of participants was very homogeneous; participants were mostly male (only three were female). This suggests that, although many of the stereotypical workplace roles for women have been removed, there is still the tendency for women to not choose those considered as male-dominated fields for their future vocational occupations. Moreover, most of the participants (75.7%) did not consider themselves as belonging to a minority and they were mainly single (81.1%). Comparing the employment status of participants, they were mainly working part time while attending classes at MTC. A small percentage of them (18.9%) were working full time or were unemployed. It seems that many participants are interested in a career and are creating for themselves perceptions of career opportunities and even career progress. Participants perceive that opportunities to achieve their career aspirations are available at MTC. Many people measure their career success in terms of accumulated expertise, achievement in the face of a new challenge, and the continuing gaining of a reputation for skill (Zabusky & Barley, 1996). Participants seem to be trying to balance work and study in order to achieve better opportunities in the near future.

The average participant's age was 28 years. The age of participants ranged from 18 to 46 years old. One possible explanation is that MTC is open to provide opportunities for occupational attainment for all ages and a wide age range of participants take advantage of those opportunities. The educational level of the participants was similar. Over two-thirds possessed a high school diploma, the remaining having certificates from technical schools, two-year associate degrees and masters degrees. Clearly, responses indicate that to attend MTC, the level of education attained is not a barrier to the opportunity to build new skills and be trained for a variety of careers. Therefore, by making and enacting realistic career choices, those who want to attend MTC can move forward to train and obtain a career.

For about half of the participants, the gross annual income was less of $10,000. About 30% reported having a gross annual income less than $19,999. Nearly half of participants were receiving financial assistance while attending MTC. This is congruent with findings of other research studies in which, students identified as being economically disadvantaged were found in higher concentrations in CTE (Levesque, et al., 2008; Silverberg, et al., 2004).

2. The majority of the participants were students at MTC for the first time. In addition, 81.1% indicated they were taking classes within the architecture and construction career cluster for the first time. Only seven students had previously taken classes in the program in which they are currently enrolled. Information provided by participants is valuable because what they have experienced during the decision-making process that led them to enroll at MTC

can provide insights into what influences students to decide about the CTE career path they want to follow.

3. Availability of registration information for specific courses was not an obstacle for participants in deciding which courses to select. This may suggest that MTC units in charge of the dissemination of information are effective in reaching those individuals who are targeted as users of specific registration information. Additionally, more than two-thirds of the participants said they received the necessary assistance during the registration process. The remaining third did not receive assistance. This could possibly be for a variety of reasons: they either did not need assistance, or the assistance provided was not what they expected, or they did not consider that the attention received was intended as assistance for the registration process.
4. Schedules for classes offered by MTC seems to be satisfactory for the adult students enrolled in the architecture and construction career cluster program since approximately 87% of the participants stated they are not having any kind of problem that interferes with attendance for the classes. However, the remaining 13% reported their job and school as the main reason for attending classes at the time they are offered. One possible explanation for that is that MTC is taking into account the environment and social roles of students when courses are scheduled. Also, it is possible that adult students are mature and they understand how decisions are made and how the scheduling allows them to manage progression in their learning and training. Therefore, they utilize time management in order to achieve their career goals.

5. The majority of participants had their career objectives clearly established. More than half are planning to obtain two-year certificates while nearly one-third is planning to obtain a one year certificate. The remaining 16% was undecided on which option to take. This might indicate that participants already had career maturity. Career maturity can be understood as "the individual's readiness for coping with tasks of career development as compared with others handling the same tasks" (Kidd, 2007, p. 100). For those participants that remain undecided, it is natural that at some point in life people experience a certain amount of indecisiveness. This might, in fact be beneficial since, after exploring their options, they can make more informed decisions. Two-thirds of the participants indicated MTC as their first choice for getting additional education after high school. The remaining third, for whom MTC was not their first choice, indicated college as their first choice. Moreover, participants seem to have clearly established career objectives in the long term. More than three-fourths of the participants have plans to pursue a career in the program in which they are currently enrolled.
6. Although participants were aware of the existence of other programs at MTC, they were confident in their decision to register for the program in which they are currently taking classes. Approximately 90% stated having knowledge of other technical programs at MTC. Reasons given for making the decision to register in their chosen program were improving the knowledge they possess about their specific occupations and job availability. These answers are also congruent with the reasons provided by completing one of the open-ended

statements, “I am taking class(es) in the architecture and construction programs at MTC because.” Reasons given were occupational commitment, achievement motivation, expressed interest, and using unplanned events as career opportunities. This might reflect that adult students are conscious of what they want to achieve; thus, they are carefully planning, working hard, and persisting in having a behavior directed to reach their goals. Furthermore, this might explain why more than half of the participants stated they would not change the program based on how they like the class they are currently taking.

