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# Pennsylvania Academic Career/Technical Training Alliance Initiative: Engaging Youth in School and Work

Marna Goodman

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THE PENNSYLVANIA ACADEMIC CAREER/TECHNICAL TRAINING ALLIANCE  
INITIATIVE: ENGAGING YOUTH IN SCHOOL AND WORK

by

MARNA GOODMAN

A Dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the  
requirements for the Degree of Doctor of Philosophy, The City University of New York

2015

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This manuscript has been read and accepted for the  
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## **Abstract**

### **THE PENNSYLVANIA ACADEMIC CAREER/TECHNICAL TRAINING ALLIANCE INITIATIVE: ENGAGING YOUTH IN SCHOOL AND WORK**

by

Marna Goodman

Adviser: Professor Jeff Mellow

This research offers a feasibility study on the effectiveness of the Pennsylvania Academic Career Technical Training Alliance (PACTT) at engaging youth in school and work upon return to the community. The sample included adjudicated youth from Allegheny County, Pennsylvania committed to PACTT-affiliated residential facilities and who discharged between July 1, 2011 and June 31, 2012. An overview of the PACTT Initiative, with specific attention to its core elements, is presented and examined in the context of Ecological Systems Theory. Secondary data was analyzed using logistic regression to measure the overall impact of the five PACTT elements, dosage of PACTT elements, and the influence of a youth's personal characteristics on engagement in school and/or work upon discharge. Although the results revealed statistically non-significant relationships among four of the PACTT elements and the outcome variables, statistically significant positive relationships were identified between the following sets of variables: (a) obtaining a HSD/GED during placement (one of the PACTT elements) and (b) age at discharge (one of the personal characteristics) and engagement in work post-discharge. Additionally, a statistical trend showing a positive relationship between length of stay and school engagement was identified. Taken together, this feasibility study shows a limited relationship between the PACTT program and the youth outcomes the program is designed to impact. However, the study does offer a first step towards a more robust evaluation

of PACTT and provides an evaluative framework for future researchers interested in examining the effectiveness of PACTT.

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## Table of Contents

Abstract .....	iv
Acknowledgements.....	vi
List of Tables .....	ix
Introduction .....	1
Purpose of the Study & Research Questions .....	3
Overview of Chapters.....	3
Literature Review.....	5
Ecological Systems Theory.....	7
Figure 1: Brofenbrenner's Ecological Theory of Development .....	9
MacroSystem.....	13
MicroSystem .....	35
Mesosystem and Exosystem .....	41
Exploratory Questions and Hypotheses.....	49
PACTT .....	51
Description of the Pennsylvania Academic Career Technical Training Alliance Initiative .....	51
The Evolution of PACTT and Pennsylvania's Juvenile Justice System .....	51
The Inception of PACTT .....	59
PACTT: Past, Present, Future .....	61
Methodology.....	70
Participant Characteristics .....	70
Sampling Procedure.....	71



Measures .....	74
Procedures .....	75
Variables .....	77
Research Questions and Hypotheses .....	80
Results .....	83
Question 1: Influence of PACTT components on employment and school engagement.....	83
Question 2: Influence of PACTT dosage on employment and school engagement.....	86
Question 3: Influence of personal characteristics on employment and school engagement .....	89
Discussion.....	92
Review of Results.....	92
Interpretations .....	94
Limitations and Recommendations .....	106
Conclusion .....	111
Appendix A.....	113
Appendix B.....	116
Appendix C.....	119
References .....	121

## List of Tables

Table 1: Logistic regression predicting engagement in work six months post discharge with PACTT components	í í í í í í í í í í í í í í í 83
Table 2: Logistic regression predicting engagement in school six months post-discharge with PACTT components	í í í í í í í í í í í í í í í ..85
Table 3: Logistic regression predicting engagement in work six months post-discharge with PACTT dosage (four components)	í í í í í í í í .86
Table 4: Logistic regression predicting engagement in work six months post-discharge with dosage (five components)	í í í í í í í í í í í í ...87
Table 5 ó Logistic regression predicting engagement in school six months post-discharge with dosage (four components)	í í í í í í í í í í í ..88
Table 6 ó Logistic regression predicting engagement in school six months post-discharge with dosage (five components)	í í í í í í í í í í í ...89
Table 7 ó Logistic regression predicting engagement in work six months post-discharge with personal characteristics	í í í í í í í í í í í .í ..90
Table 8 ó Logistic regression predicting engagement in school six months post-discharge with personal characteristics	í í í í í í í í í í í í 91

## Chapter One

### Introduction

Research supports that effectively connecting youth to school and/or work upon return to the community is critical in a youth's ability to avoid recidivating and being returned to placement (Abrams, 2006; Cecil, Drapkin, Mackenzie, & Hickman, 2000). Further research provides that promoting education for children and youth while in delinquent residential facilities<sup>1</sup> can also be an effective method for improving the placement experience and ultimately lowering recidivism (Lewis, 2006; Mazzotti & Higgins, 2006). However, placements have historically been unable to equal the resources available to youth in the public school system and modern workplace resulting in placed youth receiving "watered down" academics and inferior career and technical programs (Donlevy, 2001). This is consistent with the long term focus on the safety, security, and mental health treatment of youth in placement with minimal attention paid to offering quality education or adequate vocational training services (Griffin & Hunninen, 2008). The results were youth, already at significant academic risk, becoming increasingly disconnected from school and even less likely to return post discharge (Alexander, Entwisle, & Horsey, 1997) and unable to obtain adequate employment.

However, over the past decade efforts have been made to improve educational services, including the academic instruction, offered to youth placed in the juvenile justice system (Houchins, Pucket-Patterson, Crosby, Shippen, & Jolivet, 2009). Though, many of these efforts were historically lost at reentry, as traditional aftercare programs had not attempted to

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<sup>1</sup> Delinquent Residential Facilities (also referred to as placement) house youth in the juvenile justice system who have been accused of and adjudicated delinquent for the commission of a crime. There are numerous designs holding anywhere from a handful to hundreds of youth with average lengths of stay ranging from 30 days to a few years. Some facilities may be treatment specific, but all focus on holding youth accountable for their behavior and providing community safety.

understand or continue the work or education provided while in placement, and instead focused on supervision in the community through monitoring and surveillance (Altschuler & Brash, 2004). This practice is also changing with the new approach to aftercare that understands that reentry is more effective when the process of helping youth return to an appropriate educational or vocational placement or secure employment begins in placement (Nellis & Wayman, 2009). Further, if the improvements at the residential facilities are to be effective at engaging youth in school upon their return to the community, the facility and the juvenile justice system must develop relationships with the community, the school districts, and the schools they work with (Balfanz, Spiridakis, Curran Neild, & Legters, 2003). These changes aimed at improving the placement experience may have the subsequent effect of helping residential facilities be more than moderately effective at preventing against future placement and incarceration (Abrams, 2006).

As recidivism is the most commonly studied post release variable, preventing recidivism is often the primary goal of the interventions in residential facilities. The question that is seldom studied, when evaluating the impact of academic and career technical education in residential facilities, is whether the individual, adult or youth, pursues their education upon release (Gates, 2008) or is able to obtain and maintain legitimate employment. To this end, there are few studies that examine the intermediate outcomes of the facility to community transition of placed youth (Bullis & Yovanoff, 2002) or look specifically at whether participation in or completion of education programs increase commitment to pro-social institutions (Gates, 2008) such as school or work.

## **Purpose of the Study & Research Questions**

The aim of this research is to fill the void between the research, focusing on the relationship between education and/or employment and recidivism, and the relatively unevaluated efforts of the residential facilities intended to connect youth to school and/or work upon their return to the community. This research will look specifically at the Pennsylvania Academic Career Technical Training Alliance (PACTT) Initiative which is focused on enhancing the academic and career/technical opportunities for youth in residential facilities with the aim of increasing youths' engagement with school and/or work upon return to the community. The PACTT is currently being implemented in 24 residential facilities in Pennsylvania.<sup>2</sup>

There are three objectives of this research on the PACTT initiative: 1) assess if the initiative is effective at engaging youth in school and/or work upon their return to the community; 2) assess the impact of dosage on youth outcomes; and 3) examine the impact of each youth's own characteristics on the effectiveness of the intervention.

## **Overview of Chapters**

The research begins with a review of the literature, chapter two, on the juvenile justice system, its relationship with education, and the connection between youth in juvenile residential facilities to school, work, and the potential for recidivism. This chapter also introduces and provides an overview of Bronfenbrenner's Ecological System Theory (1974) which provides the theoretical framework for this study. Guided by the four components of the Ecological System's Theory, macro, exo, meso, and micro systems (Bronfenbrenner, 1974; 1979), the literature

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<sup>2</sup> 24, is number of residential facilities in which PACTT was being implemented during the time frame of this study. PACTT was also present in two day treatment programs at this time.

## PACTT Initiative

review starts with the macrosystem where the history of the juvenile justice system and the role that education has played throughout is addressed. Although out of order from how the theory is generally presented, the microsystem is presented next in an order better designed for framing this research. This level explores the impact of youth relationships and personal characteristics on their relationship to school and work. This section also presents Hirschi's Social Bond Theory (1969) as a supporting theory of significance of youth having positive and strong microsystems with school and work. Following is the exosystem which focuses on the potential impact of the Pennsylvania Academic Career/Technical Training Initiative (PACTT) on the youth's experience in placement and ultimately on the mesosystems they may build between placement and the community and ultimately within the community. Lastly, is the mesosystem, the space in which microsystems interact. The mesosystems developed in placement, under the current juvenile justice paradigms, and the subsequent ability for the micro level systems youth build in placement to successfully replace the less functional relationships youth had to school and work in the community are explored.

Following the literature review, chapter three presents the Pennsylvania Academic Career/Technical Training Alliance (PACTT) Initiative. It provides background on the inception and development of PACTT as well as the thorough description of the initiative. This includes further reference to PACTT's place in the exosystem.

The methods section follows as chapter four and presents the research questions, an operationalized description of the PACTT program and population, the data collection process including: instruments, variables, and the data analysis plan.

Chapter five presents the result of the data analysis to be followed by chapter six which provides a discussion of these findings and future research.

## CHAPTER TWO

### Literature Review

The United States Juvenile Justice System has a history wrought with the struggle between being punitive, responsible for meting out punishment to those who violate the law, and being rehabilitative, responsible for bringing about positive change in youth who have gone astray (Lipsey, Howell, Kelly Chapman, & Carver, 2010). This struggle has ensued through the present day, with the early focus on rehabilitation replaced with a "tough on crime" mentality in the 1970s and 80s, until scholars returned to the research in search of what does work in efforts to prevent delinquency (Tonry, 2009; Warren, 2007; Cullen, 2005). For the approximately 200,000 individuals under the age of 25 that exit the custody of the juvenile justice system each year (Nellis, 2011; Snyder, 2004), their preparation for successfully returning to the community is largely predicated on the paradigm governing the juvenile justice system during the time of their involvement.

Individuals, including juveniles exiting the criminal or juvenile justice system, are often confronted with significant obstacles around housing, mental health care, employment (Nellis, 2011), and education. When the juvenile system fails to prepare youth for returning to the community by not providing life skills training, employment training, and assistance with school reengagement, it exacerbates a youth's barriers to reentry (Nellis & Wynman, 2009).

The presence of appropriate educational opportunities for youth in placement has long been recognized as significant for reconnecting youth to society (Gagnon, Barber, Van Loan, & Leone, 2009; Foley, 2001; Nelson, Leone, & Rutherford, 2004). Residential facilities have the capacity to be successful at engaging youth in school and/or work upon their return to the community (Frustenberg & Hughes, 1995; Coleman 1988). For instance, incorporating a focus

on academic and career/technical education into programming such that youth feel the material is relevant to them will increase their connection to school (Leone & Meisel, 1997; Polk, 1984) and employment. The notions of individualized education and the need to engage the child in their learning were integral at the start of the juvenile justice system (Platt, 1977).

However, this early focus did not sustain and over time the emphasis was on areas concerned with safety, security, and treatment, with significantly less attention on providing a high caliber education or vocational training services (Griffin & Hunninen, 2008). This shift likely contributed to youth, generally already academically at risk, becoming increasingly disconnected from school and often resulting in youth's failure to return to school upon returning from placement (Alexander, Entwisle, & Horsey, 1997). The capacity for systemic shifts in the programming and policies governing the juvenile system, and subsequently the residential facilities to ultimately impact the individual lives of youth while in placement and upon their return to the community, can be explained via the Ecological Systems Theory.

This literature review will present Bronfenbrenner's Ecological Systems Theory (1974) as a useful framework for understanding both the significance of affording youth in placement a quality education and the impact of that education on youth's return to the community. This premise will be examined through the lens of each system level ó macrosystem-, microsystem-, exosystem-, and then mesosystem. It is worth noting that the system is being presented out of order, which is typically microsystem, mesosystem-, exosystem-, then macrosystem, or in the reverse. However, the order of presentation here is best suited for this theory as a framework for explaining how improving the academic and career technical opportunities for youth in placement enhance these opportunities for youth upon their return to the community. The macrosystem section will provide an overview of the history of the juvenile justice system and



the relevant policies and laws affecting youth in residential facilities, with special attention to the provision of education to incarcerated youth. The microsystem section follows and provides insight into general academic and employment characteristics and histories of youth in the juvenile justice system. In addition, this section will discuss Hirschi's Social Bond Theory (1969) as a supporting theory for the significance of ensuring that youth are connected to school or work as a means of protecting against further delinquency. Next is the exosystem, which provides context for the impact of the Pennsylvania Academic Career/Technical Training Alliance (PACTT), to be described further in the following chapter, in the residential facilities and subsequently on the youth. The last section will present the mesosystem and explore how residential facilities have the capacity to form a mesosystem with youth's home communities and contribute to the formation of new and positive connections for youth with school or work upon their return to the community. Further, the mesosystem section will explore how PACTT's impact in the residential facilities is able to target the micro and meso systems impacting youth in the community and in placement toward successful academic and employment outcomes upon a youth's return to the community.

