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AN EVALUATION OF AGRICULTURAL EDUCATION
PROGRAMMING IN A CORRECTIONAL FACILITY

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Jeffrey Monroe Lewis
May 2009

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DEDICATION

This thesis is dedicated to my loving wife, Maggie and our two children, Elijah and Isabel, who continue to provide daily joy. This dedication is also extended to the rest of our amazing family members for always believing in me and encouraging me. Thank you Lord for the people you have placed in my life and for making all things possible.

ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to all those who aided me in the attainment of my Master of Science degree in Agricultural and Extension Education. I would like to thank Dr. Carrie Stephens for the enormous amount of time and devotion to not only me, but to countless others who believe in the future of agriculture. I would like to thank Dr. Randal Waters for the sacrifices he has made on my behalf and for all the helpful advice. I would also like to thank Dr. Roland Roberts for being so much more than just a committee member. His selfless guidance has been timely, inspiring, and extremely beneficial.

Lastly, I would also like to thank the State of Tennessee, Department of Correction for their cooperative spirit throughout the attainment of my degree and for making possible the research objectives of this study.

ABSTRACT

The purpose of this study was to evaluate the effectiveness of the interior and exterior landscaping program in a correctional facility located in Mountain City, Tennessee. Rule violations were counted for one month for both the 20 active interior and exterior landscaping program participants and a 20 member, random sampling of the general inmate population. Rule violations were also counted for landscaping program graduates and compared to those of the general inmate population. In addition, this study examined the correlation between student perceptions of the interior and exterior landscaping program and inmate behavior. While it cannot be stated that participation in the interior and exterior landscaping program caused changes in behavior, this study did reveal program graduates had far fewer recorded rule violations when compared to the general inmate population, and it also revealed a substantial positive correlation ($p = .52$) between the inmate's perceptions of the program and fewer recorded rule violations. In addition, findings revealed that 75% of the class members believe the program has positively affected their behavior, and 100% of the class members believe the program is effective. Also, 95% of those in the program find furthering their education to be appealing because of the program, and 85% believe their outlook on the future has improved because of the landscaping program. Recommendations for furthering and enhancing correctional education are provided as are recommendations for further research.

PREFACE

The life-changing power of agricultural education has boundless qualities that transcend even razor-wire fences and the most extreme, non-traditional learning environments. This study focuses on the effects of an interior and exterior landscaping program, a component of agricultural education, within a Tennessee state prison. The excellence of this “learning by doing” style of instruction shines brightly—providing hope for the future and a reason for existence in the darkest learning situation. Some of the surprising ways that lives have been changed by the inclusion of agricultural education in the prison system are chronicled in this document.

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LIST OF ABBREVIATIONS

GED	General Equivalency Diploma
NECX	Northeast Correctional Complex
TDOC	Tennessee Department of Correction
TOMIS	Tennessee Offender Management Information System

CHAPTER 1

INTRODUCTION

Traditional vocational programming in Tennessee state prisons has been in existence for nearly four decades. After almost 100 years of maintaining a punitive focus, the department included for the first time in its 1973 mission statement the word rehabilitation (Little, 2008). In response to numerous lawsuits by inmates and members of society, the Tennessee Department of Correction (TDOC) was forced to do what much of the nation had already done—create both academic and vocational classes for the betterment of the felon population. The societal shift away from simply shelving those enduring punitive action meant revolutionary change was in order (Hrabowski & Robbi, 2002). Furthermore, the establishment of the American Correctional Association mandated the implementation of academic and vocational classes nationwide and created standards that every institution must pass in order to receive accreditation. Tennessee lawmakers responded, and by the early 1980's, Tennessee prisons had a full range of academic programs serving as General Equivalency Diploma (GED) preparatory classes. Also, “trade courses” were created to offer “hands-on” learning opportunities in skills like commercial food service, cabinetry, welding, upholstery repair, cosmetology, and horticulture (Dukes & White, 2007).

The Northeast Correctional Complex (NECX) and three other state prisons were opened in 1992 with a rehabilitative initiative. Five GED teachers and 11 vocational instructors were hired when NECX began operations (Carlton & Miller, 2008). As class titles and offerings have evolved to reflect both the timely needs of the inmate population and current labor demands, the number of teachers at NECX has increased to 15 as of January 2009. The 2002 deletion of the upholstery repair and shoe repair classes made room for the addition of the computer applications, family life and consumer science, and the interior and exterior landscaping programs.

Need for the Study

The morals of our society continue to degrade, while state and federal prison populations spiral upward at an alarming, rocket-like pace (Crary, 2008). Currently, 1% of America's population is in prison—2,319,258 persons at the start of 2009 (Crary). Furthermore, 1 in 25 individuals will serve prison time at some point during their lives (Crary). Therefore, budget allocations for state correctional departments across the nation continue to escalate with the increasing inmate burden. The continental United States is expected to spend more than \$49 billion on correctional facilities in 2009 (Crary). Statistics indicate nearly 97% of those in prisons now will be released and will be free citizens within 10 years of entering the penal system (Little, 2008). Increasing numbers of releasees are returning to effected communities—over 650,000 annually from state prisons and federal institutions (Osborne & Solomon, 2006).

As states tighten their budgets, many are asking if the rehabilitative efforts of our prisons are effective. The Commissioner of the TDOC addressed the problem by stating, "The problem for nearly every state in the union is that financial resources are at their lowest levels since the great depression, and difficult choices must be made to determine the governmental services that will be provided" (G. Little, personal communication, November 21, 2008). In spite of rehabilitative efforts, studies have shown recidivism rates for some states still reaching 67% within three years of release (Langman & Levin, 2002). Those figures have been remarkably stable and unchanging since the 1960's (Langman & Levin). Is it a worthy sacrifice to take money away from traditional primary schools and higher education as well, in an attempt to educate the prisoners of our society? If so, what educational or vocational programs should be funded? Ultimately, is there a correlation between the vocational programs offered at these prison facilities and a positive, measurable change in the behavior of offenders?

Government officials are faced with the task of answering these questions as the economy continues to suffer. Tennessee Congressman Jason Mumpower said, "Every area of state government will be scrutinized [and] cuts will be made in the areas that will cause the least amount of pain for the people of the State of Tennessee" (J. Mumpower, personal communication, October 28, 2008). Tennessee's Governor added, "Our current financial crisis is causing us as a nation and a state to ask difficult questions and make unprecedented decisions

based on information and the effectiveness of how we spend our tax revenues” (P. Bredesen, personal communication, October 16, 2008).

Purpose of the Study

The purpose of this study was: 1) to determine the correlation between improved inmate behavior while housed in the prison setting and participation in an agricultural education program, and 2) to evaluate the behavior of landscaping program graduates to determine if the program had caused a change in conduct while incarcerated.