7. Factors such as interest in learning about this occupation, I want to work in the industry, challenge to learn a skill, and better job opportunities were categorized by participants as very influential in their decisions to enroll in the architecture and construction career cluster programs at the MTC. Analyzing those factors indicates they are all related to their occupational interests. Up to this point these results are consistent with those of Johnson (1987) who found that student interest, anticipated ease of finding employment, and projected earnings are some of many influential factors in student decisions to enroll in a CTE course. A possible explanation might be that participants are aware of their needs, values, strengths and weaknesses, and life-style preferences which lead them to set career goals. Maintaining career goals might stimulate a person to work hard and provide a focus to the individual’s effort (Greenhaus & Callahan, 2006). Interestingly, this group of participants, when asked about the single strongest influence, more than half identified “myself.” This might be explained by understanding that career is a notion that has meaning for

people as a separate phenomenon in its own right, as a particular domain of experience (Greenhaus & Callahan, 2006). Moreover, it is possible that participants might have an awareness of the environment that allows them to seize every opportunity to learn about themselves and the work world. Factors such as courses offered in the program, location, MTC instructors, and MTC reputation also obtained moderate rates of response taking into account both the very influential and moderately influential categories. On the other hand it is interesting to note how, to this group of participants, influences such as friends and family pressure was not influential at all. This finding is contrary to the findings in other studies where friends and family were very influential factors in the decision to enroll in a CTE program (Diemer, 2007; Esters & Bowen, 2004; D. P. Gaunt, 2005).

8. Regarding the sources of information that students may have accessed to gather information that led them to awareness and knowledge about the architecture and career cluster programs at MTC, Internet was the first source of information consulted by participants. With the advances in technology the Internet now offers new possibilities for information exchange and further collaboration among participants. Also the Internet makes opportunities available for giving and receiving more traditional forms of career support (Khapova, Arthur, & Wilderom, 2007). Considering this point of view, it is understandable that participants reported the Internet as the main source of information. Another possible explanation is that, with all the complications of daily life, not everyone has the time and money to seek face-to-face assistance

and therefore turn to the Internet to find the information needed. Other sources of information reported by students were high school counselor, parent, career day or event, and letter from the MTC.

9. Attitudes toward MTC were generally positive. Participants perceived that MTC does a good job in providing occupational training after high school. Nearly half of the participants strongly agreed with that statement. More than half of the participants strongly agreed that they are an important part of the success of MTC. Participants strongly agreed that MTC is open to anyone who wants to attend and that MTC is meant to fulfill the educational needs of the local community. Regarding the statement "employers in the community like to hire people who attended MTC," opinions of participants were almost evenly divided among the strongly, moderate, and somewhat agree categories. The 35% of participants who think that MTC is less expensive than other institutions moderately agreed with that statement. The level of agreement was moderate to the following statements: MTC staff and faculty are helpful, a person who gets an education from MTC is more likely to receive higher wages, and the MTC provided me with information about the different programs available before registration. However, looking at both of the categories strongly agree and moderately agree, these items received a high percentage of agreement. Looking at the responses of participants, it could be stated that participants categorize as satisfactory the services provided by MTC, and as a result, they support the efforts of MTC. Since "satisfaction is the outcome from the match between the individuals' vocational interest,

motivational needs, and values and the extent to which the organization is able to appropriate rewards and reinforcement of these" (Greenhaus & Callahan, 2006, p. 508) this might explain also why participants are willing to recognize the prestige and authority of MTC as suppliers of CTE.

Recommendations for Practice and Research

As a result of this study the following recommendations are offered.

1. To overcome the gender differences in career orientation, efforts might be directed to provide the female population with the necessary information that might become the foundation for both improved self-awareness in relation to work as well as the base on which to build occupational exploration and career search strategies. If counselors begin with the assumption that there are a lot of limitations, then more can be done to change the female participation in CTE courses at MTC.
2. First impressions are important. The majority of the students were first time students at the MTC and first time students in the program in which they are currently enrolled. Therefore, it is important that MTC meet the expectations of these students by maintaining the appearance of the programs, the currency of equipment, the engagement of the teachers, and a positive classroom environment.
3. Since more than two-thirds of the participants had a high school diploma as the highest level of education attained and near one third of the participants

stated that MTC was not their first choice in getting additional education after high school, a more intensive campaign that offers enough information to allow students to make more informed decisions that fulfill both job demands and their own needs can be effective to promote CTE courses among high school students.

4. MTC needs to continue providing information in the manner they are and verifying that all students consistently get the information. Participants stated having enough information to register for the correct class. Moreover, they indicated Internet as their main source of information. Internet can be now seen as an important way of receiving career support because the opportunity of reaching a wide range of people using other approaches might be difficult to access. The MTC website needs to be updated regularly in order to provide current information that is required for potential MTC students. Every resource that counselors believe is helpful to potential students should be made available and should be as user-friendly as possible.
5. Friends and MTC students (either past or present) remain a significant part of the enrollment landscape. They were identified by participants as the most consulted sources of information at the time they were seeking information. When potential students learn about MTC from inside sources they are more likely to believe that they are provided with more accurate information which can lead to more realistic expectation about MTC. One strategy would be to have some form of reward for example for the students who refer or recommend MTC to potential students. Therefore, accessing these groups and

the social networks of students as a medium to circulate information about MTC can be worthy as a strategy to attract potential students.