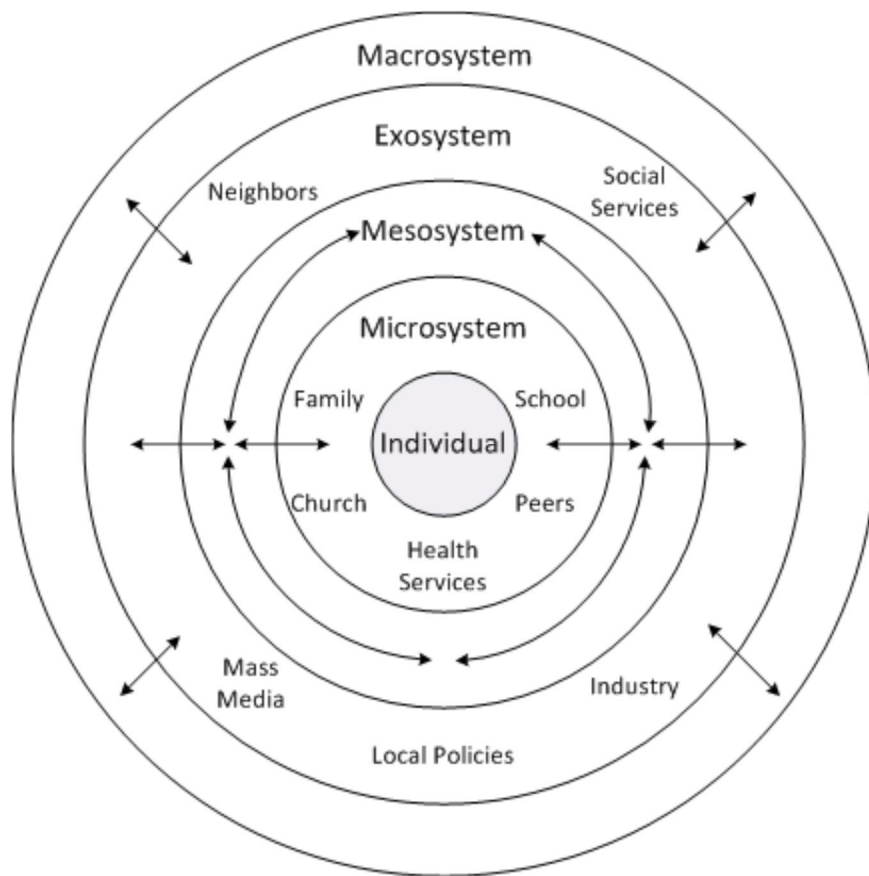
### **Ecological Systems Theory**

Ecological Systems Theory is a psychological theory that identifies an ecological system as a guide of human development (Bronfenbrenner, 1974). The central tenet of the Ecological System Theory is that individuals exist in a multitude of settings beginning with the individual and extending outward to include the family, school/work, and the larger society (Duerden & Witt, 2010). In this theory, human development is conceptualized in relation to the context and the interdependent nature of the system (Arditti, 2005). Accordingly, in the ecological framework, it is in the interaction between the individual and all the aspects of their immediate

environment (people, objects, and situation) that development occurs (Bronfenbrenner, 1994). Here, development is in the dynamic interrelationship between the changing environments in which the individual exists and the changing person him/herself (Arditti, 2005; Lerner, Sparks, & McIubbin, 1999, as cited in Arditti, 2005).

The foundational component of the Ecological System Theory that multiple environmental systems interacting with proximal processes and stable systems cultivate opportunities and human development (Bronfenbrenner, 1994), is well suited for understanding the premise that youth's time spent in placement can positively alter youth's previously existing and future microsystems in the community. For instance, pertaining to education, a youth's success can be impacted by a wide range of environmental factors including family, school, and surroundings (Bronfenbrenner, 1979; 1994; 1999; Miller, 2012) where both a youth's home/community and residential placement can constitute an environment. One intersection of systems identified as enhancing student learning and academic success is active collaboration between schools and families (Bronfenbrenner, 1994; Miller, 2012). This research expands on this premise to include the impact of active collaboration occurring within residential facilities and between the residential placements and the community. Supporting this notion is the concept that youth exist in overlapping worlds of community, school, workplace, peer, and family (Bronfenbrenner, 1974), and that youth are shaped through the constant intersecting of these worlds (Bronfenbrenner, 1979). To capture the various systems impacting the individual, the Ecological Systems Model is comprised of four already mentioned components: the microsystem, mesosystem, exosystem, and macrosystem. They are presented below in the appropriate order with additional description.

**Figure 1: Bronfenbrenner's Ecological Theory of Development<sup>3</sup>**



The microsystem refers to an individual's relationship with a given setting, specifically the individual's roles, activities, and interpersonal relationships within this setting (Bronfenbrenner, 1979). This includes the individual's social affiliates (Cairns, Cairns, & Neckerman, 1989, Cornille, Pestle, & Vanwy, 1999), how the individual perceives his/her interconnectedness with these affiliates and his/her own role in the setting. The relationship to family is a primary component of development, and parental functioning has been shown to be critical to the development of a youth's overall interests (Arditti, 2005). However, the micro

<sup>3</sup>Adapted from Santrock and Yussen (1992).

systems also include an individual's connection to peers, school, and work. The microsystem is dynamic and shifts as an individual develops, expands his/her immediate environments, changes roles, and builds new relationships (Bronfenbrenner, 1979). In addition, microsystems are influenced by the mesosystem- and exosystem (Miller, 2012). This would include the manifestation of each of these systems in the residential facility into which a youth is placed.

Duerdin and Witt (2010) speak to the cross over between individual microsystems and those in youth residential placements and highlight the importance of compatibility between the two. This research will refer to the microsystems youth form in the home and community and also those formed in placement. With regards to the microsystems youth forms at home, the research speaks to: the youth's family environment, which is shown to be connected to youth's academic outcomes; youth's history in school, which is typically one of failure, characterized by a lack of access to assistance from teachers and few positive social interactions, as well as poor school role models; and the academic characteristics of youth entering placement which often reveal them to be far behind. In placement, the microsystem would include youth participation in the employability and career/technical education training as well as in work experience. Further, time in placement provides opportunities for youth to enhance academic characteristics through literacy and numeracy opportunities.

The mesosystem is comprised of microsystems interacting together. Where the Ecological Systems Theory posits that human development occurs in the interaction between the individual and changing environments in which the individual lives, the mesosystem accounts for the ways those individual micro systems overlap. It is the interaction between the contexts containing the developing person. For instance, a youth's relationship to family would be a microsystem as would the youth's relationship to school, but the relationship between home and

school would build a mesosystem (Bronfenbrenner, 1979; Arditti, 2005; Miller 2012). The interconnectedness of microsystems in the mesosystem makes it influential in shaping the values and beliefs of youth (Bronfenbrenner, 1979; Jackson & Fondacaro, 1999; Barboza, Schiamberg, Oehmke, Korzemiewski, Post, & Heraux, 2009, Corcoran & Nichols-Casebolt, 2004). For instance, the relationship between one's parents and school is hugely influential in conveying the value placed on school/education and, when positive, provides the youth with additional educational supports and maintains continuity between the two micro systems (Hong & Eamon, 2012).

Similar to the microsystem the mesosystem is not fixed, but rather is formed and extended as an individual moves into new settings (Bronfenbrenner, 1979). In addition to the settings generally discussed – family, school, and work – the residential facility where placed youth reside also serves as part of a youth's mesosystem with influence over a youth's development. In this research, a youth's participation in programming that crosses back into the community comprises the mesosystem. This includes, for instance, participation in work experience, career/technical education, and opportunities for remediation and acceleration.

The exosystem is an extension of the mesosystem and refers to the interaction of an environment that has a direct impact on the youth with settings or factors that do not directly involve the individual (Miller, 2012). The social structures that have an indirect influence on an individual can be either formal or informal (Hong & Eamon, 2012; Bronfenbrenner, 1977). Both of these influences can be at work in a prison setting, including a juvenile facility, where the setting itself and influences therein can impact the youth's experience and subsequent re-entry into the community and home (Arditti, 2005). Examples of systems at work in a residential facility that may impact a youth – though not touch them directly – include administrative and

## PACTT Initiative

staff policies and a facility's collaboration with the community (Duerdin & Witt, 2010). For the purpose of this research, the exosystem includes the Pennsylvania Academic Career/Technical Training Alliance PACTT and the impact of its implementation into the residential facilities. As will be further explained in the following chapter, PACTT, while not directly impacting the youth, involves factors being embedded into the residential facility, which is the environment in which the youth is directly involved. The factors, referenced throughout, include an enhanced focus on academics aligned with state standards and an emphasis on career/technical education (CTE).

Lastly, the macrosystem, according to Bronfenbrenner (1979), is the broader societal factors in which the other systems reside (Duerden & Witt, 2010). This includes socioeconomic status and culture (Corcoran, 2000). This level includes regulatory systems and established policy (Schensul, 2009), in essence providing the lower order systems with a "blueprint" of the underlying ideology and subculture (Bronfenbrenner, 1979). As the macrosystem provides the broad societal attitudes, it generally has the least direct effect on the individual (Barboza et al., 2009). However, indirectly, its effect can be significant as policies and procedures can define the experiences of youth in the juvenile justice system and subsequently their potential for success upon discharge.

As indicated, an ecological perspective is concerned with an individual's environment at all four levels, and how it is influenced by human interaction and situational changes ultimately leading to risks or opportunities (Garbarino, 1992). When considering an individual's immediate setting, the theory focuses on the individual's direct interactions with others in the setting, the impact of the connections between others in the setting (McLaren & Hawe, 2005), and the relationship between that setting and other settings influencing the youth. Given this, any effort

to fully understand the capacity of time spent in residential placement to impact a youth's likelihood of engaging in school and work upon return to the community via an ecological perspective, must begin with a review of the macrosystem. Specifically, the changing paradigms and policies that have governed the juvenile justice system will be discussed.

## **MacroSystem**

**History of juvenile justice system.** Two primary principles guided the inception of the juvenile court at the end of the 19th century. The first was the notion of *parens patriae*, the idea that the government had a right to act in lieu of the parent whenever it was believed that a child's welfare was at risk. By the 1920s every state had affirmed its allegiance with this concept (Schlossman, 2005). The second principle was the belief that youth who were deemed delinquent were also amenable to reform and it was the system's responsibility to provide ample rehabilitation and ensure that they did not suffer the stigma of being considered a "criminal" (Nellis, 2011). However, before the Juvenile Justice Act and the establishment of the first Juvenile Court in Chicago in 1899, reformatories were created in the middle of the nineteenth century as a "special form of prison discipline for adolescents and young adults" (Platt, 1977 p. 46). The reformatories subscribed to the belief that incorrigible youth could be rehabilitated and become productive and useful members of society. To facilitate this, the reformatories were designed to house youth for indeterminate sentence lengths and deemed to be a place of "organized persuasion" (Platt, 1977).

The managers of the reformatories, generally considered to be residential schools for underprivileged youth, convinced the states that these institutions should be covered under *parens patriae*. Considering themselves responsible for the education of these youth the reformatories embarked on the second principle, the belief in the rehabilitative potential of

youth, and focused on education and the training of youth in morality, industry, religion, the ability to earn a living (Platt, 1977; Schlossman, 2005), and the overall teaching of middle class values (Roberson, 2000). It also served the equally important function of separating youth from negative influences, which included their families, many of which were considered unfit by the reformers (Platt, 1977; Schlossman, 2005). With the exception of the southern states, nearly all the states had some form of a reform school by 1890.

However, despite the desirable intent of the reformatories, to counter the impact of the early life experiences including, poor family life, corruption, and poverty, of many delinquent youth (Roberson, 2000) and ultimately eliminate delinquency (Mennel, 1973), they ultimately turned out to be generally reflective of the prisons they replaced (Roberson, 2000). While couched in paternalism reformatories ladled youth deemed to be delinquent with indefinite periods of confinement, military drills and discipline and long hours of manual labor (Platt, 1977; Roberson, 2000). The violent and exploitative approach of the reformatories toward children called into question their capacity of serving *en parens patriae* (Mennel, 1973). Yet, despite this, the doctrine of *parens patriae* guided the establishment of the juvenile court which was authorized to act *in loco parentis*, in place of the parent, and as a guardian of the youth that came before it (Roberson, 2000; Mennel, 1973).

Rehabilitation remained the objective under the new juvenile justice system (Bilchick, 1997) and the court sought to address the misbehavior of wayward youth and to get them back on track, a reflection of its function of both crime control and social work (Platt, 1977; Butts & Harrell, 1998; Nellis, 2011). Consistent with the Court's premise that the youth before it were not criminals, but rather youth in need of protection, care, and discipline (Roberson, 2000), youth received education and aid rather than punishment (Mennel, 1973). Therefore the Court was



designed to focus on the needs of the youth when dispensing its dispositions, and was subsequently less punitive than with adults (Bilchick, 1997). Holding to the juvenile court's commitment to helping versus punishing youth, lawmakers endorsed a lesser legal standard of due process (Butts & Harrell, 1998) and operated informally (Roberson, 2000). The development of a court based on a lesser legal standard than used in the adult system also appealed Illinois Reformers who were concerned about the limiting impact of affording juveniles constitutional protections on their ability to effectively rehabilitate them under the traditional patriarchal approach (Mennel, 1973). Unfortunately, the perceived benefits of this lesser standard became a significant concern as the courts were quickly plagued by many of the same problems of the reformatories (Roberson, 2000) and soon demonstrated their own random use of authority (Schlossman, 2005).