Agricultural programming was selected for this study over the various other vocational offerings in this prison setting because very little documented research exists that specifically examines the effectiveness of agricultural education for the incarcerated. While thousands of state and federal dollars have fueled studies that examined academic classes and vocational education offerings as a group, few have targeted what is often the most popular and most requested education class for many prisons in our state (Dukes & White, 2007). This research addresses this lack of information by evaluating the effectiveness of the interior and exterior landscaping class, a component of agricultural education.

Another reason for selecting an agriculture program over the myriad of other vocational offerings was because it provided many unique workings, learning opportunities, and outside certifications that can be carried into the world beyond the prison. After assessing the other courses offered in the Tennessee

prison system, it was discovered no other type of class provided students with the prospects to gain needed skills to feed themselves and their families by growing live plants from seed to harvest (Carlton & Miller, 2008). The interior and exterior landscaping course offered two private industry certifications from the American Landscape Contractors Association and the Tennessee Nursery and Landscape Association, state pesticide private applicator certification through the Department of Agriculture and the University of Tennessee Agricultural Extension Service, federal workforce certification from the Department of Labor, and state program area certification (Dukes & White, 2007). The compilation of these attributes gave special qualities to the landscaping program and provided purpose and meaning to the study.

It is expected by the researcher that inmates who have taken the class will have fewer offenses (rule violations) than those who have not. Findings from the study will be used to make recommendations for future education programming.

Specific objectives of this study were to:

- 1) determine how agricultural education affects prisoner behavior while attending the interior and exterior landscaping program;
- 2) determine how agricultural education affects prisoner behavior after completing or graduating the interior and exterior landscaping program;
- 3) describe inmate perceptions of the interior and exterior landscaping program; and
- 4) determine how inmate perceptions of agricultural education affect prisoner behavior while attending the interior and exterior landscaping program.

CHAPTER 2

REVIEW OF LITERATURE

The overall effectiveness of educational programming within state prison systems continues to be heavily scrutinized by enumerable members of the general public, especially state and federal lawmakers. This chapter chronicles the birth of penal education and tracks its advancement. In addition, chapter two addresses the findings of extensive articles, ranging from those that hail correctional education as a necessity to those that question the very existence of a taxpayer-supported education system for the prison population. Moreover, this chapter highlights research that suggests the transforming power of learning in prisons as it changes inmates into persons of promise.

Historical Perspective

The practice of providing some limited post-conviction education to inmates has been around since 1789, when traveling ministers would graciously visit with prisoners to teach reading skills so the Bible could be studied (McShane & Williams, 1996). That practice continued for centuries, but was limited because the vast majority of offenders was not thought worthy of the effort or the investment (Johnson County Historical Society [JCHS], 1985).

Indeed, as history shows, almost 75% of those entering prisons prior to 1850, died while in prison (JCHS, 1985, p.17). However, public perception of prisons, prisoners, and sentencing laws began to drastically change around 1900 (JCHS, p.18). Many American towns had their last public hangings before 1910, and the practice of public humiliation as a means of punishment was all but abolished (JCHS, p.18). Moreover, many states began to question the morality of the death penalty, and some states eliminated the act altogether. Tennessee was among the number of states that decided to eradicate capital punishment, but has since reinstated the practice (Little, 2008). Furthermore, as the twentieth century progressed, some states purged life sentences. These new penal paradigms have changed life inside American prisons and the communities that have received recently released inmates (United States Department of Labor [USDOL], 2008).

By the 1980's, a complete reversal of the pre-1850 "automatic death sentence" for three fourths of those entering prisons had taken place (Clare, 1996). In 1983, 75% of those entering American prisons were scheduled to be released before they turned the age of 60 (Clare). However, as these offenders were released back into society, many found a life of crime was their easiest and often only means of survival. A stark set of realizations about prisoner re-entry emerged among policymakers and scholars in the late 1980's. Increasing numbers of releasees were re-entering communities—more than 600,000 annually from state prisons—as a result of the quadrupling of prison and jail admissions that occurred over the prior 20 years (Harrison & Beck, 2003). A

vicious circle of repeat offenders began to occur, and in 1987 public outcry brought new legislation to implement hundreds of new prison education programs (Sam Houston State University, 1994). A portion of Carl Perkins Vocational funding was diverted to fuel prison vocational offerings in the 1980's and early 1990's (Dukes & White, 2007).

Recent Documents of Opposition

Educating men who had been convicted of terrible offenses was extremely controversial (Sam Houston State University, 1994). A series of violent prison riots in the 1960's and 1970's focused new attention on this old issue of spending public dollars to educate prisoners. Those riots resulted in massive losses of life and millions of dollars in property damage, all at the taxpayers' expense. This outbreak caused the public and elected officials to once again question whether rehabilitation was an approachable task (Wolford, 1986).

Furthermore, when Californians learned during Governor Pete Wilson's tenure that the correctional department budget was at an all time high while state support for colleges and universities was at a 32 year low, there was a shift away from funding inmate learning (Macallair, Taqi-Eddin, & Schiraldi, 1999). One congressional member boldly stated providing programs for prisoners was a double punishment for all Americans—murder times two (Hrabowski & Robbi, 2002). A study indicated nearly 60% of state inmates were either completely or functionally illiterate, in spite of the state of New York offering a wide range of academic programs at all its prison facilities (Petersilia, 2003). As a result, under

mounting pressure from the public, the federal government withdrew Perkins Vocational Funds and Pell Grant support of prison education. This move eliminated the dollars necessary for inmates with limited financial means to attend college while incarcerated. Following what seemed to be a national trend, some states revoked prison schools and decided it was just too expensive. In 2001, 44 states offered educational programming to inmates (Welsh, 2002).

Tennessee experienced a similar crisis in public funding of educational programs for the incarcerated in 1994. Sales tax collection short-falls caused mandatory layoffs within the department of correction. Since education was a secondary priority of the TDOC, personnel cuts were made at each facility in order to preserve security. When educational reductions were complete, each facility had lost three to five teachers and programs—totaling 27 teachers (Dukes & White, 2007).