6. Although nearly two-thirds of participants stated they would not change the program in which they are currently enrolled, the remaining third indicated they would or were unsure whether they would. These students appear to be inappropriately enrolled in the architecture and construction career cluster program. Perhaps they do not have clearly defined academic and career goals; they considered their options inappropriately; they did not have enough information about their options; or, they have a poor understanding of the work involved in their field of study; therefore, attention should be provided to these students in order to help them to make a decision on the basis of their interest and their perceptions that the career will permit them to fulfill their interests.
7. The strongest influence for the adult students in their decision to enroll in the architecture and construction career cluster programs was "myself." Taking into account this fact, the major focus of recruitment efforts should be directed toward influencing the prospective student, instead of other influences that may or may not have the desired impact of influencing their decisions to enroll at MTC.
8. The positive image of MTC and the support that participants are giving to the programs at MTC can be used as strategy to advertise the CTE programs offered by MTC. Participants' attitudes toward MTC can be used to portray an image which makes MTC very accessible, lets people ask personal

questions to be explored in a comfortable manner, and transmits an image of the CTE institution as friendly and concerned as it is perceived by current students.

9. The SLTCD theory may need to be re-evaluated based on the use of the internet and personal reliance which were found in this study. When the theory was developed the Internet was not available. In this study it is widely being used and perhaps the theory need to be updated if not already done.
10. An area that needs further analysis is the exposure of students to CTE programs before they make the decision to enroll in a CTE program. This study did not attempt to pursue this topic.
11. The present study targeted adult students as the population. Further research should be conducted to identify the factors influencing student decisions in both adults and young student groups in order to establish differences and commonalities about the main influencers at the time to make the decision to enroll in a CTE program. Both of these areas could be further explored.
12. Results describe the current adult students at MTC. It is not known whether those students that did not participate in the study are similar or dissimilar to those who participated in the study. It is also not known why two instructors chose not to participate in the research study. Thus, further research is needed.
13. Conducting a study using mixed methods would allow the opportunity to explain issues that may be difficult to comprehend using a survey as the main data collection source. The basic rationale of using mixed method is that the

strength of one collection method will offset the weaknesses of the other form (Creswell, 2007). The qualitative component will permit a deeper understanding of the factors that influence student decisions to enroll in a CTE program.

14. One area for further study would be conducting a much larger study including both large and small institutions and in rural, urban, and suburban places. The present study was conducted in a large urban CTE institution, thus results from this study are specific to this center. Demographics, sources of information, and factors influencing student decisions may or may not be similar to or representative of CTE students. Having data that involve participants from different settings can produce rich data to generalize results for specific geographical areas.

Final thoughts

This research study explored the unknown factors which lead to a decision to enroll in the architecture and construction career cluster programs at Meridian Technology Center (MTC). Variables such as the enrollment and demographic information, influences on student enrollment decisions, and attitudes toward the MTC were studied using descriptive statistics.

Findings from this research study indicate that the group of participants was very homogeneous: mostly males, part-time employed, high school diploma as the highest level of education achieved, with a gross annual income less than $10,000. Regarding

their enrollment status, the majority was first time students at MTC taking classes for the first time in the program currently enrolled. Influential factors such as the interest in learning about the occupation, desire to work in the industry, challenge to learn a new skill, and better job opportunities were identified as the main factors that may have influenced their decision to enroll in a CTE program at MTC. The person who was the strongest influence in their decision to enroll at MTC was identified as "myself." The main source of information accessed by students before making the decision to enroll was the Internet. Overall, participants have a positive image of MTC, and they are supportive of MTC programs. Results from this research study cannot be generalized to the population studied, thus further research in this area is needed.

REFERENCES

Center, M. T. (2008). Meridian Technology Center: About us - vision Retrieved 9/20/2008, from http://www.meridian-technology.com/about/Vision.asp

Cohen, M., & Besharov, D. J. (2002). The role of career and technical education: Implications for the federal government Retrieved 09/20/2008, from http://www.ed.gov/offices/OVAE/HS/besharov.doc.

Creswell, J. W. (2007). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence*: Center for the Study of Teaching and Policy: A National Research Consortium.

Diemer, M. A. (2007). Parental and school influences upon career development of poor youth of color. *Journal of Vocational Behavior, 70*(3), 502-524.

Education, U. S. D. (2008). The Carl D. Perkins Career and Technical Education Improvement Act of 2006 Retrieved 09/09/08, from http://www.ed.gov/policy/sectech/leg/perkins/index.html

Esters, L. T., & Bowen, B. E. (2004). Factors influencing enrollment in an urban agricultural education program. *Journal of career and technical education, 21*(1), 25-37.

Gaunt, D., & Palmer, L. B. (2005). Positive student attitudes toward CTE. *Techniques: Connecting Education & Careers, 80*(8), 44-47.

Gaunt, D. P. (2005). *High school seniors' perceptions of career and technical education and factors influencing their decision to attend an area career technical center.* Unpublished Ph.D., Western Michigan University, Michigan.

Gentry, M., Peters, S. J., & Mann, R. L. (2007). Differences between General and Talented Students' Perceptions of Their Career and Technical Education Experiences Compared to Their Traditional High School Experiences. *Journal of Advanced Academics, 18*(3), 372-401.

Gibson, J. L., Griepentrog, B. K., & Marsh, S. M. (2007). Parental influence on youth propensity to join the military. *Journal of Vocational Behavior, 70*(3), 525-541.