The movement that brought about the new juvenile court also seemed to bring an increase in the State's oversight of and involvement with the youth that it deemed in need of assistance. For instance, a separate youth detention facility was established to house youth that were believed to have committed a crime as well as those that were identified as dependent or neglected. This appealed some reformers's desire to save homeless and poor children from the streets (Butts & Harrel, 1998). This corresponded with Congress's proposition that children should not be raised by parents deemed unworthy (Platt, 1977) and enabled the system's claim that it was necessary to detain youth for diagnostic, educational, and punitive purposes (Schlossman, 2005). Working under the notion of *parens patriae* and with the limited legal restrictions the juvenile court was able to use broad strokes when determining if a child's welfare was threatened and in need of state intervention. Rather than a positive agent of social control the courts began to be seen as an authority aimed at punishing youth as though they were adults

(Schlossman, 2005) and simultaneously as a means for the upper class to preserve the class system and control the lower class identified as dangerous (Roberson, 2000).

This struggle to find the correct balance between protecting youth from the harshness of the adult system without subjecting them to the pitfalls of an arbitrary juvenile system waged on for half a century. By the 1960s the Supreme Court had decided that the informality of the juvenile court including its lack of legal protections had done more harm than good (Schlossman, 2005). Specifically, the Supreme Court acknowledged that in labeling youth as delinquents the juvenile court functions similar to the adult court and in its current state does so without providing adequate due process (Platt, 1977). To this end, the Court decided a number of cases between the 1960s and 1970s that sought to formalize the juvenile court and protect the youth that came before it. Through the 14<sup>th</sup> Amendment's due process clause *In re Gault* (1967) applied to youth specific protections of the 5<sup>th</sup> amendment to the right to counsel, the right to confront witnesses, protection against self-incrimination, and timely notice of the charges (Fondacaro, Slobogin, & Cross, 2006) was one such paramount decision changing the landscape of the juvenile court (Platt, 1977). Although the ruling stopped short of extending the right to trial by jury to the juvenile court for fear that it would eliminate a youth's privacy and allow the past to dictate the youth's future chances, the inclusion of attorneys in the process made it more litigious and less parental (Nellis, 2011). Although more litigious than parental, the presence of an attorney ensured procedural regularity and legal safeguards (Platt, 1977). Also reflective of the trend toward a more adult court was the decision of *In re Winship* (1970) through due process (Fondacaro, Slobogin, & Cross, 2005) established that the burden of proof in the juvenile court also had to be beyond a reasonable doubt (Butts & Harrell, 1998). This

decision served both as a protection to youth, but also to move the juvenile court toward the adult court.

In addition to the court rulings initially intended to decrease the arbitrariness of the juvenile court, the 1970s was the beginning of policies to increase the punishment available in the juvenile system and move more youth to the adult system (Butts & Harrell, 1998). These changes resembled the intent of the original founders of the juvenile system of "crime control by removing legal obstacles that prevented criminal court from dealing effectively with young hoodlums" (Butts & Harrell, 1998, p.2). The trend away from affording juvenile offenders protections not afforded adult offenders continued into the 1980s. This included replacing the emphasis on youth's privacy, honored during the 1960s and 70s, with a focus on public accountability (Nellis, 2011). By the end of the 1980s some states had practically eliminated the treatment approach for one of "just desserts" (Roberson, 2000).

The 1990s moved the juvenile system further away from its rehabilitative roots to a focus on punishment, public safety, and accountability spurred on by an increase in youth violence. By the mid-90s these increasingly violent youth had been coined "super-predators" by a professor at Princeton University who predicted juvenile violence would only get worse (Dilulio, 1995). Although this prediction failed to come to fruition, by the mid 90s the trend of moving from rehabilitation to punishment was manifesting across a majority of the states through legislation intended to increase incapacitation and the sentencing of youth as adults (Bilchick, 1997). This period, easily defined as the "get tough movement" (Howell, 2003), was characterized by the loss of rehabilitation programs in favor of boot camps, detention centers, and Scared Straight Programs (Howell, 2003; Males, 1996; Roush & McMillen, 2000). In addition, the policies governing the juvenile system became more punitive and included sanctions such as the "three

strikes rule, electronic monitoring and drug testing, and determinate sentencing previously belonging to the adult system (Howell, 2003). Fueled by fear and anger over violent crimes committed by juveniles, and a belief that nothing worked in rehabilitation, the Courts redefined their purpose as punishment and accountability (Bilchick, 1997; Lipsey, Howell, Kelly, Chapman, & Carver, 2010), and furthered the trend away from treatment to punishment, already occurring in the criminal system, in the juvenile system (Lipsey, Howell, Kelly, Chapman, & Carver, 2010).

By the early 2000s the pendulum of the juvenile justice system began to swing back toward rehabilitation, and even prevention (Howell, 2003; Cullen, 2006), aiming to weave rehabilitation back into the framework (Howell, 2003; Butts & Mears, 2001; Mears, 2002). This shift was reflective of the Balanced and Restorative Justice (BARJ) approach to juvenile probation, further described in the following PACTT chapter, intended to address the simultaneous needs of offender accountability, community protection, and competency development (Torbet & Thomas, 2005). In this model, competency development, the process by which juvenile offenders acquire the knowledge and skills that make it possible for them to become productive members of their communities (Griffin & Hunninen, 2008, p. 2), addresses the call for rehabilitation. The reality that youth in placement are often there during crucial developmental phases makes the competency component imperative in helping to address the reality that many of these youth are woefully lacking the necessary skills to be successful adults including, access to school, employment, and stable living arrangements (Nellis, 2011). The PACTT Initiative, part of the exosystem, is geared at helping residential facilities address these deficits while youth are in placement under the premise that enhanced relationships to school and work will follow youth into the community. The focus a residential facility places on education,

academic or career tech is generally driven by the emphasis that the juvenile justice system, at the macro level, is placing on education at that time.

**Education in the juvenile justice system.** The notion that the criminal justice system and subsequently the juvenile justice systems had a responsibility to provide its charges with access to education is not a new one. On the contrary, it can be traced back to the late 1700s when education was present in the early American prison system (Stephens & Arnette, 2000). Similarly, by the end of the 19th century, education and labor were identified as key components of the reformatories for rehabilitating youth (Platt, 1977). As with the history of the juvenile justice system, elements of current perspectives surrounding education for youth in placement were present at the start of the system. For instance, accompanying the Child Saving Movement was the new progressive education, which contrasted from traditional education in its belief that youth needed to be active participants in their learning. The rote learning approach was subsequently devalued (Platt, 1977).

The premise of the new progressive education was that education needed to focus on the youth's skills and learning styles versus on the teacher, which opened up opportunities for youth to chart their own learning courses and learn through their own investigations (Platt, 1977). This approach was thought to enhance learning and help with information retention since the youth had to be actively involved in acquiring the information and with problem solving (Platt, 1977). However, this new focus on youth's active learning was hindered by the coexisting premises that learning was to be bounded by a youth's class of origin and that youth in reformatories did not require more than an elementary education to meet the low expectations placed on them and the low skilled jobs they were expected to hold (Platt, 1977). Ultimately, the emphasis on independent learning that defined the new progressive education was misconstrued to support the

notion that “knowledge is subordinate to practice and inferior to practice” and used to justify and support the focus on manual and menial labor (Platt, 1977, p. 60)

The perception of placed youth as disadvantaged learners who lacked the necessary skills to succeed academically remained throughout the decades, and subsequently these youth were deprived of challenging academic opportunities or tasks that could be engaging (Coffey & Gemignani, 1994). This perspective corresponded with the presumption that academic skills must build off each other, that the youth must master basic skills before more advanced skills, such as cognitive reasoning, reading comprehension, advanced writing, and problem solving can be taught (Gemignani, 1994; Morrison & Epps, 2002). This notion has since been challenged with the realization that remedial instruction can seldom be done in order (Gemignani, 1994) and that participation in challenging tasks can yield great results with disadvantaged students (Morrison & Epps, 2002). Overall, an education program should be designed to teach basic skills, including math, reading, and writing, but also more advanced thinking skills, such as creative thinking. In addition, there should be a personal development component to address sociability, responsibility, and accountability (Gemignani, 1994). It was evident that all three of these educational components were needed given the significant academic and social difficulties of the youth placed in the juvenile justice system, leading to it being considered a default housing system for poorly educated and poorly socialized youth (Nelson, 2000; Mathur & Schoenfeld, 2010). This perspective was reminiscent of the Child Saving Movement days. Unfortunately, and despite the evident needs of these youth, juvenile justice schools have historically offered an inferior education to the public school system and the academic and social needs of the youth were often neglected or ignored (Blomberg, Blomberg, Waldo, Pesta, & Bellows, 2006; Balfanz, Spiridakis, Curran-Neild, & Legter, 2003).

## PACTT Initiative

In the 1970s the Individuals with Disabilities Act entitled everyone to a free and appropriate education (Leone & Meisel, 1997), including juvenile delinquents placed in residential facilities. Since 1974, the Neglect and Delinquent Program, as part of the Elementary and Secondary Education Act (NCLB), earmarked funds to provide educational services to juvenile offenders in state run or adult correctional facilities (Pfannenstiel, 1993). To help facilitate this, the American Correctional Association's (ACA) commission on accreditation developed standards for education in juvenile residential facilities. These included: a literacy program; capacity to offer special services to disabled youth as needed; and policies and procedures aligned with Federal and State requirements for enrolling youth upon return to the community (Coffey & Gemignani, 1994). Despite these policies and efforts, residential placements generally continued to offer subpar education that fell below state standards (Leone & Meisel, 1997). According to a Department of Education study in the late 1980s of programs covered by the Neglect and Delinquent Program, instruction varied widely across facilities and was strongly influenced by the perspectives of the teachers about their own capacity to effectively teach these youth and whether they believed the youth had the capacity to learn (Pfannenstiel, 1993; Rowe & Pfannenstiel, 1991). Some teachers believe correctional education is the last legitimate opportunity to reverse these students' general histories of academic failure, whereas other teachers see the allotted time as inadequate and the students as unmotivated to alter their academic trajectories toward failure (Pfannenstiel, 1993).

Correctional education in the 1980s was identified as myopic and unaware of reforms occurring in education (Coffey & Gemignani, 1994). This is consistent with the unifying attribute among correctional education teachers: their unfamiliarity with new teaching practices and strategies (Pfannenstiel, 1993) and lack of experience with correctional education teaching

(Platt, Casey, Foessel, 2006). The Correctional Education Association took steps to address these issues by issuing a set of standards that were intended to be used by the facilities for planning, goal setting, and self-evaluation (Coffey & Gemignani, 1994). Fundamental among them was the requirement that juvenile justice facilities adhere to minimum education standards that approximated the public school requirements. Unfortunately, overall, the recommendations were generally too broad and tended not to be adopted (Leone & Meisel, 1997).

A failure to systemically implement the standards put forth by the Correctional Education Association maintained the education opportunities in placement at a sub-par level and teachers were disconnected from advancing teaching strategies. There was a move away from the educational model that focused predominantly on repetitive practice of basic academics and remediation to a more strength-based presumption that all students could learn and succeed (Coffey & Gemignani, 1994). Reflective of the move from traditional education to a more youth-focused and youth-initiated education during the Child Saving Movement (Platt, 1977), this shift rejuvenated the emphasis on focusing instruction on the individual needs of the youth and proclaimed the tradition of drills and practices as outdated (Gemignani, 1994; Foley, 2001; Morrison & Epps, 2002). The 1990s also saw a corresponding change in the labor market requiring enhanced academic and vocational instruction, which could not be effectively taught by teachers using yesterday's pedagogy (Coffey & Gemignani, 1994). Specifically, according to a 1994 bulletin by the Office of Juvenile Justice Delinquency Prevention, the labor market required advanced academic and vocational training. Consistent with the premise that youth in placement have the capacity to succeed it was recommended that they be given the opportunity to learn increasingly complicated tasks and master competitive skills (Gemignani, 1994).



A number of specific competencies were identified as imperative for being able to participate in the current labor market including: capacity to effectively use resources; functional familiarity with technology and systems; and appropriate interpersonal skills (Coffey & Geminiani, 1994). Programming in the residential facilities able to prepare youth for post-discharge opportunities beyond academics was imperative given the data revealing that the majority of youth, especially those 16 or older, do not continue on an academic track once released (Blomberg, Bales, Mann, Piquero, & Berk, 2011; Roberson, 2000; Coffey & Geminiani, 1994). The Juvenile Justice Education Enhancement Program (JJEPP, 2002) found that only about a third of the youth in academic programs, which were intended to help youth return to school, were still in school a year after release and less than a quarter ever completed high school. Ultimately, this population needs a holistic curriculum that addresses employment, career/technical education, literacy needs, and that helps youth adjust and build resiliency by ensuring they possess academic proficiency, adequate thinking skills, and appropriate personal qualities (Platt, Casey, & Fossel, 2006; Roberson, 2000; Coffey & Geminiani, 1994). The expanded academic instruction of the 1990s also included a focus on social and moral reasoning (Geminiani, 1994). Interestingly, the above progression in the approach to education is reflective of practices during the progressive era including attaching moral instruction to academic schoolwork (Schlossman, 2005) and the incorporation of vocational skills as a component of education (Platt, 1977). At this point, however, vocational education was intended to enhance a youth's opportunities rather than relegate them to a lesser standing.