Government Findings Show Promise

Encouraging research to validate efforts of schools and especially vocational programming in correctional settings has been hopeful. The positive effects of learning in a state penitentiary have been multifaceted. Most of the research has been conducted by or at the request of state governments, especially in California and Florida. Florida created a series of probes called “Return on Investment.” Results of the “Return on Investment” probes showed lower in-house disciplinary rates and lower recidivism rates directly linked to participation in a vocational program while in prison. Florida documented 719

disciplinary reports per 1,000 inmates during Fiscal Year 1995-96 for vocational program completers compared to 1,025 disciplinary reports per 1,000 members of the general inmate population (Florida Corrections Commission, 1999). The same report also showed lower disciplinary rates for those who were enrolled in educational courses. Educational program participants collected 684 infractions per 1,000 inmates compared to 917 infractions for the general inmate population (Florida Corrections Commission). Expanding this research to include dollar figures showed impressive results. Florida found that every tax dollar invested in correctional education returned to the state taxpayers \$3.20 of gained or saved revenue because of higher earning levels, more favorable employment statistics, lower public assistance enrollment rates, and less recidivism (Florida Corrections Commission). Moreover, a study conducted in the Northwest United States found those inmates who graduated from a school program had an in-house infraction rate of 7.8% compared to 23.2% for other inmates (Clare, 1996). This same study correlated post-secondary levels of education with drastically lower rule violation rates. A Texas study demonstrated that prison vocational programs resulted in fewer institutional policy breaches, lower recidivism rates and lower parole revocation rates when compared to non-participants (Sam Houston State University, 1994). That study found 9.4% of inmates who enrolled in academic programs were charged with a prison rule infraction compared to 15% of those who were non-participants (Sam Houston State University).

Unexpected Benefits

Finn (1997) has shown a direct correlation with prison vocational program enrollment and improved inmate conduct while incarcerated. New York has utilized vocational schools as a means of aggression therapy and anger replacement for young violent offenders (Nuttall et al., 1995). Research conducted in New York showed this positive effect occurred for multiple reasons, but primarily because the offenders achieved and felt new levels of self-worth and self-respect. Several other states reported similar findings with their programs. Maryland researchers found those benefits as well, but went further to link the improved behavior with exceptional officer performance, lower staff turnover rates, and increased staff morale (Hrabowski & Robbi, 2002). Those benefits translated into an even greater tax savings for the public in the form of retained, experienced officers who perform more effectively and efficiently when compared to those who have just emerged from training to fill a new post at an institution (Hrabowski & Robbi).

Prisoner Re-Entry Initiative

The United States Department of Labor (USDOL) (2008) recognized the need to strengthen urban communities affected by large volumes of returning prisoners. The USDOL introduced employment-centered projects that incorporated job training, housing assistance, mentoring, and other comprehensive transitional services. As a result, in 2005 the agency created a demonstration program called the Prisoner Re-Entry Initiative that provided

grants to 30 faith-based and community-based organizations across the country to implement the program. An evaluation team consisting of Mathematica Policy Research, Inc., Johns Hopkins University, and the University of Maryland was assembled to evaluate the program.

The evaluation team focused on needs of individual releasees and how barriers to societal re-entry and re-employment were being met. Many common threads existed among barriers to re-employment. The evaluators found at least two barriers were specifically related to a lack of education. A lack of work skills and job training were employment barriers hindering 60% of the program participants (USDOL, 2008). Also, 26% of the ex-offenders in the program reported their lack of a basic education [high school diploma or GED] kept them from a productive working environment (USDOL). Seeing the need for educational furtherance, 90% of the grantees offered a combination of GED classes, remedial education, pre-apprenticeship training, and English as a second language to their ex-offender participants (USDOL). Because of the expressed need, 47% of participants received additional mentoring services beyond the regular educational services (USDOL). The study goes further to make these poignant remarks:

This comprehensive, ongoing study highlights some very concrete shortfalls in our ex-offender support system. One of the primary reoccurring indicators from the study is the 'education vacuum' that existed at the institutional level and the need for more skill-based vocational training. The prevailing sentiment is that these [educational]

programs would have created a new purpose in life and led to changed behavior. This theme is synonymous with most participants, regardless of their urban location (USDOL, p.127).

Table 1 highlights many barriers ex-offenders face upon societal re-entry. The data represent the total number of grantees who mentioned the particular barrier. Multiple responses per grantee/barrier were only counted once. Some of the barriers include transportation/mobilization, lack of family support, continued drug abuse, a lack of education, and poor job skills.

Prison Schools Versus Public Schools in Tennessee

Within the TDOC, 3,585 inmates (18.20 % of the total prison population) are currently enrolled in some type of education program (State of Tennessee, Department of Correction, 2008). The TDOC 2009-2010 budget allocated \$12,942,180 to fund educational offerings for the fiscal year (State of Tennessee, Department of Correction). Moreover, the State of Tennessee (2008) spends \$1.84 per inmate, per day to provide all education and library services. This dollar figure is included in the comprehensive amount of \$63.90 per inmate, per day that is necessary to provide all services while in TDOC custody (State of Tennessee, Department of Correction).

By comparison, the Tennessee Department of Education was appropriated \$5,122,359,800 during the 2009-2010 fiscal year to provide educational services to its 965,059 pre-kindergarten through 12th-grade students (State of Tennessee, Division of Budget, 2008). The people of the State of

Tennessee spend \$29.49 per student, per day to educate the students enrolled in grades PK-12 (State of Tennessee, Division of Budget).

Table 1. Reported Participant Barriers to Re-Entry (USDOL, 2008)

Barrier	Number
Inadequate Transportation	18
No Work Experience / History or No Work Skills	18
Difficulties in Securing Housing	16
Substance Abuse	15
Society Does Not Accept Ex-Offenders	13
Employer Reluctance to Hire Ex-Offenders	11
Lack of Self Confidence / Social Skills	11
No Support System	11
Accepting Responsibility / Living Responsibly	9
Cognitive Behavioral Issues	8
Lack of Education	8
Mental Illness	8
Not Motivated / No Work Ethic	8
No Identification / License Upon Release	7
Child Support Obligations	6
Need to Find New Friends / Move to New Area	6

Table 1. Continued.

Barrier	Number
No Soft Skills	6
Poor Money Management Skills	5
Unrealistic Expectations	5

Education at NECX

Educational programs have been offered at NECX since the institution was opened in 1992. Program offerings and curriculum contents have evolved over the years to reflect the timely needs of current employment trends. In spite of the many changes, the GED program at NECX has maintained a pass rate of 75% or better each year (Dukes & White, 2007).

Since the creation of the interior and exterior landscaping program in 2002, 48 inmates have successfully graduated or completed the program. Fifty-four percent (26 of 48) of the interior and exterior landscaping graduates are either still in prison or are deceased. Furthermore, 59% (13 of 22) of the landscaping program graduates who have been released from prison are employed at least part-time in some area of the landscaping industry, and they have not re-entered the prison system.

Vocational Education

Vocational classes have provided “hands-on” learning activities in public school settings since their inception. The characteristic “learning by doing” has provided a natural progression of learning life skills across a wide range of cognitive abilities and didactic settings. “Hands-on” or experiential learning is an easy fit in the prison learning environment with its wide array of clientele who have learning disabilities, a lack of basic education attainment for many, and the desire to learn a viable and enjoyable trade or hobby (Carlton & Miller, 2008).