Gray, K. (2004). Is high school career and technical education obsolete? *Phi Delta Kappan, 86*(2), 128-134.

Greenhaus, J. H., & Callahan, G. A. (Eds.). (2006). *Encyclopedia of career development* (Vol. 2). Thousand Oaks, CA: Sage Publications, Inc.

Grotevant, H. D. (1979). Environmental Influences on Vocational Interest Development in Adolescents from Adoptive and Biological Families. *Child Development, 50*(3), 854-860.

Grotevant, H. D. (1987). Toward a model of identity formation. *Journal of adolescent research, 2*(3), 203-222.

Gunz, H., & Peiperl, M. (Eds.). (2007). *Handbook of career studies*. Thousand Oaks, CA: Sage Publications, Inc.

Hannan, B., Fergurson, S., Pollock, J., & Reeders, E. (1995). *Charting a course: Students' views of their future*. Retrieved 08/30/2008. from http://www.voced.edu.au/docs/dest/TD_TNC_47_20.pdf.

Hardin, E. E., Leong, F. T. L., & Osipow, S. H. (2001). Cultural Relativity in the Conceptualization of Career Maturity. *Journal of Vocational Behavior, 58*(1), 36-52.

Hotchkiss, L., & Borow, H. (1996). Sociological perspective on career choice and attainment. In D. Brown, L. Brooks & Associates (Eds.), *Career choice and development* (pp. 281-336). San Francisco, CA: Wiley.

Johnson, F. C. S. (1987). Factors influencing enrollment in a vocational oriented course: Perceptions of students and teachers. *Family and consumer science research journal, 16*(1), 46-56.

Jordan, J. P. (1963). Exploratory behavior: The formation of self and occupational concepts. In D. E. Super, R. Starishevsky, N. Matlin & J. P. Jordan (Eds.), *Career Development: Self concept theory*. Princeton: College Entrance Examination Board.

Khapova, S. N., Arthur, M. B., & Wilderom, C. P. M. (2007). The subjective career in the knowledge economy. In H. Gunz & M. Peiperl (Eds.), *Handbook of career studies* (pp. 114-130). Thousand Oaks, CA: Sage Publications, Inc.

Kidd, J. M. (2007). Career counseling. In H. Gunz & M. Peiperl (Eds.), *Handbook of career studies* (pp. 97-113). Thousand Oaks, CA: Sage Publications, Inc.

Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. *The counseling psychologist, 6*(1), 71-81.

Levesque, K., Laird, J., Hensley, E., Choy, S. P., & Cataldi, E. F. (2008). *Career and technical education in the United States: 1990 to 2005 (NCES 2008-035).* Washington, DC: National Center for Education Statistics, Institute of Education Science, U.S. Department of Education.

Levesque, K., Lauen, D., Teitelbaum, P., Alt, M., & Librera, S. (2000). *Vocational education in the United States: Toward the year 2000* (No. NCES 2000-029). Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

Maxwell, G., Cooper, M., & Biggs, N. (2000). *How people choose vocational education and training programs: Social, educational and personal influences on aspiration*. Leabrook, South Australia: National Centre for Vocational Education Research.

Mayfield, D. (2005). *Finding Martha: Social networks that influence student enrollment into vocational education programs in the community college.* Unpublished Ed.D., University of Southern California, United States, California.

Mitchell, L. K., & John D. Krumboltz (1990). Social learning approach to career decision making: Krumboltz's theory. In D. Brown, L. Brooks & Associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed.). San Francisco, CA: Jossey-Bass Publishers.

Phelps, J. D. (2002). *The no child left behind act of 2001: Opportunities for career technical education*. Washington, DC.: National Association of State Directors of Career Technical Education Consortium.

Sandford, B. (1997). *Factors perceived to influence students decisions for entering the welding technology program at the Doña Ana Branch Community College.* Unpublished M.A, New Mexico State University, New Mexico.

Sauermann, H. (2005). Vocational choice: A decision making perspective. *Journal of Vocational Behavior, 66*(2), 273-303.

Savickas, M. L. (2007). Occupational choice. In H. Gunz & M. Peiperl (Eds.), *Handbook of career studies*. Thousand Oaks, CA: Sage Publication, Inc.

Silverberg, M., Warner, E., Fong, M., & Goodwin, D. (2004). *National assessment of vocational education: Final report to congress*. Washington D.C.: Office of the Under-secretary, Police and Program Studies Service, U.S. Department of Education.

Stringer, E. (2008). *Action research in education* (2nd ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.

Urdan, T. C. (2005). *Statistics in plain English* (2nd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc., Publishers.

Walsh, W. B., & Savickas, M. L. (Eds.). (2005). *Handbook of vocational psychology: Theory, research, and practice* Mahwah, New Jersey: Lawrence Erlbaum Associates.

Zabusky, S., & Barley, S. (1996). Redefining success: Ethnographic observation on the career of technicians. In P. Osterman (Ed.), *Broken ladders: Managerial careers in the new economy* (pp. 185-214). Oxford Oxford University Press.