This period of individualized education as part of a general academic curriculum, reminiscent of past foci, encompasses the GED, pre-vocation and vocational education and training, and work experience (Gagnon, Barber, Van Loan, & Leone, 2009; Carter, Lane,

Pierson, & Glasser, 2006; Lane & Carter, 2006; Rutherford, Quinn, Leone, Garfinkle, & Nelson, 2002). The individualization of a youth's education also included recommended alternatives to conventional approaches such as: recognition of youth's cultural context; focus on youth's strengths; and attention to the experiences and knowledge of the youth being served (Coffey & Gemingnan, 1994). In the 2000s, No Child Left Behind (NCLB), which guaranteed a quality education to all youth in the juvenile justice system (Schlossman, 2005), presented an opportunity to expand these enhanced approaches to education in the facilities. Unfortunately, it appears as though when NCLB guaranteed a quality education, its intent was specific to ensuring a rigorous academic education (Gagnon, 2008). Guided by NCLB the intended academic focus was to be on standardized test preparation ó tests which youth in placement were expected to take (Platt, Casey, & Foessel, 2006) ó despite the reality that youth in juvenile residential placements are among the most educationally disadvantaged. Many enter placement as functionally illiterate (Morrison & Epps, 2002).

In correctional facilities No Child Left Behind seemed to manifest in the teaching of abstract information that lacked any connection to these youth's experiences, subsequently teaching to their weaknesses versus their strengths (Wang, Blomber, & Li, 2005). This approach is contrary to research that stresses the importance of being able to offer a range of curriculum opportunities so that each youth receives the educational option best suited for them (Nelson, Leone, & Rutherford, 2004; Gagnon, Barber, Van Loan, & Leone, 2009). The extent to which the incorporation of vocational training, work experience, or valuing the GED will be impacted by a legislative focus on a traditional academic education remains unknown (Gagnon, Barber, Van Loan, & Leone, 2009).

## PACTT Initiative

Efforts to expand the focus of education within the juvenile justice system are hampered by a number of additional system obstacles beginning with budget constrictions since the 1990s creating challenges to broadening the educational scope (Pfannenstiel, 1993). These obstacles include: the lack of oversight of the juvenile justice system's academic programs (Brown, 2003; Coffey & Gemingnani, 1994; Leone 1994; Gagnon, Barber, Van Loan, & Leone, 2009); teachers who have generally lacked the skills and training to offer the recommended level of academic instruction (Mathur, Griller Clark, & Schoenfield, 2009; Rutherford, Mathur, & Griller Clark, 2003); and facilities that struggle with identifying and implementing appropriate curricula (Gagnon, Barber Van Loan, & Leone, 2009). Further, although Balanced and Restorative Justice (BARJ) includes competency development among its three components, the system has traditionally focused primarily on the tenets of accountability and public safety (Altschuler & Brash, 2004; Griffin & Hunninen, 2008). This long-standing practice of emphasizing security and safety before education has impeded the facilities' capacity for offering pre-vocational education, vocational education, and work experience as part of their academic component (EDJJ, 2010).

Not surprisingly, the lack of focus on employment training and assistance, life skills training, and academics geared toward youth's school re-engagement upon return to the community all exacerbated a youth's barriers to re-entry (Nellis & Wyman, 2009). This is particularly significant for youth returning from placement who generally feel disconnected from school, and this feeling of disconnection subsequently decreases their likelihood of returning (Alexander, Entwisle, & Horsey, 1997). Youth are particularly unlikely to return to school if a placement's educational program is not recognized by a youth's home school district, if it is seen as failing to meet a youth's individual needs, and if it offers credits that are not accepted by the

home school district (Stephens & Arnette, 2000). Recognizing that successful reintegration into the community begins in placement and requires access to a solid academic education, there have been efforts geared at improving the mesosystem: addressing the education deficits in placement and attempting to develop links between the residential facilities and to a youth's home school district (Stephens & Arnette, 2000). To most effectively help youth reintegrate into the community upon discharge, links should also be developed with employers and opportunities created for youth to work in the community (Dumdi & Roelofs, 1984; Coffey & Gemignani, 1994). To this end, residential facilities need to provide youth with the opportunity to develop positive micro systems with work/employment as they gain work place competencies and on-the-job training through internships, apprenticeships, and work experience (Gemignani, 1994). The on-the-job- training approach illustrates the significance of the mesosystem, wherein youth's placement experience can impact their experience upon their return to the community, specifically with engaging in school and work. A residential facility has the capacity to offer youth a broad academic and vocational education inclusive of the moral reasoning, life skills, and work experience mentioned throughout. This approach can help youth meet society's expectations that they demonstrate the ability to participate in healthy social relationships and activities, live independently, pursue education, and maintain stable employment (Waintrup & Unruh, 2008).

The Georgia Department of Juvenile Justice has begun to implement this philosophy in some of their residential facilities that offer extensive vocational programs and enhanced academic coursework that is aligned with their state standards. This change in practices reflects the impact of the macrosystem--where the broader policies are developed--on the lower systems including the exo and meso systems, both of which impact the youth, as well as their

microsystem. Further, Georgia's Department of Juvenile Justice has incorporated the notion of connecting work in placement to the community in preparation for a youth's return by establishing a collaboration with the schools, the state agencies, and community organizations that support a youth's efforts to return to school and obtain employment (Donlevy, 2001; O'Rourke & Satterfield, 2005). The Florida Department of Juvenile Justice has also piloted a program that includes employability skills training in placement then continues to offer support with vocational preparation and in other life skill areas needed for successful reintegration upon youth's return to the community (Platt, Kaczynski, & LeFebvre, 1996).

This trend of implementing enhanced academics and teaching industry-recognized knowledge and skills has also extended into New York. Residential facilities in the state are now able to offer career/technical programs under the guidance of an instructor with direct industry experience and offer real-world certifications and opportunities for real-world work experience (Donlevy, 2001). The New York program is consistent with recommendations from the National Dropout Prevention Center that residential facilities' career/technical education components include career programs, cooperative education, and apprenticeship opportunities (Reese, 2005). The implementation of a practical component of education into the residential facilities, evidenced by opportunities for integrated learning where youth could work on projects that merged academic and career/technical education components, also began to take place in Oregon (Moody, Kruse, Nagel, & Conion, 2008).

Similarly, correctional education programs were implemented in the adult system. The Three States Recidivism Study examined the impact of these programs, focusing on the prison systems of Ohio, Minnesota, and Maryland supported the connection between academic achievement and a reduction in recidivism (Hannekin & Dannerback 2007; Drakeford, 2002;

Nuttall, Hollmen, & Staley, 2003). The study tracked the recidivism rates of inmates in these three states (with sample sizes per state ranging from a little over 80 to 1200) who received correctional instruction compared to those who had not. In all three states, statistically significant results (at the  $p < .01$  level) were found showing inmates who participated in correctional education were less likely to recidivate, with re-arrest, re-conviction, and re-incarceration, respectively. Specifically, aggregating the recidivism data for the three states the re-arrest for those who participated were 48% compared to 57% of those who did not, 27% of participants had a re-conviction compared to 35% of non-participants, and 21% of participants and 31% of non-participants were re-incarcerated (Steurer, Smith, & Tracy, 2001).

Another state, West Virginia, incorporated both education and vocational programming into their correctional placements. An assessment of this change revealed that when vocational education was paired with academics, specifically GED completion, recidivism was lower than the 26% recidivism for non-participants with vocational completers revealing an 8.75% recidivism rate and 6.71% among those who participated in vocational education and completed the GED (Gordon & Weldon, 2003).

Although the above research was conducted on an adult population, the outcomes support the intent underlying the previously noted changes to the ways academics are offered within the juvenile justice systems in a number of states. This includes offering opportunities to learn concrete skills and earn industry certifications (Brazzell, Crayton, Mukamal, Solomon, & Lindahl, 2009), as is provided via career/technical education in placement. A focus on a broad education, especially in placement, has also been connected to helping improve youth decision-making skills, the development of pro-social values and positive thinking patterns, and improving moral reasoning (Brazzell et al., 2009). Yet, despite the established advantages and

history of incorporating education ó both academic and career/technical ó into the programming at residential placement, history has also demonstrated the difficulties in the success of the programs in engaging youth in school and work both in placement and upon their return to the community. The following section explores identified macrosystem obstacles and possible explanations for why youth continue to struggle with engaging in school and work upon their return to the community even when privy to educational opportunities in placement.

**Obstacles to education in the juvenile justice system.** The concept of “differential interventionist” purports that the impact of treatment on an individual is dependent on both the specific approach and external conditions affecting the youth (Benda & Tollet, 1999; Palmer, 1991). This notion supports the value of examining the impacts and obstacles of correctional education on a youth’s academic and employment success post-discharge at the youth level, with consideration for the diversity of the population and the influence of a youth’s experience on the program level; mesosystem --where the majority of these youth’s academic opportunities are located; and systemically, the macrosystem, because it has been shown that youth who successfully complete academic and vocational programs can have greater employment and lower recidivism outcomes (Foley, 2002). Yet, the majority of youth served in placement are at least 16 and either do not return to school after being discharged from placement or do not remain there long enough to graduate (Gemingnani, 1994; Coffey & Gemingnani, 1994). Further, many of these youth will pursue entry-level work positions versus any form of post-secondary education, yet, they will generally lack skills necessary to be successful in these positions (Walker & Bullis, 1995; Platt, Casey, & Fossell, 2006). Unfortunately, the No Child Left Behind Act requires that all youth who are educated with public funds participate in standardized testing and that the results be attributed back to the district’s outcomes. The

pressure for the youth to pass these tests further contributed to a facility's lack of willingness to go beyond teaching for the test and focus on alternative programming that would prepare youth for the work world (Walker & Bullis, 1985).

As previously stated, youth in residential facilities generally have unique and significant academic needs that may necessitate increased individualization or alternative curricula (Quinn, Rutherford, Leone, Osher, & Poirier, 20005; Gagnon, et. al, 2009). A study by Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivet, 2009) revealed that the use of inappropriate curriculum for this population coupled with a lack of interest and ability by the youth posed a major barrier to providing them with a quality education (Mathur & Schoenfeld, 2010). Program design, specifically the relatively short length of stay, with regards to academics, makes earning credits difficult (Austin, Johnson, & Weltzer, 2005; Gagnon et al., 2009). Related, some facilities, sometimes due to length of stay, focus primarily on the GED rather than providing classes for credits which contributes to the difficulty of these youth trying to pursue a high school diploma upon return to the community (Gagnon, Barber, Van Loan, & Leone, 2009). Overall, residential facilities have historically put little emphasis on ensuring that youth are provided with a quality education, including vocational and work experience opportunities (Altschuler & Brash, 2004).

The lack of emphasis that the residential facilities place on education and vocational training is consistent with information indicating that there continue to be significant problems with the caliber of education in schools serving detained or placed youth across the United States (Giles, 2003). Despite No Child Left Behind, which contains clear provisions about the education requirements of schools serving placed youth that are often the same as for public schools (Blomberg, Waldo, Pesta, & Bellows, 2006), many facilities still provide academic



instruction that is sub-par (Gordon-Kheir, 2010). This reality stems from obstacles embedded in the often rural location of facilities, fluctuating length of stay, and the variation among youth skill levels and deficiencies (Blomberg, Waldo, Pesta, & Bellows, 2006). Teachers have identified lack of support by the administration and a deficit of certified teachers as contributing to barriers to providing a quality education (Houchins et al., 2009). Facilities have often cited a lack of the funds necessary to enhance their academics to better serve a population of youth that has usually not had success with traditional education (Coulter, 2004). A lack of funds is also an example of why programs that want to comply with No Child Left Behind often struggle to do so. Other reasons include little oversight of the facility schools, lack of professional development and assistance with curriculum alignment to state assessments, and poor communication with the local education and state education agencies (Gagnon, Barber, Van Loan, & Leone, 2009). These were many of the same struggles facing the residential facilities in Pennsylvania and ultimately leading to the development of the Pennsylvania Academic Career/Technical Training Alliance (PACTT).

The variability in the oversight of education in placement, within and across states, also contributes to the difficulties programs have offering a quality education. For instance, some states have a fragmented oversight of the delivery of education services with some programs (i.e., long term residential facilities) run by the state and others (i.e., detention centers) run by the county. In some states multiple agencies govern juvenile justice whereas other states, such as Kentucky, have a single central agency governing juvenile justice. In Kentucky, the Educational Collaborative for State Agency Children oversees the delivery of education services for many of the juvenile justice, child welfare, and mental health placements (Wolford, 2000). The New

York Department of Education operates schools in their residential facilities (NYC Administration for Children Services, 2014).

The fact that some states lack local support for educational efforts in juvenile justice (Wolford, 2000) is consistent with breakdown in the transfer of records and sharing of information to and from the juvenile justice system and system partners which creates problems for youth in placement and upon return to the community (Giles, 2003). The system further impedes opportunities for successful correctional opportunities by working at cross-purposes. For instance, youth are mandated to return to school, though likely insufficiently prepared by the facility to be successful when they return. Additionally, the youths' home school districts generally lack a system to successfully reenroll them, especially because youth are often released from placement mid-semester or during the summer when schools are least prepared to accept them and the student is at the greatest disadvantage for success (Stevens, 2004). New Jersey provides one example of this system breakdown reporting that schools are unwilling to accept the credits youth earn in placement, and if youth are released back to the community mid- year, the schools do not accept the youth back (Giles, 2003).