Experiential learning is not a new concept in education. However, experiential learning models have been credited to theorists like Dewey (1933), Kolb and Fry (1975), and Rogers (1969) who expanded the idea. Dewey's fame was built on constant examination of educational practices and procedures pertaining to lesson delivery and subsequent student responses. He expressed great disdain with those educators who saw their roles as teachers expressed as stern lecturers who only spouted facts from aged text books (Dewey, 1933). He believed teachers should be more concerned with evaluating what the students actually gained from education rather than focusing on delivery (Dewey).

Another experiential learning theorist was Rogers (1969) who, like others, made a distinction between cognitive and experiential learning types. He classified cognitive learning as meaningless and experiential forms of learning as significant because experiential styles relate to the learner (Rogers). A noteworthy difference between the two learning types was that experiential learning addressed the real needs and wants of the learner as opposed to

parlaying arbitrary (meaningless) facts and figures for students to attempt to find application (Rogers). Furthermore, Rogers identified some unique characteristics of experiential learning such as personal involvement, self-initiated, evaluated by the learner, and pervasive effects on the learner. According to Rogers, learning was facilitated when the student participated completely in the learning process and had control over its nature and direction. Furthermore, learning was primarily based upon direct confrontation with practical, social, personal, or research problems; and when self-evaluation was the principal method of assessing progress or success.

Kolb and Fry (1975) expanded on the research of Dewey (1933) and Piaget (1953), by stressing the importance of learning by experience. They emphasized experiential learning is different and superior to cognitive learning styles which was a reversal from many previous learning theories (Kolb & Fry). The superiority was credited to the concrete reinforcement afforded by seeing, doing, and experiencing learning on an individual basis. In addition, learning is a cycle which begins at one of four distinctly different but connected phases, and this idea was illustrated by their model called the Experiential Learning Circle (Kolb & Fry). In the circle, learning can begin at any of the four steps, but typically initiates at the concrete experience phase that involves “hands-on” experiences. The second step is the observation and reflection phase that leads into phase three where based upon that reflection, abstract concepts are formulated. The fourth phase calls for the learner to test what has previously been experienced in a new setting or situation (Kolb & Fry). In Figure 1, Kolb and Fry’s learning circle

illustrates the repetitive nature of experiential learning and presents the idea that this type of learning is a continuing process.

Rogers' (1969) model of experiential learning and its associated framework constitute the building blocks of the interior and exterior landscaping program offered at NECX. No other learning theory more closely emulates the actual structure and routine daily activities present in this agricultural education course. Some key features of the class that mesh with Rogers' theory include: offering the class as an elective; open program entry and exit; continuously evolving, student-designed curriculum; relaxed learning atmosphere with significant student participation; provided refreshments during class; ability to raise, eat, and sell plants; perform landscape design and cost estimates for actual homeowners and non-profit organizations; and perform assignments at a comfortable pace. These are all key components of the interior and exterior landscaping program at NECX.

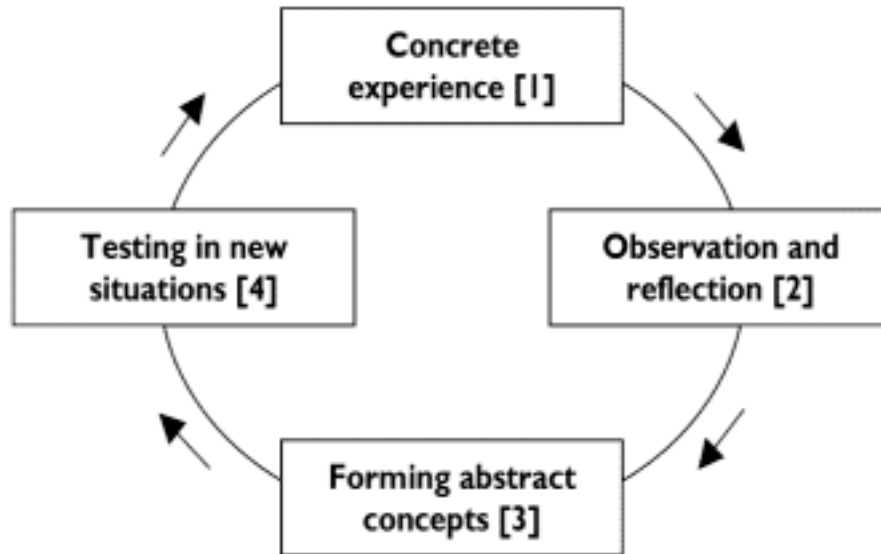


Figure 1: Kolb and Fry's Learning Circle (Adapted from Smith, 2001)

CHAPTER 3

METHODS AND PROCEDURES

All employed methods and procedures presented below address the effectiveness of the interior and exterior landscaping program in the prison setting, and thus directly address the objectives of this research. Several methods were engaged in an effort to meet the common goal, and this chapter details their use. Those methods include the use of a survey instrument and three separate comparison studies. An added challenge to the study was that all these procedures were conducted with absolute identity protection for the respondents.

Protecting Those At-Risk

The identity of all study participants was kept completely confidential in accordance with Tennessee Department of Correction policy. No names, aliases, or “nicknames” were revealed in any portion of this study in an effort to protect the inmates themselves, family members of inmates, the victims of the inmates’ offenses, and the relatives of those victimized by the felons presently or formerly housed at NECX. Furthermore, this protection included imagery, given that neither video nor still-photography is permitted in Tennessee state penal

institutions without the consent of the commissioner or designee. Therefore, neither type of imagery was included in this document.

Instrument Design

The research design for the first part of the study (objective one) which attempts to tie landscaping program participation with improved in-house conduct was the Pre-experimental Static Group Comparison (Campbell & Stanley, 1963). This method was utilized to determine the influence of program participation on class participants (group one) versus the comparison group (group two). Data were collected via Tennessee Offender Management Information System (TOMIS) for one month on all 20 current members of the landscaping program at NECX. This group served as the treatment group. The comparison group was composed of 20 inmates randomly selected from among the 1,834 inmates who had not participated in the interior and exterior landscaping program. They represented a sample of the overall NECX inmate population. Furthermore, none of the members of the comparison group were enrolled in an education program at the time of the study. The evaluation period for both groups was January 23, 2009 through February 23, 2009. Means and standard deviations of the data were tabulated and a *t*-test was performed to determine the statistical significance of the differences. Microsoft Excel® statistical computing functions were utilized to determine the means and standard deviations. GraphPad® statistical software was used to perform the *t*-tests. These steps were taken in an

attempt to test the hypothesis of a positive relationship between improved behavior and participation in the interior and exterior landscaping program.