APPENDICES

APPENDIX A

SURVEY INSTRUMENT

Factors Influencing Students' decisions to enroll

In the

Architecture and Construction Career Cluster Programs

Meridian Technology Center

DIRECTIONS

Please answer the following questions to the best of your knowledge. There are not right or wrong answers and responding to the questionnaire will not affect your grade for this or any class of your program. Your viewpoints are important and will help gather information for improving the architecture and construction career cluster programs. It is important that you respond to **ALL** the questions as completely as possible. Your help is greatly appreciated!

PART I - Enrollment Status

For part I and II, please check the box which best describes you.

1. Are you a first-time student at the Meridian Technology Center (MTC)?

   ☐ Yes ☐No

- If No, in what other program(s) at the MTC have you taken courses?

  _____
  _____
  _____
  _____

2. Is this the first time you have taken a course in this program at the MTC?

   ☐ Yes ☐ No

3. Are you planning to obtain a:

   ☐ One-year certificate

   ☐ Two-year certificate

   ☐ Short-term course

   ☐ Undecided

4. In your opinion, was sufficient information about the programs available to you in order to register for the correct classes?

   ☐ Yes ☐ No

5. Did you receive any assistance with course selection during registration?

   ☐ Yes ☐ No

6. Will it be difficult to attend this class at the time it is currently offered?

   ☐ Yes ☐ No

- If YES, what will be the cause of the conflict?

  ☐ Job ☐ Family ☐ Other _____

7. Were the programs at MTC your **first** choice for getting additional education during or after high school?

☐ Yes ☐ No

If No, what was?_____

8. Do you plan on pursuing a career in the program you selected?

☐ Yes ☐ No ☐ Possibly

9. Are you aware of other technical study programs at MTC but chose to enroll in your current program instead?

☐ Yes ☐ No

♦ If YES, why?

_____

_____

10. Will you decide to change programs based on how well you like this class?

☐ Yes ☐ No ☐ Unsure

PART II - Influences

Using the rating scale below, identify the degree of influence each factor had in your decision to enroll in this program at MTC. **(Circle one number for each item)**

1 VERY Influential (VI)
2 MODERATELY Influential
3 SOMEWHAT Influential
4 SLIGHTLY Influential
5 NOT Influential (NI)

Influences	VI				NI
1. Cost	1	2	3	4	5
2. Location	1	2	3	4	5
3. MTC reputation	1	2	3	4	5
4. Interest in learning about this occupation	1	2	3	4	5
5. Courses offered in the program you selected	1	2	3	4	5
6. Want to work in the industry	1	2	3	4	5
7. Friend(s) also enrolled in this program	1	2	3	4	5
8. Better job opportunities	1	2	3	4	5
9. Hope to start own business	1	2	3	4	5
10. Challenge of learning a new skill	1	2	3	4	5
11. Family pressure	1	2	3	4	5
12. One year certificate available	1	2	3	4	5
13. Two year associates degree available	1	2	3	4	5
14. Time that courses at MTC are offered	1	2	3	4	5
15. instructors	1	2	3	4	5
16. Other (Please specify) _____ _____	1	2	3	4 5	

2. From which of the following sources, if any, did you obtain information about your Program? (Check all that apply)

☐ Radio ☐ Television ☐Internet

☐ Newspaper ☐ Parent(s) ☐ Other relative

☐ MTC student (either past or present) ☐ Friend

☐ Letter from the MTC ☐ High school counselor

☐ Co-worker ☐ Career day or other event

☐ Other (Please specify)

_____

_____

3. Who has been the strongest influence in your decision to enroll in your Program ? (Choose only one)

☐ Parents ☐Other relative ☐ Friend

☐ Co-worker ☐ MTC faculty or staff member

☐ High school counselor ☐ Spouse ☐ Employer

☐ MTC student (either past or present) ☐ Myself

☐ Other (please specify)

_____

PART III - Attitudes toward the MTC.
Using the rating scale below, identify your degree of agreement with the following statements. **(Circle one number for each item)**

1 STRONGLY agree (SA)
2 MODERATELY agree
3 SOMEWHAT agree
4 SLIGHTLY agree
5 DO NOT agree (DNA)

	SA				DNA
1. The MTC does a good job in providing educational opportunities after high school.	1	2	3	4	5
2. MTC provided me with information about the different programs available at MTC *before* registration.	1	2	3	4	5
3. MTC is meant to fill the educational needs of the local community.	1	2	3	4	5
4. MTC is not open to anyone who wants to attend.	1	2	3	4	5
5. A person who gets an education from MTC is more likely to receive higher wages.	1	2	3	4	5
6. Employers in the community like to hire people who have attended MTC.	1	2	3	4	5
7. MTC faculty members are helpful.	1	2	3	4	5
8. MTC staff personnel are helpful.	1	2	3	4	5
9. Students are not important to the success of MTC	1	2	3	4	5
10. The MTC is less expensive than other institutions.	1	2	3	4	5

PART IV

Answer the following two questions in your own words.

1. I decided to come to the MTC because:

2. I am taking class(es) in the architecture and construction career cluster programs at MTC because:

PART V - Demographics

Please check the appropriate box.