This practice of only allowing youth to return to school during natural breaks in the school year and refusing to honor credits earned in placement is not unique to New Jersey (Feirman, Levick, & Moody, 2009; Mears & Travis, 2004) and creates an additional obstacle to reentry, contributing to the high drop-out rate of youth returning from placement (Feirman, Levick, & Moody, 2009; Arthur, 2007). There are a number of reasons school districts resist enrolling youth returning from placement; perhaps the most limiting to these youth is the a fear that the youth are a danger to the school and its population (Carroll, 2008; Feirman, Levick, & Moody, 2009). This perception is unlikely to be diminished by the open access schools

generally have to juvenile records. In addition, a number of states have enacted policies and procedures that inhibit youths' ability to re-engage in school upon return to the community (Nellis, 2011). Further, obstacles related to education can easily become obstacles to employment as well. The far-reaching effect of a juvenile's record on their ability to successfully reconnect to their community, especially in the areas of education and employment, upon discharge is known as "collateral consequences" (Nellis, 2011). In addition to responding to the struggles facing the residential facilities, the Pennsylvania Academic Career/Technical Training Alliance (PACTT), as part of the exosystem, was designed to address many of the system obstacles impeding youth's successful return to school or work upon reentry.

An additional reason for schools' resistance to enrolling youth returning from placement, is the concern that they will perform poorly academically and impact their standardized test scores (Carroll, 2008; Feirman, Levick, & Moody, 2009). The systemic obstacles to reentry are another area where NCLB has failed to address the issues of disconnected youth, specifically those returning from juvenile placements. NCLB's accountability framework, which punishes schools for failing to meet set standardized test standards without providing any assistance to these struggling schools, results in schools being increasingly less likely to accept youth returning from placement, who are often characterized by poor academic performance and educational disabilities. This can feed the school-to-prison pipeline.

Overall, the barriers to adequate academic and career/technical education in placement leave many youth who discharge from placement with a number of problems that make it difficult for them to meet education and employment markers of success (Nellis & Wayman, 2009; Moody et al., 2008; Steinberg, Chung, & Little, 2004). This coupled with the barriers to accessing education and/or gaining employment that they experience upon return to the

community makes their successful reintegration less realistic (O'Rourke & Satterfield, 2005; Nellis & Wayman, 2009). Adding to their obstacles to success is their diminished access to the supports and resources they would need to succeed (Carr, Cooke, Strain, & McMillan, 1976). These factors are aligned with the reality that many youth who are 16 and older and returning from placement do not return to school (Malmgren & Leone, 2000) and the increased reality that they will be unemployed (Moon & Ando, 2009; Nellis & Wayman, 2009). The impact of external obstacles, such as those discussed above, is further examined in the Transition Research on Adolescents Returning to the Community Setting (TRACS) study presented below.

The Transition Research on Adolescents Returning to the Community Setting (TRACS) study examined youth returning from Oregon's Juvenile Correctional Facilities over a five year period (Waintrup & Unruh, 2008), via qualitative interviews with youth discharged from Oregon's juvenile facilities. The study captured some of the youths' external obstacles to engaging with school and work upon returning to the community. The primary themes that were identified pertained to external obstacles such as accessing public transportation to work, being financially responsible for the family, and not having engaged with school months post-discharge. Another youth identified the influence of old friends and the pitfalls of unstructured time as challenges to success along with an unstable living situation and an immediate need for money. Unfortunately, the obstacles embedded in returning to one's community are significant enough that even a youth who claimed that earning his high school diploma was one of the best achievements of his life remained disengaged from school four months post-discharge (Waintrup & Unruh, 2008).

The switch from an academic focus to economic needs is quite common: many youth opt for work over school to provide financial assistance to their family (Rumberger, 1987) and gain

housing stability (Abrams, 2006). For many youth returning from placement, challenges impacting their family relations and living situations can be debilitating and can create additional barriers to youth continuing their education or obtaining employment upon returning to the community (Brazzell, Crayton, Mukamal, Solomon, & Lindahl, 2009).

The preceding reveals the far-reaching impact of the juvenile justice system's practices and policies on the youth it serves. It is evident that throughout its history, the juvenile justice system has acknowledged the value of education and, at times, vocational instruction for the youth in its care. Further, both research and theory have supported the importance of focusing on these areas for youth in placement. Yet, as indicated above, there are many remaining obstacles which impede youth from successfully integrating back into school and/or their community. As previously noted, some of these barriers are in the macrosystem, while others exist in the mesosystem, and others still in the microsystem (individual). The following is an examination of the microsystem component of the Ecological System Theory, and includes youth-level characteristics and individual level systems that characterized many youths' lives prior to placement and that will subsequently impact their likelihood of engaging in school and/or work upon return to the community.

### **MicroSystem**

As indicated by the reports of youth in the TRACS study (referenced above), the world that these youth came from and subsequently return to is part of defining who they are and their capacity to be successful. Many youth who enter the system come from neighborhoods with a high concentration of families living in poverty and often experience learning, emotional, and behavioral problems (Donlevy, 2001). By the time the majority of youth enter the juvenile

justice system, they are likely to have an established history of failure of academic and otherwise that is consistently reinforced by the system itself (Sheridan & Steele-Dadzie, 2005).

Many youth in placement are identified as having acute academic skills deficits that put them at risk of failing in a society that places a premium on academic achievement (Houchins, Jolivet, Krezmien, & Baltodano, 2008). For instance, more than half of youth in detention have not completed the eighth grade and even more are believed to be illiterate (Drakeford, 2002) and to have a learning disability (Nellis & Wayman, 2009; Geringani, 1994). Placed youth are, on average, four years behind their same-age peers and read on a fourth grade level (Drakeford, 2002). They generally have a history of partial attendance and of failing at least half of their classes (Balfanz et al., 2003). Consistent with this, more than half of the youth in secure placement have not completed the eighth grade (Roy-Stevens, 2004; Nellis, 2011)

The above realities are reflective of the perspective that the academic difficulties of youth in placement began at the start of their academic careers, prior to placement (Sheridan & Steele-Dadzie, 2005; Meltzer, Levine, Karniski, Palfrey, & Clarke, 1984). These youths' academic histories generally include a lack of access to assistance from teachers and few positive social interactions in this environment (Croninger & Lee, 2001; MacLeod, 1987; Fine, 1986). This dearth of academic support and opportunities tended to extend into the home, which often lacked learning materials and where English could be the second language (Rumberger, 1987; Steinberg, Blinde, & Chan, 1984; Steinberg, Chung, & Little, 2004). The interactions youth have with school and their families form key micro systems that, as indicated, can greatly impact youths' ultimate academic and career success. A family's capacity to support a youth's connection to school can vary greatly (Newman, Smith, & Murphy, 1999). Subsequently, as a result of their social or economic conditions, youth often lack the necessary support for

successful social partnerships. This puts them at a disadvantage for achieving success in school or work (Fraser, 1996).

Other family characteristics also identified as having an impact on youth's school and learning experiences include: income; parental occupational levels; the nature of the relationship between the parent and the child (Goldschmidt & Wang, 1999; Steinberg, Chung, & Little, 2004); and single-parent household status (Corcoran & Nichols-Casebolt, 2004; Rumberger, 1987; Steinberg, Chung, & Little, 2004). Success in school is often predicated on youth identifying with school and having a sense of belonging with the school experience. This is often born from relationships with family, peers, and community (Finn, 1989). Altschuler and Brash (2004) compiled a list of domains in which youth face the most challenges including: family and living arrangements; peer groups; mental/physical health; substance abuse; leisure activities; education; vocational training; and employment (Abrams, 2006, Altschuler & Brash, 2004). Accordingly, many youth entering the juvenile justice system have come from troubled home lives and have struggled in their communities and at school prior to their first contact with the juvenile justice system (Steinberg, Chung, & Little, 2004). The influence of a youth's family and environment on their connection to school or work is captured by Hirschi's Social Control Theory (1969) which also supports the value of a youth's attachment to school or work as a means of protecting against further delinquency.

**Social Control Theory.** Hirschi's Social Control Theory (1969) addresses the significance of youth bonding to school (Maddox & Prinz, 2003; Tittle, 1988), which is often a predictor of the likelihood of youth's success in school (Finn, 1989). According to Social Control Theory, also known as Social Bond Theory, attachments to positive family environments and societal institutions and commitments to pro-social ideas, such as pursuing education,

prevent individuals from engaging in crime and delinquency (Wiatrowski, Griswold, & Roberts, 1981). The presence and impact of these types of attachments are associated with the micro level systems youth form with family, school, and their communities. The theory further suggests that providing juvenile offenders with educational opportunities that enable them to experience academic success and engage in further learning in the community encourages youth to choose legitimate (non-criminal) roles (Malgren & Leone, 2000; Empey & Stafford, 1991). Unfortunately, many youth in placement have historically attached less importance on education and school participation (Rosenthal, 1998; Meyer, Harootunian, & Williams, 1991; Pittman, 1991).

The notion of connectedness to school can be simply described as the degree to which youth feel a part of the school. More complex explanations include elements of whether youth feel the school is supportive of academic pursuits, creates a supportive climate and implements discipline fairly (Waters, Cross, & Runions, 2009; Maddox & Prinz, 2003; Cernkovich & Giordano, 1992; Murray & Greenberg, 2000). The benefit of a youth's connectedness to school extends beyond education to include employment, which has also been shown to have a positive impact on reducing recidivism among juvenile offenders and adult inmates (Reese, 2005). It also has the indirect benefit of providing opportunities for these individuals to earn a legal income and be able to support their families and pay their debts (Brazzell et al., 2009). Collectively, these benefits speak to the social control goal of employment: that of binding the youth to their community and building a positive work ethic (Ploeger, 1997). To be clear, employment, in and of itself may not serve as a sufficient social control. However, if the employment is stable, youth may form a commitment to the job functioning as a positive social bond (Sampson & Laub, 1992).



Another pathway through which youth can develop social bonds, especially to school, is growing up in a home with educated parents. This is a form of human capital based on the parents passing their relationship to education and learned information and skills to their youth. This can provide youth with an advantage in their academic pursuits, especially when there is a positive relationship between the parents and the child whereby the parent is able to transmit their skills, values, and commitment to education (Coleman, 1988). Unfortunately, families that occupy a lower socioeconomic status have a significantly reduced capacity to pass the above values and academic investments along to their children, compared to middle class families (Stanton- Salazar, & Dornbusch, 1995). In turn, many youth in placement likely have little familial support or resources to assist them along the way (Steinberg et al., 2004). The limited familiar support and resources available to these youth is a reflection of their lack of social capital, a mechanism used by parents to connect youth to social institutions, including school, and to advance their children's success (Furstenberg & Hughes, 1995; Coleman, 1988). Consequently, these youth are generally less bonded to school and subsequently do not reap the protective benefits of that relationship. This is consistent with the premise that disengagement from school is the culmination of a long-term process (Alexander, Entwisle, & Horsey, 1997; Cairns et al., 1989) and likely one of multiple declining institutions, including family, from which a youth should have been able to draw support and guidance (Croninger & Lee, 2001; Coleman, 1988; Stanton-Salazar, 1997).

Environmental factors, including family, have long been associated with school failure and delinquency. In a study of incarcerated youth, Kyle (1992) noted the impact of being from single-parent homes: many latch key youth, or those cared for by the neighborhood, jump to four or five schools before ultimately dropping out (Coffey & Gerningani, 1994). This is

consistent with the reality that many youth in residential placement have a poor history of elementary and secondary education (Morrison & Epps, 2002). It is also reflective of the mesosystem where multiple microsystems, including youth's relationship with home and with school, interact (Duerdin & Witt, 2010). Despite the challenges these youth possess, providing youth with educational skills and connecting them to education is identified as one of the most effective means of preventing future delinquency (Center on Crime, Communities, & Culture, 1997; Morrison & Epps, 2002). This notion, associated with the premise of Hirschi's Social Bond Theory (1969) underscores why education is seen as foundational programming within residential placement (OJJDP, 1994; Morrison & Epps, 2002).

Given the diverse histories of youth in placement and their wide range of educational needs, they usually do not respond well to a "one size fits all" approach to academics (Brazzell et al., 2009). Addressing youth's individual needs while they are in placement, such as helping youth to acquire general academic skills (especially, literacy skills) and career/technical education including structured learning and job skills were found to be an effective approach to reducing delinquent recidivism rates (Coulter, 2004; Malmgren & Leone, 2000; Lipsey & Wilson, 1998).

Research recognizes that youth have a greater chance of successfully reintegrating into the community if they are afforded an appropriate and rigorous education while in placement (Houchins et al., 2009). The facility must also ensure that vocational programs offered in placement have value in the community and keep pace with employment trends and include job training (Gordon & Weldon, 2003). This relationship between a youth's time in placement and time in the community prior to and after placement speaks to the role of the mesosystem. The mesosystem, as previously established, is comprised of at least two microsystems interacting

together. Again, a youth's relationship to school would be a microsystem, as would a youth's relationship to the facility at which s/he is placed, but the relationship between school and youth's residential facility would create a mesosystem (Bronfenbrenner, 1979). As a result of this relationship, residential facilities have an opportunity to help youth develop positive relationships with school and work that can ultimately replace the relationship youth had with these institutions on the community.