The second research design utilized was the Equivalent Time Samples Design (Campbell & Stanley, 1963). This type of quasi-experimental design was employed to determine how agricultural education affects prisoner behavior after completing (graduating) the interior and exterior landscaping class (objective two). The behavioral measurements were taken at both one and three month intervals following program completion for group three and compared with those of group two. As in objective one, the means and standard deviations of the data were tabulated and a *t*-test was performed to determine the statistical significance of the differences. Microsoft Excel® statistical computing functions were utilized to determine the means and standard deviations. GraphPad® statistical software was used to perform the *t*-tests for statistical significance. This was done in an attempt to test the hypothesis of a positive relationship between improved behavior and graduating from the interior and exterior landscaping program.

A survey instrument was utilized as a component of the study to address objectives three and four. The survey, distributed to all current students, gauged the participants' perceptions of the program and measured perceived behavior changes. The simple questions they answered measured their perceptions of how much the course offered at NECX has impacted their lives in their present situation and how they expect it to change their lives after subsequent release. The format for questionnaire layout, wording, and design was based on models

by Gall, Borg, and Gall (1996). Participation in the survey was strictly voluntary; however, all 20 members of the class completed the survey. In an attempt to reduce human participant reactivity or experimenter bias, the single-blind technique was employed (Bordens & Abbott, 2002). This step called for a disconnected teacher to administer the survey. Furthermore, the validity of the project was improved by allowing the participants to express their thoughts and perceptions of the survey and the entire project as well.

The survey's first question measured the duration of their enrollment in the landscaping program. The remainder of the survey made use of a Likert-type five point scaling with answer choices ranging from, "*strongly agree*" to "*strongly disagree*" (Bordens & Abbott, 2002). Values of 0, 1, 2, 3, and 4 were assigned to the response choices with 0 being assigned to "*strongly disagree*," and 4 assigned to "*strongly agree*." Pearson Product-Moment Correlation Coefficients were used to study the relationship between behavior scores and the students' perceptions of their behavior (Bordens & Abbott).

Variables

Dependent—offenses or rule violations among inmates during specified time frames of the study while in TDOC custody

Independent—participation in interior and exterior landscaping programming

Reliability and Validity

Reliability of the study was ensured by employing multiple reliability procedures. Foremost among these was the utilization of stable computer data from the TOMIS database to serve as a foundation and information source for the comparison groups used in the study. Test-retest reliability was employed by assessing identical disciplinary infractions within TOMIS at both one and three month intervals in the procedures designed to address objective two. The reliability of the survey questionnaire was increased by taking the following steps: 1) using a relatively high number of items (15 questions), 2) standardizing the administration procedure, 3) scoring the questionnaire with precision, and 4) ensuring the questionnaire was clear, well written, and appropriate for the sample (Bordens & Abbott, 2002).

An expert panel was obtained to assist in determining survey items and the reliability and validity of the survey as well. The panel members consisted of Dr. David Matlock, Vice President, Virginia Highlands Community College; Dr. Sharon Taylor, Education Director, Northeast Correctional Complex; and Dr. Wayne Guynn, Pastor, First Baptist Church, Damascus, Virginia. According to the expert panel of reviewers, the study possessed high levels of face validity because it measured items necessary to establish and theorize a relationship existing between program participation or completion and improved behavior. Moreover, the survey possessed content validity because all questions measured perceptions of the program. The document also displayed content validity in the simplicity of its design which measured good behavior and bad behavior. Finally,

criterion-related validity was reflected in a predictive nature with objectives that progressively build on one another. For example, the positive behavior change of students while enrolled in class was predictive of their continued behavior modification at both one and three month intervals following graduation. Ordinal scaling was used to collect data through the TOMIS records of those inmates involved in the study. The expert panel found this process displayed face validity and criterion validity as well, but the latter was determined after several trials (Bordens & Abbott, 2002).

Data Collection

Data addressing all four objectives was collected during the last week of February 2009. TOMIS records were accessed using in-house, TDOC computers. For objective one, TOMIS disciplinary infraction data were collected for all 20 students currently enrolled in the interior and exterior landscaping program and the 20 member, randomly selected comparison group. None of the members of the comparison group were attending an educational course at the time of the study, and none of the members were former landscaping program graduates. The comparison group was selected using a randomizing tool that is utilized by the drug testing division of the internal affairs department within the TDOC. This instrument allowed the omission of all current educational program participants. Moreover, the tool allows the user to randomly select up to 10% of the inmate population at NECX for mandatory substance abuse testing and detection. These records provided the necessary disciplinary infraction details for

current landscaping program participants (group one), the randomly selected comparison group (group two) used in the study to address objectives one and two, and the 20 most recent graduates (group three) studied in objective two. In objective two, archived TOMIS disciplinary data were collected for all 20 members of the sample representing graduates from the class for two specific time frames. The data listed disciplinary infractions for both the month following graduation and three months after program graduation, and all levels of severity of in-house misconduct were counted. The same randomly selected, computer generated comparison group was used in this portion of the study, and their rule infractions were recorded at both one and three month intervals.

Objectives three and four make use of survey data. The survey instrument was distributed following the pilot study during the last week of February 2009. A teacher colleague agreed to oversee the questionnaire process and collected the papers for evaluation.

Data Analysis

Data analysis was performed using exploratory data analysis techniques which rely less on the population assumptions that inferential statistics make and rely heavily on the ability of exploratory data analysis to be more descriptive and revealing of both suspected and unsuspected influences (Bordens & Abbott, 2002). This task was carried out with reader-friendly tables for all objectives. Furthermore, descriptive statistics were employed to describe the average (mean). Standard deviations were calculated for the data collected. Also, *t*-tests

were performed to determine the statistical significance of the data presented for objectives one, two, and four. Survey data for objectives three and four were analyzed and displayed in tabular format. The Pearson Product-Moment Correlation Coefficient was used to demonstrate correlation between the mean scores of the students' perceptions of their behavior and the mean scores of the behavior scores to show the results of objective four. Coefficients were calculated using Microsoft Excel's® statistical calculating function.

The behavior scores were calculated by assigning point values that mirrored the Likert-type scores of 4,3,2,1, and 0. The score of four represented no behavior violations during the month of study, while a score of 0 represented four or more rule violations during the period of monitoring. The means were calculated and used in the correlation formula. The calculated coefficients were used to describe the relationships. Although the statistical significance of a relationship can be interpreted using correlation coefficients, according to Davis (1971), the magnitude of the correlations is a more important consideration. Davis describes the magnitude of correlations as follows

1.0	Perfect Correlation
.70 - .99	Very High Correlation
.50 - .69	Substantial Correlation
.30 - .49	Moderate Correlation
.10 - .29	Low Correlation
.00 - .09	Negligible Correlation

CHAPTER 4

RESULTS

Population Description

The sample (group one) used in the first comparison displayed varied demographic information. All the subjects were male. (A disproportionately high number of sexual offenders was in the survey group as they composed the bulk of the landscaping student body during the study period.) The members of the current landscaping program were predominantly Caucasian, and they possessed either a high school diploma or GED. Their types of convictions varied greatly. The median age of the group was 38, and 10% of the landscaping program participants had active gang affiliations at the time of the study. The demographics of the landscaping class (group one) are described in Table 2.