1. Are you : ☐ Male ☐ Female

2. Do you consider yourself as belonging to a cultural or ethnic minority?

   ☐ Yes ☐ No

3. Are you: ☐ Married ☐ Single

4. Are you presently working:

   ☐ Full Time ☐ Part Time ☐ Not Workings

5. What would you say is your total gross annual income?

   ☐ Under 10,000

   ☐ 10,000 - 19,999

   ☐ 20,000 - 29,999

   ☐ 30,000 - 39,999

   ☐ 40,000 - 49,999

   ☐ 50,000 and over

6. What is your age?

7. How long (in years) have you lived in the Stillwater or the surrounding area?

_____

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

☐ High school or diploma equivalent

☐ 1 year certificate at a technical school or commu nity college.

☐ 2 year Associate's degree

☐ Other (Please specify)

_____

_____

9. Are you receiving any type of financial assistance while attending MTC?

☐ Yes ☐ No

10. Other comments which you would like to express in this survey:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Thank You!!!!

APPENDIX B

WRITTEN APPROVAL TO USE SURVEY

January 21, 2009

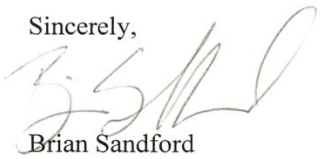
Lily Calix
103 N University Apt #4
Stillwater Oklahoma 74075

Dear Ms. Calix:

This letter is to provide you with my full permission both expressed and implied to use the format and contents of the survey instrument I developed to collect data for the Factors Perceived to Influence Student Decisions for Entering the Welding Technology Program at the Dona Ana Branch Community College study conducted in 1997. I have read your thesis proposal and believe it to be a sound, credible, and valid effort. I am pleased that my survey instrument will assist in your research study and wish you well in your successful completion of your thesis.

Please contact me if I can be of any further assistance.

Sincerely,



Brian Sandford

APPENDIX C

INSTITUTIONAL REVIEW BOARD

APPROVAL FORM

Oklahoma State University Institutional Review Board

Date:	Thursday, February 05, 2009
IRB Application No	ED0912
Proposal Title:	Factors Influencing Student Decisions to Enroll in the Architecture and Metal Construction Career Cluster at the Meridian Technology Center
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 2/4/2010

Principal Investigator(s):

Lily Yaneth Calix Rodriguez
103 N. Univ. Apt. #4
Stillwater, OK 74075

Mary Jo Self
261 Willard
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

X The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Shelia Kennison, Chair
Institutional Review Board

APPENDIX D

WRITTEN APPROVAL TO CONDUCT RESEARCH STUDY AT

MERIDIAN TECHNOLOGY CENTER

MERIDIAN TECHNOLOGY CENTER
1312 South Sangre Road Stillwater, Oklahoma 74074-1899 Tel. 405.377-3333 Fax: 405.377-9604

February 5, 2009

Diana Jacobs
IRB Coordinator
University Research Compliance
208 Cordell North
Oklahoma State University
Stillwater, OK 74078-1038

Dear Ms. Jacobs:

I wanted to confirm that Meridian Technology Center approves of the proposed research of Ms. Lily Yaneth Calix Rodriguez, a master's student in teaching, learning and leadership at Oklahoma State University. Ms. Calix Rodrigues would like to explore and describe the demographical, influential, and informational factors that influence students' decisions to enroll in the architecture and construction career cluster at the Meridian Technology Center.

We look forward to working with her and assisting her as she completes her course of study. If you have any questions, or need additional information, please feel free to contact me at 405.377.3333.

Sincerely,

John Howell, Ph.D
Assistant Superintendent

APPENDIX E

INFORMATION SHEET

Information sheet

OKLAHOMA STATE UNIVERSITY

PROJECT TITLE:

Factors influencing student decisions to enroll in the architecture and construction career cluster at the Meridian Technology Center.

INVESTIGATORS: Lily Yaneth Calix Rodriguez, B.S.

PURPOSE:

The purpose of this study is to explore and describe the demographical, influential, and informational factors that influence students' decisions to enroll in a CTE course at the Meridian Technology Center.

PROCEDURES:

The project will involve completion of one survey. The test contains five sections designed to assess the main influencers in students' decisions to enroll in a CTE program. The first section addresses enrollment status of the respondents, the second section is an inventory of the areas of influence and information which may influence students' decisions to enroll in a CTE program, the third section is designed to address attitudes toward the school, the fourth section contains two open ended questions that prompt students to identify sources and influences not previously mentioned, and the fifth section addresses students' demographic information.

This study is designed to last approximately 30 minutes.

RISKS OF PARTICIPATION:

There are no risks associated with this project, including stress, psychological, social, physical, or legal risk which are greater, considering probability and magnitude, than those ordinarily encountered in daily life. If, however, you begin to experience discomfort or stress in this project, you may end your participation at any time.

BENEFITS OF PARTICIPATION:

You will not have a direct benefit, but your participation would help understand who and what does or does not influence students when making career decision. The results from the study can also provide useful information to those concerned with marketing and recruitment. By identifying the various factors, an effective marketing approach could be developed.

CONFIDENTIALITY:

All information about you will be kept confidential and will not be released. Surveys will be assigned a number rather than names. Research records will be stored securely and only the researcher and individuals responsible for research oversight will have access to the records. This information will be

saved as long as it is scientifically useful. It is possible that the consent process and data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.

COMPENSATION:

You will not receive any compensation for the completion of this survey.