### **Mesosystem and Exosystem**

The overlapping nature of a youth's microsystems and mesosystem is evident in that family and peers, common youth microsystems, have been identified as connected to school achievement (Moon & Ando, 2009). Family and school microsystems interacting together have the potential to support academic achievement (Barboza et al., 2009), and similarly, the broader community may influence a youth's commitment to school (Waters, Cross, & Runions, 2009). However, as addressed, many youth in placement struggle with these microsystems and do not possess the necessary and positive connections to education and employment. As a result, residential facilities should take advantage of youth's time in placement as an opportunity to help them build positive microsystems, specifically around school and work to fortify or replace the ones previously held in the community and thereby increase their potential for successfully reintegrating upon their return. This premise is aligned with the emerging trend of beginning to focus on aftercare while the youth is still in placement to ensure continuity of care. The growing expectation that facilities fully utilize the time youth are in their care to develop their academic and career tech education skills reflects a growing belief that facilities have the capacity to be successful at engaging youth in school and work upon their return to the community

(Frustenberg & Hughes, 1995; Coleman, 1988) through the development of new microsystems and mesosystems while youth are in placement.

The MacArthur Foundation, a grant-making entity that has funded juvenile initiatives since the 1990s, initiated the Models for Change Framework in the early 2000s. This will be further explained in the following chapter. The initiative was, among other things, committed to developing an approach to aftercare that would address the history of youth failing to reintegrate successfully back into the community, including to school and work. The aftercare model promotes the importance of integrating the treatment plans done in placement with the aftercare plan (MacArthur Foundation, 2005). Consistent with the MacArthur Model, for the transitional period to be most effective in planning for youth's return to the community, it needs to begin when youth enter placement and should guide the education programming (Moody et al., 2008). Further, these efforts need to be designed to help youth with their transition back into the community. Specifically, youth need to be able to immediately enroll in school or connect to work upon returning home (MacArthur Foundation, 2005; Waintrup & Unruh, 2009). However, such a smooth transition requires that the work in placement be, among other things, aligned with the systems youth will come in contact with upon returning to the community. Unfortunately, as already indicated, academic and career/technical opportunities for youth in placement are often subpar, and not aimed at connecting youth to school or work upon their return to the community. The PACTT initiative, to be expanded on in the PACTT chapter, is designed to assist residential facilities to enhance their academic and career/technical educational opportunities and align them with the community systems to which youth will return, as recommended by the research.

## PACTT Initiative

In this context, the PACTT initiative and its relationship to the residential facilities comprises the exosystem of the Ecological Systems Theory. As previously described, the exosystem is considered to be an extension of the mesosystem and accounts for environments or contexts which have an impact on the individual ó in this case, the youth ó but in which the youth is not directly involved (Duerdin & Witt, 2010). The PACTT initiative, further described in the following chapter, is designed to influence the microsystems youth form with school and work by improving the academic and career/technical opportunities available to youth in placement.

In addition, PACTT seeks to influence a program's relationship with the systems and communities to which a youth will return. For instance, PACTT requires residential providers to offer career/technical opportunities for youth as a means of enhancing their connection to school. The intent is to replace the previously negative microsystem a youth had with school with a more positive one. As a youth is preparing to return to the community, the PACTT Initiative has developed pathways to ensure that the work in placement is recognized in the community by developing mesosystems between the microsystems in placement and those in the community. While PACTT has had no direct connection with the youth, its relationship to the systems youth are involved with form the exosystem. This is consistent with the premise that residential facilities settings and the practices occurring within can impact a youth's success at reentry (Arditti, 2005).

Consistent with the above premise, work in placement ultimately needs to transfer to the community, but initially, time in placement should afford youth the opportunity to close skill and knowledge gaps through additional instruction. Curricula that are aligned with state academic standards should be used and youth should be offered the opportunity to earn credits toward

graduation (Blomberg & Waldo, 2001; Balfanz et al., 2003). Effective in-placement education includes not just the subjects taught, but also the methods for teaching them and the general design of the academic program. One study examining academics in a residential facility in Maryland identified the following five components of a good curriculum which address all three levels of the ecological systems perspective:

- 1) Strives to meet national standards (macrosystem);
- 2) Responds to student specific needs (microsystem);
- 3) Offers school-to-career opportunities (mesosystem);
- 4) Affords technology-related experiences (mesosystem);
- 5) Continues to enforce high standards of behavior (microsystem factors) (Drakeford, 2002).

The PACTT Alliance also includes these five components as part of its core elements. To best take advantage of youths' time in placement as an opportunity to improve their academic standing and enhance their connection to school, a provider needs to be aware of and adapt to each youth's individual needs and then apply resources accordingly (Palmer, 1991). Given the poor literacy skills with which many youth enter placement, there are findings that demonstrate that explicitly incentivized and highly-structured reading instruction improve reading skills of youth in placement in a relatively short amount of time (Houchins et al., 2008; Malmgren & Leone, 2000).

Drakeford (2002) expands on importance of building reading skills and purports that literacy developed for placement needs to include a focus on writing. Others take it even further and argue that a focus on traditional literacy is not sufficient and that any program designed to address sub-par academics skills needs to also consider math deficits (Meltzer et al., 1984;

Sheridan & Steele Dadzie, 2005). Another significant method of improving youth literacy and numeracy skills is the incorporation of career/technical education along with academics. The approach combining career/technical education and academics helps youth see the material as relevant to them and subsequently increases their connection to school (Leone & Meisel, 1997; Polk, 1984). This premise underlies the design of PACTT, which works with the residential facilities around integrated learning<sup>4</sup>.

To successfully enhance youth's academic performance and improve their relationship to education requires, in part, well-trained teachers equipped with the right tools (Blomberg & Waldo, 2001; Brazzell et al., 2003). This includes the ability to identify the varying learning styles of placed youth and adjust the presentation of materials accordingly. Differences in these areas are often impacted by heredity and by macrosystems and microsystems influencing their environmental demands and upbringing (Lewis, 2006). As a result and as indicated, education programs should ideally respond to the individual's level of risk, need, and responsivity, or individual competencies, interests, and learning styles (Andrews & Bonta, 2003). Counter to the initial fears of using technology for instructional purposes, there is a growing acknowledgement of the value of technology in assisting underserved populations and understaffed schools. Computer-aided instructional programs, such as NOVA NET, are able to provide direct instruction or serve as an instructional aide and are designed to address a broad range of learning styles and academic levels (Borden & Richardson, 2008). Thus, PACTT encourages its affiliated providers to use such instructional programs in conjunction with teacher-led instruction.

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<sup>4</sup> The practice of identifying the academic skills taught in the teaching of a career/technical trade and correspondingly the use of career/technical examples in the teaching of academic subjects.

## PACTT Initiative

A multi-modal approach does not focus exclusively on academics or vocation, but is rather designed to address an individual's multiple needs and to bring about rehabilitation through cognitive development and behavioral changes (Palmer, 1991; Brazzell et al., 2009). A multi-modal approach should also infuse process skills such as technology, career-related learning and personal management, teamwork, and the ability to write well and speak publicly throughout the curriculum (Moody, Kruse, Nagel, & Conion, 2008). Components of cognitive development are found in life skills programs. These programs may focus on emotional elements, such as anger management and building healthy interpersonal relationships as well as more concrete skills such as learning how to conduct a job search, balance a check book, and set and achieve goals (Cecil, Drapkin, Mackenzie, & Hickman, 2000). These recommended elements are also emphasized by PACTT via its employability soft skills manual, which identifies 27 competencies that youth must be taught while in placement and includes a transportable checklist on which providers can use to track the competencies youth have completed in placement. The checklists must be provided to the school, community, or placement the youth returns to upon discharge. Utilization of the employability skill checklist occurs in the mesosystem where the work in placement intersects with developing youth microsystems with school and/or work in the community.

Consistent with a multi-modal approach a good comprehensive educational program should provide youth with human capital gains, new skills, new opportunities, and an advantage upon returning to the community (Gaes, 2008; Coleman, 1988). These skills should be both generic, like literacy skills, and specific, such as career technical skills (e.g., welding or computer skills). Collectively, these skills should help youth combat the deficits associated with their having a delinquent past (Gaes, 2008). It is also important to recognize that youth take



multiple routes to delinquency and subsequently require a variety of interventions (Donker, Smeenk, Van der Laan, & Verhulst, 2003; Brazzell et al., 2009; Palmer, 1991). This makes it important that instruction be synchronized with the micro and meso systems of youth and ways in which youth live and interact outside the classroom (and residential facilities) (Christen, 2009). Residential facilities that align with the skills, abilities, and job training that can culminate in earning an industry-recognized certificate provide youth with an opportunity for careers in high-growth areas in their communities that pay livable wages and offer youth a tangible counter to their delinquent record (Brazzell et al., 2009; Gordon & Weldon, 2003). These in-placement experiences provide the youth with a new micro system which has the potential to positively influence the micro system that they have in the community.

The successful implementation of providing youth in placement with the opportunity for increased academic and career/technical education and work opportunities involves the intersection of youth microsystems in placement to forging a mesosystem in the community. Placement sites should explore the possibilities of community partners such as community colleges, career/technical schools, and businesses which can help facilities build their programming and offer academics that will be engaging to youth (Christen, 2009). For instance, states and schools are encouraged to take advantage of the micro systems youth build in placement and develop clear and actionable plans for improving adolescent literacy instruction (Wise, 2009) that youth will carry back into the community. This requires that the academic curriculum in the residential facilities be compatible with the curriculum in the school districts from which their youth come and to which they will return to help facilitate the continuation of education services (Frederick, 1999).

## PACTT Initiative

To ensure compatibility between the curriculum in placement and that used by the school districts, the juvenile justice system needs to work to involve the micro systems likely to impact youth upon returning to the community. For instance, the juvenile justice system, and by extension the residential facilities, should work in collaboration with the neighborhood high schools to successfully transition youth returning from placement back into school (Balfanz et al., 2003). This applies to career/technical education as well, which should also be relevant in youths' communities and forward-thinking in its capacity to address the obstacles youth may encounter, specifically the impact of a delinquent history on attempting to gain employment (Altschuler & Brasch, 2004).

In addition to being relevant, it is imperative for youths' ultimate success that services and resources beginning in placement and continuing with youth back into the community be individualized and aimed at helping youth identify and connect to appropriate education and employment (Bullis & Yovanoff, 2002). Residential facilities have the unique opportunity, by virtue of having a captive audience, to reinforce educational activities, ignite an interest in learning among youth — for some, by integrating academics with career/technical education — and help to close the gap in their academic histories. Ultimately, residential facilities have the potential to effect youth change by facilitating their personal development through teaching appropriate behavioral techniques, positive social skills, and academic and vocational skills building (Lipsey et al., 2010).

The Ecological Systems Theory provides a framework for understanding this potential: youth are able to form positive microsystem relationships in placement in areas in which the youth have traditionally not been successful and use them to fortify or replace the same microsystems youth previously had in the community. The PACTT Alliance, the exosystem, is

## PACTT Initiative

designed to facilitate this change through the development of new microsystems with school and employment in placement and various mesosystems intended to help youth return to their community able to engage in school and work.

This research is an evaluation of the feasibility of the PACTT Initiative in influencing outcomes of interest (engagement in school and employment). As this is the initial evaluation of the PACTT Initiative there is no prior research from which to develop the research questions and corresponding hypothesis. Given this, exploratory questions will be posed instead to initiate an examination of the feasibility of PACTT. In addition, where there is supporting evidence in the literature for the work of PACTT, hypothesis will be developed around those variables.

### **Exploratory Questions and Hypotheses**

**Exploratory Questions 1a & 1b.** To what extent do the program elements (CTE completion, receipt of certifications, work experience, ESSM competencies, completion of high school/GED) spearheaded by PACTT impact the likelihood of youth's engagement in school and/or work upon return to the community? What is the relative influence of each of the PACTT components on school and work engagement post-discharge?

**Hypothesis 1.** The receipt of a high school diploma/GED during placement will increase the likelihood that youth will engage in school and/or work upon their return to the community.

**Exploratory Question 2.** To what extent does the degree of exposure (i.e., dosage) to the PACTT elements (i.e., length of stay and number of PACTT elements in which youth participated during placement) impact youth's engagement in school and/or work upon discharge?

**Exploratory Question 3.** To what extent do youth's personal characteristics (i.e., age and number of prior offenses) impact their likelihood of engaging in school and/or work upon discharge?

***Hypothesis 2.*** Youth, 17 and older, which had a paid work experience during placement, will be more likely to engage in work upon their return to the community.

## PACTT Initiative

### Chapter Three

#### PACTT

##### **Description of the Pennsylvania Academic Career Technical Training Alliance Initiative**

This chapter will provide a historical context for the Pennsylvania Academic Career/Technical Training Alliance (PACTT) Initiative within Pennsylvania's juvenile justice system. It will trace the inception and development of PACTT as well as provide a thorough description of the initiative, its mission, goals, and organizational structure. This chapter will also situate the PACTT initiative's place in the exosystem of Bronfenbrenner's (1974) Ecological Systems Theory.