The comparison group (group two) had similar characteristics to those who were participating in the program. Sixty percent of the comparison group was Caucasian, and 70% possessed either a high school diploma or GED. Their types of convictions also varied greatly. The median age of the comparison group was 36, and 15% of the comparison group had active gang affiliations. Demographics of the comparison group are highlighted in Table 3.

Table 2. Landscaping Class Demographic Information

Race	Education Level	Type of Convictions	Median Age	Gang Affiliation
Caucasian - 70% African American - 25% Asian American - 5%	No High School Diploma or GED -10% High School Diploma or GED - 75% College -15%	Drug Sale or Abuse - 30% Sex Crime - 25% Theft or Burglary - 25% Murder - 20%	38 Range= 18 to 72	10%

Table 3. Comparison Group Demographic Information

Race	Education Level	Type of Convictions	Median Age	Gang Affiliation
Caucasian - 60% African American - 35% Hispanic American -5%	No High School Diploma or GED -15% High School Diploma or GED - 70% College -15%	Drug Sale or Abuse - 35% Sex Crime - 15% Theft or Burglary - 30% Murder - 20%	36 Range= 18 to 68	15%

Objective One

The first objective of the study was to determine how agricultural education affects prisoner behavior while attending class.

The data revealed some insignificant behavioral differences between the two groups. The 20 students who were actively enrolled in the landscaping program had accumulated five rule violations during the previous 30 days. The 20 members of the comparison group accumulated eight rule violations during the same time period. A *t*-test showed a two-tailed *p* value of .50 with an Alpha

level set at .05. By conventional criteria, this difference is considered to be not statistically significant. The results of the study are shown in Table 4.

Objective Two

The second objective of the study was to determine how agricultural education affects prisoner behavior after completing or graduating the program.

One month following graduation from the landscaping program, the 20 program graduates (group three) had accumulated four rule infractions of varying nature and severity. The comparison group (group two) garnered eight rule infractions. However, the *t*-test revealed a *p* value of .27, and by conventional criteria is considered to be not statistically significant. Again, there was a set Alpha level of .05.

Table 4. Rule Violations, Mean Scores, Standard Deviations, *t*-test Results, and Degrees of Freedom of Both Current Landscaping Students and the Comparison Group During the Same Time Frame

Group	Rule Violations	Mean Scores	Standard Deviations	<i>t</i> -test Result	Degrees of Freedom
Landscaping Students	5	.25	.55	0.50	39
Comparison Group	8	.40	.82		

Three months following graduation from the landscaping program, the same aforementioned 20 graduates (group three) had accumulated rule violations totaling 14 for the three month period. The comparison group (group two) violated the rules on 27 cumulative occasions during the same three month period. The *t*-test showed a *p* value of .04. By conventional criteria, this difference is considered to be statistically significant with an Alpha level of .05. Table 5 expresses the differences found at both the one month and three month time intervals.

Table 5. Rule Violations, Mean Scores, Standard Deviations, *t*-test Result, and Degrees of Freedom of Both Landscaping Graduates and the Comparison Group at One Month and Three Month Intervals

Group	Rule Violations	Mean Scores	Standard Deviations	<i>t</i> -test Result	Degrees of Freedom
Landscaping Graduates After 1 Month (Group 3)	4	.20	.41	.27	39
Comparison Group (Group 2)	8	.40	.68		
Landscaping Graduates After 3 Months (Group 3)	14	.70	.86	.03	39
Comparison Group (Group 2)	27	1.35	1.04		

Objective Three

The third objective of the study was to describe inmate perceptions of the program while attending the class.

The survey revealed that the inmates do feel their behavior has improved since enrolling in the landscaping program. Seventy-five percent of the current program participants (group one) said the class has positively affected their behavior, and 47% said their friends and family have observed a positive behavior change in them since participating in the landscaping class. In addition, 60% felt they had more self control because of the landscaping class. Perception data of respondents is listed in detail in Table 6.

Table 6. Student Perceptions of the Landscaping Program at NECX

Text of Question	Possible Responses	N	All Respondents Responses	Mean
How many months have you been enrolled in the landscaping class?	Infinite	20	1 to 61 months	12.1
I believe the landscaping class has changed my life.	S. Agree Agree Neutral Disagree S. Disagree	9 4 6 1 0	45% 20% 30% 5% 0%	3.05
My friends and family believe the landscaping class has changed my life.	S. Agree Agree Neutral Disagree S. Disagree	2 9 9 0 0	10% 45% 45% 0% 0%	2.65
I believe the landscaping class is an effective program.	S. Agree Agree Neutral Disagree S. Disagree	14 6 0 0 0	70% 30% 0% 0% 0%	3.70

Table 6. Continued.

Text of Question	Possible Responses	N	All Respondents Responses	Mean
My friends and family believe the landscaping class is an effective program.	S. Agree Agree Neutral Disagree S. Disagree	8 8 4 0 0	40% 40% 20% 0% 0%	3.20
The landscaping class has positively affected my behavior.	S. Agree Agree Neutral Disagree S. Disagree	8 7 5 0 0	40% 35% 25% 0% 0%	3.15
My friends and family have observed a positive behavior change in me since participating in the landscaping class.	S. Agree Agree Neutral Disagree S. Disagree	3 6 10 0 0	16% 31% 53% 0% 0%	2.50
The landscaping class consumed valuable time that could have been better utilized.	S. Agree Agree Neutral Disagree S. Disagree	0 1 1 5 13	0% 5% 5% 25% 65%	0.50
I use information gained in the landscaping class on a daily basis.	S. Agree Agree Neutral Disagree S. Disagree	4 9 6 1 0	20% 45% 30% 5% 0%	2.80
I feel the landscaping class has improved my income potential.	S. Agree Agree Neutral Disagree S. Disagree	8 7 4 1 0	40% 35% 20% 5% 0%	3.10
I have more self control because of the landscaping class.	S. Agree Agree Neutral Disagree S. Disagree	3 9 8 0 0	15% 45% 40% 0% 0%	2.75

Table 6. Continued.