CONTACTS:

I understand that I may contact any of the researchers at the following addresses and phone numbers, should I desire to discuss my or my child's participation in the study and/or request information about the results of the study:

- Mary Jo Self, Ph.D., 261Willard Hall, Dept. of Teaching and Curriculum Leadership, Oklahoma State University, Stillwater, OK 74078, (405) 744-9191.
  E-mail: maryjo.self@okstate.edu
- Lily Yaneth Calix Rodriguez, B.S., 103 N University,Apt#4, Stillwater, OK 74075, (405) 744-1560.
  E-mail: calixro@okstate.edu
- I may also contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, (405) 744 1676 or irb@okstate.edu with any questions concerning participant's rights.

PARTICIPANT RIGHTS:

I understand that my 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.

By completing the survey, you are giving your consent to participate in this research study.

APPENDIX F

SCRIPT FOR MEETING SUPERINTENDENT AT MTC

Script for meeting with the superintendent of Meridian Technology Center:

Good morning/afternoon. I am Lily Yaneth Calix Rodriguez, a master's student in teaching, learning and leadership at OSU. I propose to conduct a research study, the purpose of which is to explore and describe the demographical, influential, and informational factors that influence students' decisions to enroll in the architecture and construction career cluster at the Meridian Technology Center.

I request your permission to conduct this research study at the Meridian technology Center. Each student's participation will involve completing a questionnaire, which will take approximately thirty minutes. Student participation will be voluntary. I will provide an information sheet for each student to read where the purpose of the research study is described and pertinent information about the research study is given. Also described are students' rights to protect them as a participant.

By completing the survey students are given their consent to participate in the research study. I will visit students in their instructional classrooms in order to administer the survey instrument. I will provide a brief description of the questionnaire as well as instructions for completing the survey. I am planning a second visit to access students who were not present on the first day the research survey was administered. All the data collected in this study will be kept confidential.

Students will be free to choose not to participate or to withdraw from the research study at any time without penalty. Although there may be no personal benefit for the students, the possible benefit of their participation may be to contribute to the understanding of who and what does or

does not influence students when making educational choices. The results from the study can also provide useful information to those concerned with marketing and recruitment.

Are you willing to give me your consent to conduct this research study at Meridian Technology Center?

If the answer is yes- proceed with the script.

Thanks for your authorization. I will contact the teachers and I schedule with each of them the best time and date to administer the survey. If you have any questions concerning this research study, I can be reached at (405) 744-1560 or through my e-mail address: lilycalix@yahoo.com

APPENDIX G

SCRIPT FOR MEETING TEACHERS AT MTC

Script for meeting Architecture and Construction Career Cluster teachers at Meridian Technology Center.

Good morning/afternoon. I am Lily Yaneth Calix Rodriguez, a master's student in teaching, learning and leadership at OSU. I am conducting a research study the purpose of which is to explore and describe the demographical, influential, and informational factors that influence students' decisions to enroll in the architecture and construction career cluster at the Meridian Technology Center.

I have obtained permission from your Superintendent to conduct a research study and also to talk to you. I am requesting your permission to contact your students in order to administer a survey.

If the answer is yes - proceed with the script.

Each student's participation will involve completing a questionnaire, which will take approximately thirty minutes. Student participation will be voluntary. I will provide an information sheet for each student to read where the purpose of the research study is described and pertinent information about the research study is given. Also described are students' rights to protect them as a participant.

By completing the survey students are given their consent to participate in the research study. I will visit students in their instructional classrooms in order to administer the survey instrument. I will provide a brief description of the questionnaire as well as instructions for completing the survey. I am planning a second visit to access students who are not present on the first day the research survey is administered. All the data collected in this study will be ketp confidential.

Students will be free to choose not to participate or may withdraw from the study at any time without penalty. Although there may be no personal benefit for the students, the possible

benefit of their participation may be to contribute to the understanding of who and what does or does not influence students when making educational choices. The results from the study can also provide useful information to those concerned with marketing and recruitment.

Are you willing to give me your consent to contact your students in your classroom?
If the answer is yes- proceed with the script.

Thanks for your authorization. What time according to your schedule will be the best to administer the survey to your students? – According to each teacher, I will set times and dates to apply the survey. I will carefully record dates, times, classroom numbers, and each teacher's e-mail address and telephone number.

Do you have any questions? I will call or e-mail each of you the day before I plan to come to remind you of my appointment.

If you have any questions concerning this study, I can be reached at (405) 744-1560 or through my email address: lilycalix@yahoo.com

APPENDIX H

SCRIPT FOR MEETING STUDENTS AT MTC

Script for meeting the students at Meridian Technology Center.

Good morning/afternoon. I am Lily Yaneth Calix Rodriguez, a master's student in teaching, learning and leadership at OSU.

Prior to coming here today, I requested and received permission from the superintendent of Meridian Technology Center and also from your teacher to conduct a survey. I am here to invite you to participate in a study to explore and describe the demographical, influential, and informational factors that influence students' decisions to enroll in the architecture and construction career cluster at the Meridian Technology Center. Your participation may contribute to the understanding of who and what does or does not influence student. The results of this study could also assist counselors in targeting the influencers that are accessible to the school. Identifying accessible areas will allow them to find strategies that can be used to provide more information and opportunities for those who are potential candidates for enrolling in vocational education.