##### **The Evolution of PACTT and Pennsylvania's Juvenile Justice System**

In the early 2000s, the Juvenile Justice and Delinquency Prevention Committee of the Pennsylvania Council on Crime and Delinquency proposed a multi-year effort geared at improving aftercare service, supervision, and supports for juveniles returning from residential placement. Shortly thereafter, the MacArthur Foundation chose Pennsylvania as a launch state for its newly-formed Models for Change Initiative, which sought to promote national change in the juvenile justice system by supporting key reforms, including aftercare, in prominent states (Griffin, Steele, & Franklin, 2007). In 2005, four counties in Pennsylvania were chosen to receive Drug Control and System Improvement (DCSI) funds to pilot "model aftercare" programs to "inform the development of statewide training" on aftercare (Griffin, 2004, pg. 3). At about the same time as MacArthur's Models for Change Initiative, Philadelphia was embarking on its own revision to aftercare with the development of the Reintegration Initiative. Although Philadelphia was not identified as one of the original four pilot sites, MacArthur used

funding from its Model Systems Project to help support Philadelphia's efforts toward improving aftercare (Griffin, 2004).

For Philadelphia, a troubling statistic illustrated a compelling need for addressing juvenile aftercare: approximately a quarter to a third of the youth returning from placement during the past decade had returned to placement within six months of returning to the community (Putter, 2010). In response, the Reintegration Initiative, a multi-agency collaboration aimed at revamping much of the current aftercare process, was developed. Initially, the initiative was focused on the connections between youth and their families and communities upon returning from placement. However, the organizers of the Reintegration Initiative quickly realized that obstacles to successful reintegration were embedded in the larger problem of the city's delinquent youth being disconnected from school, academic failure, and lack of job preparation or marketable skills (Griffin & Hunninen, 2008; Griffin, 2010).

According to research by John Hopkins University on Philadelphia's drop-out rates, approximately 90% of youth returning from delinquent placement do not graduate from high school upon return to the community (Neild & Balfanz, 2006; Putter, 2010). This is consistent with the other research that has shown that while the average age of youth entering placement is about 17 years old, most youth are generally reading at a fourth grade level and doing math at a third grade level (Weinberg & Leone, 2010 ; Putter, 2010). Youth in delinquent placement generally reflect the larger drop-out population in that they are about three years away from graduation and often disconnected from coursework that they found boring and irrelevant to them (Neild & Balfanz, 2006; Griffin & Hunninen, 2008). Despite this, Pennsylvania's Juvenile Justice System has historically focused on safety, security, rehabilitative approaches, and treatment, which generally meant a focus on behavior modification, mental health and substance

abuse services rather than education and employment training (Griffin & Hunninen, 2008; Putter, 2010)

Aligned with this approach, Pennsylvania built its juvenile justice system around the "balanced approach" model that was developed for juvenile probation in the 1980s. This model was intended to simultaneously address the seemingly incompatible goals of offender accountability, community protection, and competency development (Torbet & Thomas, 2005). Most of the residential facilities serving Pennsylvania's delinquent youth adopted this "Balanced and Restorative Justice Approach" to treatment and implemented individual service plans with goals and corresponding activities to address the competency development goal (Griffin, Steele, & Franklin, 2007). Competency development is defined as the "process by which juvenile offenders acquire the knowledge and skills that make it possible for them to become productive members of their communities" (Griffin & Hunninen, 2008, p. 2). However, the individual service plans generally were not individualized and often failed to match the opportunities or address the obstacles a youth would encounter upon returning to the community (Griffin, Steele, & Franklin, 2007). Thus, it was evident that this goal was the least understood of the three (Griffin & Hunninen, 2008). According to the research, "competency development" should focus on five skill sets: pro-social, moral reasoning, independent living, workforce development, and academic (Griffin & Hunninen, 2008; Torbet & Thomas, 2005). Training in many of these skill domains was lacking or offered at sub-par levels across the residential facilities (Putter, 2010; Griffin, 2010).

As part of the state's growing focus on aftercare, many of the counties began to address their weaknesses in meeting the competency development goal. The counties realized that a successful return to the community was not likely if youth were not prepared to succeed in all

areas upon their return (Griffin & Hunninen, 2008). Given the previously mentioned tendency of youth in delinquent placements to drop out, it was evident that the facilities' lack of focus on academic skills needed to be addressed. The education components at the residential facilities vary from private to charter to alternative public high schools. This lack of uniformity contributes to the disorganized, poorly monitored, and inconsistent academic system within the delinquent system (Putter, 2010). Further, many of the facilities had not aligned with the Pennsylvania's Department of Education's strongly encouraged, but not enforced, PA Academic Standards which posed additional challenges to youth obtaining credits upon returning home (Putter, 2010).

Pennsylvania is a "local control" state, meaning that the Pennsylvania Department of Education has little control over its 500 school districts, and instead mostly serves in an advisory capacity without the ability to monitor the services within each district. The Department of Education possesses even less oversight of the schools in the residential facilities (Putter, 2010). The result is a fragmented juvenile justice education system with varying educational opportunities available in placement and an absence of authority to enforce even a minimal level of education quality (Griffin & Hunninen, 2008; Putter, 2010). Further adding to the obstacles of youth successfully reconnecting with school upon discharge, the various graduation requirements that each facility follows are based on the inconsistent requirements of the numerous school districts of the youth they serve (Putter, Wade, & Smith, 2008). Yet, as evidenced in the literature, successful reintegration is strongly connected to youth receiving appropriate and rigorous education in placement (Houchins, Pucket-Patterson, Crosby, Shippen, & Jolivette, 2009). Success in the community is also connected to the ability of a youth to secure a job that pays a family-sustaining wage (Hornberger, 2006). Through the efforts of the Reintegration



## PACTT Initiative

Initiative, Philadelphia Probation recognized the troubling situation surrounding education of both academic and career/technical at the residential facilities, and embarked on rigorous steps toward reform. This reform focused on improving the ways which delinquent youth are educated and trained in placement, as well as how they are connected to school and work opportunities in the community (Griffin & Hunninen, 2008). As part of the reform process, the Philadelphia Youth Network (PYN)--a non-profit youth-serving intermediary agency that connects individuals, agencies, and systems toward the establishment of a workforce (Philadelphia Youth Network website, 11/17/11)--commissioned an independent assessment of the academic and career/technical education opportunities in six of the largest private residential facilities in the state. The results and recommendations focused on the need to expand the career/technical opportunities in placement and connect them to real-world training and experiences, including work experience, for the youth while in placement. PYN's assessment further noted the need for formal affiliations to be formed between the facilities and the technical schools in the youths' home school districts (Griffin, Steele, & Franklin, 2007; Hornberger & Cullen, 2006).

Technical schools tend to have relatively low drop-out rates (Neild & Balfanz, 2006). This is consistent with the notion that to help maintain youth on the graduation track, education has to be relevant to them. Career and technical training, when fully integrated with education, is the key to achieving this. The merging of academics and technical training enables youth to simultaneously work toward their high school diploma or GED and gain employment skills (Putter, 2010; Neild, 2005). Youth in delinquency placement could also benefit from this relationship of blending academics and career/technical education if the facilities afford students the opportunity to learn and apply career/tech skills in a job training program.

## PACTT Initiative

As indicated above, the educational focus is not just on developing job training opportunities for youth, but also on ensuring that the delinquency placement facilities are offering rigorous academic opportunities that are aligned with expectations of the school districts to which youth will return. Toward this end, research suggests that the facilities should establish a standards-based curriculum and ensure that teachers are adequately trained and prepared for instruction (Hornberger & Cullen, 2006). Historically, facility schools have not had the opportunity to benefit from the Pennsylvania's Department of Education's (PDE) advancement in pedagogy or had access to the PDE's training departments through which this information is generally disseminated (Putter, 2010). In addition to access to PDE training, the facilities also need regular access to information from the youths' home school districts including credits earned, grades, and special education information (Hornberger & Cullen, 2006).

However, there is often little or no contact between the youth's home school district, the school district where the facility is located, and the other system partners involved with placing the youth. When there is collaboration between probation and the facilities it tends to occur just prior to release. Of the 67 probation departments in Pennsylvania, 42 reported that they engaged the facility in identifying appropriate aftercare services for youth, whereas 18 probation departments explained that they developed the plans on their own without the facilities' involvement, and seven probation counties stated that the planning was done solely by the facility (Griffin, Steele, & Franklin, 2007). Generally speaking, there was little involvement by the school districts (Griffin, Steele, & Franklin, 2007). Given the alarming rate at which youth in placement are dropping out, it is imperative that the agencies providing social services to these youth be involved in efforts to stem this dropout crisis (Neild & Balfanz, 2006).

The goal of juvenile probation is to work in cooperation with residential facilities, the school district from where the youth comes, and the host school district in the on-going revision of the treatment plan in preparation for a youth's release. This is consistent with the need to involve youth-serving systems in youth's placement and post-placement planning (Griffin, Steele, & Franklin, 2007). While not driven by the intent to improve education within the juvenile justice system, the Pennsylvania Department of Education (PDE) recently established the Standards Aligned System (SAS) which sets clear expectations for credit-bearing courses. Though still not prescribing specific curricula, SAS provides guidance to the residential facilities and greater assurance that, if they teach accordingly, credits earned will be accepted by youth's home school district. The SAS also provides facility educators with access to teaching resources such as lessons plans and diagnostic tools (Putter, 2010). Where the Workforce Investment Act<sup>5</sup> allots at least a billion dollars for at risk youth (Homes and Communities, retrieved 2014). There is a clear benefit to engaging businesses in a youth's educational career to illustrate the relevance of classroom work to their lives. However, generally there has been little connection between the Workforce Investment Boards (WIBs) and the juvenile justice system (Putter, 2010).

Successfully addressing the drop-out crisis ó especially among the most vulnerable populations, such as juvenile offenders, requires changes to both policy and practice. These changes should include establishing relationships with a county's Family Court, Department of Human Services, and community system partners in establishing policies that strengthen the academic course work and occupational opportunities available to youth in placement. It should

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<sup>5</sup> Workforce Investment Act 1998 establishes a workforce development system for the nation. This includes funding and a governance process to ensure that the needs of the business community and economic growth are met. Specifically, the Workforce Investment ACT serves to improve, coordinate, and consolidate training on employment, literacy and vocational rehabilitation (Workforce Invest Act 101, 2010).

## PACTT Initiative

also include support of community programming that is aligned with this work and allows youth to continue the work upon their return to the community (Neild, 2006). To affect change in Pennsylvania, it was understood that the two counties which place the greatest number of youth, Philadelphia and Allegheny Counties (including Pittsburgh), would have to work together (Griffin & Hunninen, 2008).

Philadelphia and Allegheny counties along with a number of private residential facilities housing the majority of placed youth from these counties built on the aftercare reforms begun under MacArthur's Models for Change Initiative and, agreed to work together toward enhancing academic instruction and occupation skills training instruction in placement. Soon, the Pennsylvania Council of Chief Juvenile Probation Officers (Chiefs' Council), with its own growing roster of members and diverse funding sources, adopted the project (Griffin, 2010) and sent the message that:

“ remediation must be done in the context of credit retrieval and accumulation, training must be made relevant by linking it with career preparation; young people must be given the opportunity to practice their newfound skills in the protected setting of the facility; and the reentry process must include specific opportunities to pursue both the academic and career/technical training gains made in placement (Putter, 2010, p. 1).”

This commitment to improving the academic and career/technical education options for youth in placement was the foundation of PACTT, The Pennsylvania Academic Career/Technical Training Alliance (Griffin, 2010).

## **The Inception of PACTT**

The Pennsylvania Academic Career/Technical Training (PACTT) Alliance was established in April 2008 as a continuation of existing efforts to enhance aftercare and planning services for youth returning from placement and in response to the report by (Hornberger & Cullen, 2006) revealing the weaknesses of the academics and dearth of career/technical education programs at six of the largest private residential facilities (Putter, Smith, Wade, 2008; Hornberger & Cullen, 2006). PACTT's initial mission was to:

“Improve the academic and career/technical training that delinquent young people receive in placement; to improve the transition to academic and employment opportunities for these youth when they return to the community; and to reduce the system barriers which stand in the way of positive outcomes for the young people (Putter, 2010, p. 5).”

As addressed in the literature review, these goals align with Bronfenbrenner's (1974) Ecological Systems Theory as a framework for examining this research. Specifically, PACTT serves as an exosystem that, although having no direct impact on youth, seeks to impact the microsystems they develop with school and work and the mesosystems formed between the youth's world in placement and their home community. Further, PACTT aims to impact additional exosystems that establish the bureaucracy governing Pennsylvania's residential juvenile placements. To accomplish these goals PACTT, which was comprised of four staff; the director, director of operations, and one academic and one career tech education specialist, received initial funding from the MacArthur Foundation, The Pennsylvania Commission on Crime and Delinquency (PCCD) and the director received a Stoneleigh Fellowship (Putter, Smith, & Wade, 2008). PACTT, a partially grant funded initiative, began as, and remained for

## PACTT Initiative

the period of time covered in this research, a project of the Pennsylvania Council of Chief Juvenile Probation Officers (Chief's Council; Griffin, 2010).

In the experience of the author and her colleagues, it is typically very difficult to make systemic changes in Pennsylvania. This task could have been particularly challenging for PACTT with its tangential connection to the system via its status as a project of the Chief's Council versus a component of the Pennsylvania's Bureau of Juvenile Justice or officially of any of the county probation departments. Further, the success of its objective of improving academic and career technical education opportunities for youth in placement depended on facilities being willing and able to provide more services without receiving additional funding as PACTT was in essence an unfunded mandate.