Text of Question	Possible Responses	N	All Respondents Responses	Mean
Success for me and my family members is now within reach because of the landscaping class.	S. Agree Agree Neutral Disagree S. Disagree	4 9 5 2 0	20% 45% 25% 10% 0%	2.75
I no longer feel drawn to my former associates or friends who had a negative impact on me because of the landscaping class.	S. Agree Agree Neutral Disagree S. Disagree	4 6 8 2 0	20% 30% 40% 10% 0%	2.60
Furthering my education is now appealing to me because of the landscaping class.	S. Agree Agree Neutral Disagree S. Disagree	10 9 1 0 0	50% 45% 5% 0% 0%	3.45
My outlook on the future has improved because of the landscaping class.	S. Agree Agree Neutral Disagree S. Disagree	9 8 3 0 0	45% 40% 15% 0% 0%	3.30
			Overall Mean Score	2.82

Objective Four

The fourth objective of the study was to determine how inmate perceptions of agricultural education affect prisoner behavior while attending class.

Using Davis's (1971) scale, when the inmate perception mean scores were calculated with the inmate behavior mean scores, a substantial positive correlation ($p = .52$) was found to exist between how the inmates perceived their behavior had improved and an actual improvement in behavior. The t -test results

showed a p value of less than .0001, and by conventional criteria, this difference is considered to be statistically significant. The test had a set Alpha level of .05. Literally interpreted, this means 27% of the variation in behavior scores is attributable to participation in the landscaping program. Table 7 details the findings of objective four.

Table 7. Overall Perception and Behavior Mean Scores, Correlation Value, t -Test Result, Alpha Level, and Variation in Behavior Attributable to Class Participation

Overall Perception Mean Score	Overall Behavior Mean Score	Correlation Value (p)	t -test Result	Alpha Level	Variation in Behavior Attributable to Class Participation
2.82	3.75	.52	.0001	.05	27%

CHAPTER 5

CONCLUSIONS

Summary

The strong foundations of agricultural education were laid many years ago by those visionaries who understood the multitude of reasons for continuing America's strong agricultural traditions. Long before terms like national security and food safety were uttered, the humble beginnings took shape to become the core curriculum of a set of courses that have weathered time and political opposition to remain popular class offerings in our nation's high schools. It is questionable if any of the pioneers of this educational milestone could have grasped the magnitude or the far reach of their efforts. Moreover, agricultural education is offered in places many thought were out of reach. New opportunities exist for teaching agriculture outside of the United States through sponsored internships and in corporate America where agriculture has put 500,000 square feet of plant material on the roof of Ford Motor Company's historic River Rouge manufacturing facility (Ford Motor Company, 2003). Other new horizons include nursing home facilities where horticulture is utilized as patient therapy, in middle and primary schools where agriculture's natural science lessons come home to enhance learning and improve test scores, and in

the prison systems across our nation where agriculture programs are incorporated to provide inmates with a viable source of income and food production skills to better feed their reconnected families.

In 2002, Howard Carlton, Tennessee's longest serving prison warden, had a vision to revamp the education offerings at his prison in the eastern tip of the state (Dukes & White, 2007). An outdated set of courses was being offered at his facility, and he, along with the education director, decided to initiate the computer applications course, family life and consumer science class, and the interior and exterior landscaping program (Carlton & Miller, 2008).

To simply offer quality instruction must never be the end-all of any educational program. For teaching to be effective, there must be a desire to change behavior within those subjected to the employed teaching methods. In this era of increasing accountability, services, strategies, and programs offered by the government must be at least somewhat successful in their endeavors to remain in existence.

Research utilized in the development of this study included the Prison Education Research Project (1994), a document entitled, "Funding for Inmate Academic and Vocational Programs" (1999), the *Journal from the Northwest Center for the Study of Correctional Education* (1996), and the *Evaluation of the Prisoner Re-Entry Initiative: Interim Report*, by the United States Department of Labor (2008). In addition, experiential education models by theorists like Dewey (1933), Kolb and Fry (1975), and Rogers (1969) were examined. Rogers' (1969) model of experiential learning and its associated framework was found to

represent the building blocks of the interior and exterior landscaping program offered at NECX.

The objectives of this study were: 1) to determine how agricultural education affects prisoner behavior while attending the interior and exterior landscaping program; 2) to determine how agricultural education affects prisoner behavior after completing or graduating the interior and exterior landscaping program; 3) to describe inmate perceptions of the interior and exterior landscaping program; and 4) to determine how inmate perceptions of agricultural education affect prisoner behavior while attending the interior and exterior landscaping program.

Limitations of this study included: 1) some of the data reported in this study were perception data. The effectiveness of the program from the actual student perspective was imperative to the research being conducted, and 2) a limited number of the conclusions drawn were based on the accuracy of the responses to the survey-style research portion.

Important Findings

Objective one included TOMIS data that reported the 20 students who were actively enrolled in the landscaping program had accumulated five rule violations during the previous 30 days. However, the 20 members of the comparison group had accumulated eight rule violations during the same time period. Objective two showed one month following graduation from the landscaping program, the 20 program graduates had accumulated four rule

infractions of varying nature and severity. The comparison group garnered eight rule infractions. Three months following graduation from the landscaping program, the same aforementioned 20 graduates had rule violations totaling 14 for the three month period while the comparison group violated the rules on 27 occasions during the same three month period. The *t*-test showed a *p* value of .04 for the three-month comparisons. By conventional criteria, this difference was considered to be statistically significant with a set Alpha level of .05.

Based on the research conducted during the study in objective two, landscaping program completion by the inmates does lead to significantly improved in-house behavior. The most noteworthy improvement in behavior was observed among program graduates three months after program completion. This hopeful finding suggests that a lasting change may have occurred within the inmate learners who now perceive to have a brighter outlook on the future and a renewed purpose and vision for life.

The perception data collected by the survey instrument in objective three revealed some noteworthy ideas held by program participants. Foremost, 100% agreed the landscaping class is an effective program. An encouraging 95% said furthering their education was now appealing because of the landscaping class. In addition, 85% said their outlook on the future has improved because of the landscaping class.

From a behavior standpoint, 75% of the current landscaping students said their behavior had improved as a result of their involvement in the landscaping program. Additionally, 60% said they had more self control because of the

landscaping class. Finally, 50% of the respondents said they no longer feel drawn to their former associates or friends who had a negative impact on them because of the landscaping class.

While it can not be stated that landscaping program involvement caused positive behavior changes among the inmates, when the inmate perception scores from the survey were calculated with the inmate behavior scores from objective one, a substantial positive correlation was found ($p = .52$). The *t*-test showed this result to be statistically significant. Literally interpreted, this means 27% of the variation in behavior scores is attributable to successful landscaping program completion.

The survey instrument, perhaps more than any other component of the study, displays the value of prison education programming from the viewpoint of the inmate learners. Many of these students have had little success in any aspect of life, and most of their experiences with all levels of education have been distasteful. Now, however, most of the landscaping students at NECX view educational opportunities as a privilege and a right of passage to life beyond institutionalization. These hopeful observations from the survey are suggestive that the educational efforts and expenditures are valuable to all stakeholders, especially the inmates who are seeking beneficial and relevant knowledge.