To participate in the study you must be 18 years old or over. Your participation will involve completing a questionnaire, which will take approximately thirty minutes. Your participation is voluntary. I will provide an information sheet for you to read. In this information sheet the purpose of the research study is described and pertinent information about the research study is given. Also described are your rights to protect you as a participant.

Are you willing to participate in this research study?

Those who agree to participate in this research study should remain seated at your desk. Those who are under 18 years old and those who do not agree to participate in this research study, please feel free to leave the classroom and return when your classmates finish completing the survey, to continue with your normal activities.

For those of you who have agreed to participate in this research study, many thanks. I will now distribute an information sheet for you to read. Please read it carefully. In case that you have any question please raise your hand and I will assist you.

After this explanation I will distribute the questionnaires and then continue with the script.

The survey that you will complete contains five sections designed to assess the main influencers in students' decisions to enroll in the architecture and construction career cluster. The first section addresses your enrollment status. The second section is an inventory of the areas of influence and information which may influence students' decisions to enroll in the architecture and construction career cluster. The third section is designed to address attitudes toward the school. The fourth section contains two open ended questions that prompt you to identify sources and influences not previously mentioned, and the fifth section addresses students' demographic information.

Please answer each questions to the best or your knowledge. There are no right or wrong answers and responding to the questionnaire will not affect your grade for this or any other class. In the first section you will choose the option that you believe is the correct for the question. In sections two and three, you will use the scale that is shown in the questionnaire to identify your agreement with the statement.

In the scale shown in this part of the questionnaire, number one means that you strongly agree with the statement, number two means that you moderately agree with the statement, number three means that you somewhat agree with the statement, number four means that you slightly agree with the statement, and number five means that you do not agree with the statement.

In the last section please check the appropriate box that best answers the questions.

After this explanation I will distribute the questionnaires and then continue with the script.

Before you begin to answer the questionnaire, do you have any questions? – If yes, answer the question; if not continue with the script.

I will remain here in the classroom. In case that you have any question please raise your hand and I will assist you.

After students finish the questionnaire, collect completed questionnaires.

Thanks to all of you for your participation in this research study. Your participation is greatly appreciated.

If you have any further questions concerning this research study, my contact information is on the information sheet.

VITA

Lily Yaneth Calix Rodriguez

Candidate for the Degree of

Master of Science

Thesis: FACTORS INFLUENCING ADULT STUDENTS' DECISIONS TO ENROLL IN THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER AT MERIDIAN TECHNOLOGY CENTER.

Major Field: Occupational Education

Biographical:

Personal Data: Born in Honduras, CA, on October 04, 1970.

Education: Graduated from Western Normal High School in November of 1989; received Bachelor of Science in Technical Education from National Pedagogical University "Francisco Morazán", Honduras in December of 2001; completed the requirements for the Master of Science in Occupational Education at Oklahoma State University, Stillwater, Oklahoma in May, 2009.

Experience: Taught basic metal work, and manufacturing methods and processes at National Pedagogical University "Francisco Morazán" in San Pedro Sula, Honduras. Taught technical drafting and basic metal work and foreman of metal structures shop at Instituto Técnico "Adelaida Villanueva de Serrano" in Potrerillos, Cortes, Honduras.

Professional Memberships: Honor Society Phi Kappa Phi; Golden Key International Honor Society; High School Teacher Association of Honduras COPEMH.

Name: Lily Yaneth Calix Rodriguez Date of Degree: May, 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: FACTORS INFLUENCING ADULT STUDENTS' DECISIONS TO ENROLL IN THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER AT MERIDIAN TECHNOLOGY CENTER.

Pages in Study: 115 Candidate for the Degree of Master of Science

Major Field: Occupational Education

Scope and Method of Study: The purpose of this study was to explore and describe the demographical and informational factors that influence students' decisions to enroll in the architecture and construction career cluster at the Meridian Technology Center (MTC). The problem was analyzed using a cross-sectional survey methodology. The target population for the present study was the morning and afternoon adult student body enrolled in the architecture and construction career cluster at Meridian Technology Center. Thirty-seven students (N=37) in eight courses completed a survey that used a check list and Likert-type scale format. Both concrete variables, such as the enrollment and demographical information, and intangible variables, such as influences on student enrollment decisions and attitudes toward the MTC, were studied using descriptive statistics.

Findings and Conclusions: Findings from the study indicate that the group of participants was very homogeneous: mostly males, part time employed, high school diploma as the highest level of education achieved, with a gross annual income less than $10,000. Regarding their enrollment status, the majority was first time students at MTC taking classes for the first time in the program currently enrolled. Influential factors such as the interest in learning about the occupation, desire to work in the industry, challenge to learn a new skill, and better job opportunities were identified as the main factors that may have influenced their decision to enroll in CTE program at MTC. The person who was the strongest influence in their decision to enroll at MTC was identified as "myself." The main source of information accessed by students before making the decision to enroll was the Internet. Other sources of information listed by students were high school counselor, parent, career day or event, and letter from the MTC. Overall participants have a positive image of MTC and they are supportive of MTC programs.

ADVISER'S APPROVAL: Dr. Mary Jo Self