The study did reveal some considerable implications for not only retaining vocational courses within our state but also expanding the menu of course offerings. The study strengthened beliefs that educational efforts should be intensified because of the reduction of disciplinary infractions found after program

completion within not only Tennessee state prisons, but institutions located in Florida, New York, and Texas as well. The report also solidified claims that graduation from the interior and exterior landscaping program is statistically linked to improved behavior. Moreover, the inmates themselves also perceive that program involvement will lead to a more secure future, advances in self esteem, improved family relationships, and an enhanced view of post-secondary education options.

Recommendations for Further Study

Future research should address the overwhelming problem of recidivism in both state and federal prisons. Educational programming will appear to be much more effective if substantial evidence exists to link lower prison return rates to involvement in educational courses. Does prison education programming lead to lower prison return rates?

The effectiveness of other educational classes or programs should also be investigated to determine which offerings are the most successful in altering in-house behavior and deterring repeat offenders. Those programs that do not lead to measurable behavior changes should be evaluated for possible improvements that could lead to greater effectiveness. Are all prison education programs of equal value?

The ability of future research projects to track and evaluate the behavior of program graduates at six months to one year after program completion is imperative. This study displayed the surprising effect that lapsed time had on the

observed differences in behavior of the graduates when compared to their peers who were not enrolled in an education program. Will the improved behavior endure as more time passes?

If possible, any future study should include the use of a larger sample size for several reasons. Foremost among these reasons is the ability that a larger sample would provide for making inferences to a greater population. Also, a larger sampling would make the use of inferential statistics and accompanying formulas seem more reliable when compared to a limited sampling. Would a larger sampling provide for more dependable results and far-reaching applications?

The behavior of those inmates who are allowed to participate in college-level courses should also be examined. Does a correlation exist between improved behavior and educational furtherance at another level?

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Appendices

Appendix A

Definition of Terms

Definition of Terms

GED Course: A class with open entry and exit that attempts to prepare students for the General Equivalency Diploma examination. Simulator exams are given throughout the year to gauge student progress and preparedness. The GED exam is offered each quarter. A maximum number of 24 inmates can be assigned to a GED classroom at a Tennessee prison, with an additional one to four inmate teaching assistants for each instructor. NECX has five GED classes.

Recidivism: The occurrence of former inmates who commit new, punishable offenses and subsequently re-enter the prison system.

Rehabilitation: Programming within the prison system that attempts to change inappropriate behavior and habits by suggesting, teaching, modeling, and implementing more desirable conduct.

TDOC: The Tennessee Department of Correction is based in Nashville with a hierarchal governing structure spanning from the commissioner who reports to the governor, then to fifteen individual prison wardens, each with their own respective staff members who oversee the rehabilitation efforts of 19,519 inmates across the state of Tennessee. In 2008, the department employed 5,298 people (Little, 2008).

TOMIS: The Tennessee offender management information system is a DOS-based computer network serving as the information storehouse for the TDOC. Access to the system is limited to TDOC employees, and some parts of the network have further restrictions within the department.

Vocational Program: The combination of relevant classroom instruction and supervised hands-on learning activities designed to establish competence in a useable and marketable skill. NECX offers eight vocational programs including: carpentry, commercial cleaning (two classes), commercial food service, interior and exterior landscaping, residential construction technology (two classes), and residential electricity. A maximum number of 20 students can be assigned to each program with one to four inmate teaching assistants and an inmate custodian serving under the supervision of the teacher. Most programs offer some form of certification after successful completion. A high school diploma or a GED is a prerequisite for program entry.

Appendix B
Survey Instrument

Interior and Exterior Landscaping Performance Survey

Instructions: You are being asked to voluntarily participate in a research study, and participation or non-participation will have no effect on services you are now receiving or will receive in the future. Use the provided pencil to place an "X" beside the answer that most accurately describes your thoughts, feelings, or experiences regarding your participation in the landscaping class. **DO NOT WRITE YOUR NAME OR NUMBER ON THIS PAPER! DO NOT IDENTIFY YOURSELF IN ANY WAY!**

1) How many months have you been enrolled in the landscaping class?

2) I believe the landscaping class has changed my life.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

3) My friends and family believe the landscaping class has changed my life.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

4) I believe the landscaping class is an effective program.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

5) My friends and family believe the landscaping class is an effective program.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

- 6) The landscaping class has positively affected my behavior.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
- 7) My friends and family have observed a positive behavior change in me since participating in the landscaping class.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
- 8) The landscaping class consumed valuable time that could have been better utilized.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
- 9) I use information gained in the landscaping class on a daily basis.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
- 10) I feel the landscaping class has improved my income potential.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
- 11) I have more self control because of the landscaping class.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree

12) Success for me and my family members is now within reach because of the landscaping class.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

13) I no longer feel drawn to my former associates or friends who had a negative impact on me because of the landscaping class.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

14) Furthering my education is now appealing to me because of the landscaping class.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

15) My outlook on the future has improved because of the landscaping class.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Appendix C
Letter of Support and Authorization



STATE OF TENNESSEE
DEPARTMENT OF CORRECTION
Northeast Correctional Complex
P.O. BOX 5000
MOUNTAIN CITY, TENNESSEE 37663-5000
TELEPHONE (423) 727-7387 FAX (423) 727-5415

MEMORANDUM

TO: Jeffrey Lewis
FROM: Lee W. Miller, Deputy Warden
DATE: June 30, 2006

SUBJECT: RESEARCH PROJECT

In response to your request dated June 16, 2006, you have approval to initiate your research studies for the University of Tennessee with some limitations. TOMIS access is granted to you only and is not to be extended to anyone else. Also, per TDOC policy, the identity of inmates can not be revealed or compromised in any way. This confidentiality includes inmate names and aliases, inmate numbers, family names, victim names, visitor names, and imagery or pictures that might include inmates.

LWM/par

PC: Howard Carlton, Warden
David A. Sexton, Associate Warden of Operations
Dr. Sharon Taylor, Principal

Vita

Jeffrey Monroe Lewis was born in Abingdon, VA on July 17, 1976. He was raised in Shady Valley, TN on a 110 acre farm and went to grade school at the Shady Valley and Laurel Bloomery Elementary schools. He graduated from Johnson County High School in 1994. From there, he went to the University of Tennessee, Knoxville and received a B.S. in Agricultural and Extension Education in 1998.

Jeffrey has taught interior and exterior landscaping for the State of Tennessee at the Northeast Correctional Complex for seven years.

Jeffrey and his wife Maggie currently live in Shady Valley with their two children, Elijah and Isabel.