From the beginning, however, PACTT had the advantage of the purchasing power of the two largest counties (Allegheny and Philadelphia) in addition to its relationship with the Chief's Council. This support, especially the identification of PACTT as a project of the Chief's Council, provided credibility to PACTT's efforts and was instrumental in communicating to the residential facilities that improved academics and available career technical education was of growing importance to the probation departments and would ultimately be considered in placement decisions. In addition, PACTT began with the participation of nine of the largest and most powerful private residential facilities (Griffin, 2010). This degree of support by the residential facilities for an unknown and unfunded program was due in large part to the relationships that the PACTT director and director of operations built through running the Reintegration Initiative. With this support, PACTT began working toward achieving the initial goals which focused on ensuring a speedy transfer of academic records for youth entering placement and an acceptance of credits earned in placement by youth's home school districts

## PACTT Initiative

when they returned to the community. With career/technical education, the primary focus was on enhancing the career/technical offerings available in placement and ensuring that youth could continue this work in the community. These goals also necessitated that PACTT focus on securing the involvement and participation of key county and state stakeholders (i.e., Probation Departments, Department of Children and Family, school districts, non-profit agencies, county workforce investment boards, etc.) in its work (Putter, Smith, & Wade, 2008).

### **PACTT: Past, Present, Future**

Historically, no one entity – not the state, probation, or local schools – paid attention to the academics available in the residential facilities. Typically, the education components were unrelated to the graduation requirements of the districts to which the youth would be returning. Additionally, education in residential facilities lacked rigor and was generally fragmented and inconsistent across facility sites. This was not conducive to serving the youth who arrived at the facilities years behind their non-adjudicated peers academically (Griffin, 2010). Providers also had difficulty accessing youths' academic records upon intake and providing the youths' school districts with workable transcripts at discharge (Putter, 2010).

As part of the initial academic focus, PACTT responded immediately to the issue of record transfer. This led to a 100% increase in the timely arrival of academic records from Philadelphia, where the problem had been the most severe in the state (Putter, 2010). In response to the other deficiencies in education at the facilities, PACTT brought about a number of tangible changes in the ways that youth in placement are educated, trained, and provided the skills they need to successfully transition back to the community and into the workforce. These included connecting the providers with the PDE Standards Aligned System, which provides a recommended curriculum, tools, and resources for the teachers, and making PDE trainings

## PACTT Initiative

available to teachers and administrators at the facilities. PACTT began offering on-site literacy training to the residential facilities and teaching effective ways for offering remedial education with credit recovery (Griffin, 2010). Related to credit recovery, PACTT encouraged the use of instructor-assisted computerized programs (e.g., NOVA Net, PLATO, A+) and promoted the use of competency development over "seat time", as the Carnegie Unit<sup>6</sup> is informally known, as a measure of academic achievement (Putter, 2010).

Among the many concrete improvements PACTT has brought to the education of youth in residential placements across Pennsylvania are enhancements in the way youth are trained and equipped with the skills necessary to successfully transition into productive adults with careers that can pay family-sustaining wages. These enhancements are intended to provide opportunities for youth to replace their former micro systems which likely included criminogenic elements such as deviant peer groups with positive factors such as education and employment. A key example of these advancements is the growth in career/technical education (CTE) that PACTT helped to spur by expanding the number of available career/technical education programs from approximately 16 programs arbitrarily run by a few providers to over 65 industry-aligned programs in credible career tracks spread uniformly throughout the participating providers (Griffin, 2010). PACTT also focused attention on the opportunities for youth to complete basic certifications, such as OSHA 10, ServSafe, and the International Computer Driving License (ICDL)<sup>7</sup> which are achievable in shorter amounts of time than the career tracks. Further,

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<sup>6</sup> Carnegie Unit refers to the long standing system of determining academic credit by how much time a student spends in the classroom with the teacher. The length of a Carnegie Unit is 120 hours of direct contact with the teacher. Typically, one high school credit generally equals one Carnegie Unit (The Glossary of Education Reform <http://edglossary.org/carnegie-unit/> Retrieved on 08.24.14 at 2:05).



## PACTT Initiative

completion of a basic certification provides delinquent youth with an advantage in applying for jobs and can help counter the negative impact of their delinquent record, which is not automatically expunged. The portability of the skills, including the PACTT Employability Soft Skills Manual described below, and experiences youth gains in placement comprises the mesosystem as the microsystems formed in placement are brought back to youth's community.

The mastery of "soft skills," the non-technical components of a job is often overlooked as a key to successful employment. Soft skills typically include critical thinking, creativity, communication, and collaboration (Warner, Gates, Christeson, & Kiernan, 2011; 21<sup>st</sup> Century Skills.org website). Many potential employees are not qualified for jobs due to a lack of adequate soft skills (Warner, Gates, Christeson, & Kiernan, 2011) which employers report are more difficult to teach than the hard technical skills (Pritchard, 2013).

To address the instruction of soft skills, PACTT developed the PACTT Employability Soft Skills Manual (ESSM) and a corresponding checklist. The manual identifies 27 competencies that youth should develop while in placement, consistent with those recommended by Ansell Casey Life Skills, Skills USA, and the Pennsylvania Department of Education Career Education and Work Standards<sup>8</sup>. PACTT does not prescribe the curriculum with which the

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<sup>7</sup> These certifications are initial, and sometimes requisite, certifications in the area of general industry (OSHA 10), food safety (ServSafe), and computers (MOS and ICDL). Specifically, OSHA 10 is a 10-hour course on general safety concerns in the work place. ServSafe is a course designed to address the food safety requirements of a state's health department. Both Microsoft Office (MOS), specific to Microsoft Office, and the International Computer Driving License (ICDL) are certifications of computer proficiency in word processing, databases, spreadsheets, and presentation tools. These certification are considered basic because they take significantly less time to complete than a complete career technical education track (D.Smith, personal communication, February 22, 2013).

<sup>8</sup> Ansell Casey Life Skills is a tool that assesses the extent to which youth possess the competencies and behaviors required for successful independent living including, budgeting, work/school habits, computer skills, and healthy relationships ([http://www.caseylifeskills.org/clsa\\_learn\\_provider](http://www.caseylifeskills.org/clsa_learn_provider)). Skills USA is a non-profit that serves teachers, secondary, and post-secondary students interested in pursuing a career in technical, trade, and health occupations. (<http://www.skillsusa.org/about/facts.shtml>). Most career/tech schools have a local chapter and offer a curriculum on employability and soft skills. The Career Education and Work (CEW) standards are the 13th set of academic standards

## PACTT Initiative

competencies are taught; rather, it only requires that all 27 competencies are covered. The manual also includes indicators and rubrics to assist the instructors in determining if an individual has successfully demonstrated the competency and to provide consistency across instructors and programs. The corresponding checklist makes the information portable and available to youthsøhome school districts and community programs to which youth may return to avoid them having to repeat learning of these skills (Smith & Goodman, 2011).

PACTT also brought opportunities for youth to gain work experience while placed in juvenile residential facilities. In 2009 PACTT obtained 60 jobs slots from the Philadelphia Workforce Investment Board (WIB) for Philadelphia youth in residential facilities. This was the first time that WIB Work Ready money had ever been allocated to fund work in a residential facility. Subsequently other WIBs across the state placed an additional 100 jobs spread between two other facilities (Putter, 2010). In addition, PACTT partnered with Goodwill Industries in Allegheny County, through a Department of Labor grant, to establish a pilot program in two of the participating residential facilities that provided six weeks of subsidized employment in placement and six weeks of subsidized employment post-placement when youth returned to the community (Putter, 2010). Similarly, PACTT was involved in the development of a two-year pilot program at a day treatment program for court-involved youth. This program, which aimed to graduate the youth by time of discharge, focused on preparing them for some form of post-secondary experience and providing the youth with soft skill and job-readiness training. It further mandated their involvement in a service learning project, and included two paid internships in the youths area of career/technical study (Putter, 2011). These PACTT-initiated

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established by the PDE. The CEW standards address the soft skills necessary for employment and are broad enough to be applied to many CTE programs (S. Will, personal communication, February 22, 2013 )

## PACTT Initiative

programs (i.e., employment at residential facilities, Goodwill industries, and soft skill/job-readiness training) facilitated additional mesosystems by fostering work experience for youth in placement and by creating the ability to continue with the work experience upon youths' return to the community.

From its inception in 2008, interest in PACTT continued to grow, and, as detailed above, PACTT brought a number of concrete elements to the providers which the Pennsylvania Council of Chief Juvenile Probation Officers saw as improvements that were worth expanding. To facilitate the expansion, in 2010 the Chiefs' Council announced a formalized PACTT Alliance Affiliation process, which enabled the providers to indicate their alignment with Probation's academic and career/technical training goals, as defined through the PACTT Alliance.

Although, as mentioned previously, PACTT was an unfunded mandate and joining the PACTT affiliation was voluntary, Probation's growing interest in quality academics and career technical education in placement was incentive for providers to demonstrate the steps they were taking toward this end. Development of the PACTT Affiliation for the residential facilities afforded recognition to those providers who had structured themselves to align with the PACTT goals and also established clear guidelines for other programs interested in meeting the PACTT goals. These factors, the growing emphasis by the Chiefs' Council and probation departments on the key elements of PACTT and that becoming a PACTT Affiliate substantiated a facility's efforts toward improving these areas, was motivation for facilities to seek affiliation. The affiliation process also formalized much of what PACTT was doing with the providers and instituted a measure of continuity across the residential facilities.

Although this research focuses on PACTT's work with the residential facilities, it is also worth noting that PACTT developed an Affiliation Agreement geared at community based

## PACTT Initiative

programs. This agreement maintained the emphasis on quality academics and career technical education, but adjusted the requirement to account for the fewer hours they are in contact with the youth and their limitations to offering actual career technical education tracks. This process was still being fine-tuned at the time of this research.

To become a PACTT Affiliate, the provider must sign a PACTT affiliation agreement, signed also by PACTT and shared with the Council of Chief Juvenile Probation Officers, and must agree to implement and maintain the basic PACTT elements (Appendix A). PACTT began with nine private residential facilities and has grown to 24<sup>9</sup> providers, which opted to affiliate, including five of the state-run facilities. These programs, by becoming PACTT Affiliates, have committed to ensuring that their academics are relevant to their population and are on par with the school districts to which youth will return. This requirement is intended to provide youth with a better academic experience than many had in their home schools, in essence building new, pro-social micro systems with academics. The programs are required to align their curricula with the Pennsylvania Standards Aligned System (SAS), the state's voluntary model curriculum, to establish consistency across providers and to help ensure the successful transfer of credits when youth return home. To help facilitate a youth's successful return to school and subsequent graduation, providers are to foster opportunities for credit recovery and acceleration and to emphasize literacy (Will, 2011).

Collectively, these efforts help forge mesosystems between the youth's relationship to academics in placement and the new one they will build upon returning to the community.

Probation officers and the aftercare workers are also instrumental in helping youth forge these

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<sup>9</sup>24, is the number of PACTT affiliated residential facilities during the timeframe of this study. According to the PACTT website (pacttalliance.org), as of September 2014 there are 35 PACTT affiliated facilities (residential and day treatment). However, as they were added after the period of time for this study they are not counted above.

## PACTT Initiative

new relationships. While there is no affiliation agreement geared at these entities, PACTT recognized their significance and focused on building bridges and pathways of communication between the residential facilities, probation officers/aftercare workers, and the community-based organizations.

PACTT is predicated, in part, on the demonstrated value of linking academic and career/technical education and skill training toward increasing the academic success of youth with a history of academic failure (Putter, 2010; Bales et al., 2006). Therefore, PACTT requires providers to integrate academic and career/technical training and encourages providers to use conceptual learning where the academic teachers include practical application as part of their instruction and the CTE instructors incorporate academic standards into their teachings. This approach is key in helping youth to understand the relevance of new concepts and to recognize the relationship between the academic and work worlds which should ultimately guide the youth in employment that pays family-sustaining wages (Will, 2011).

To address the career/technical education (CTE) component, PACTT instituted the use of its Employability Soft Skills Manual (ESSM), across all of its affiliated programs. Part of the ESSM involves the creation of a portfolio which contains documents necessary for employment. Also required is the offering of at least one basic certification, OSHA 10, ServSafe for culinary arts, Microsoft Office Specialist, or the International Computer Driving License (ICDL) available to all youth and serves as an enhancement to any employment application. A remaining key element of affiliation is the implementation of at least one career/technical track in an occupation offering viable job opportunities for these youth and the capacity to pay a family-sustaining wage. These tracks must be at least 10 hours per week for a minimum of 90 hours and taught according to industry standards. Lastly, PACTT encourages the facilities to

## PACTT Initiative

work toward developing relationships with their Workforce Investment Boards (WIBs) to build relationships with potential employers and to access funds for youth employment (Smith, 2011).

PACTT is referred to as one of the most successful initiatives undertaken by the PA Council of Chief Juvenile Probation Officers (Putter, 2010), and as a result, is acknowledged to be an initiative worth expanding to other probation departments in the state beyond the pilot counties. To facilitate the expansion, PACTT obtained a Pew Grant to expand to three additional counties and was invited to work with a fourth. The move to these additional counties led to an expansion in scope of PACTT's focus, and specifically, to bring a number of PACTT elements into the community.

An intended benefit of expanding elements of PACTT into the community is the opportunity it provides for youth to continue the work they began in placement upon their return home. An example of the way PACTT functions as an exosystem is in the forging of mesosystems for youth between placement and the community. The PACTT ESSM is easily adapted across schools, aftercare programs, and community support centers, and provides an opportunity for youth to complete any competencies they did not finish in placement. Further, the corresponding checklist (Appendix B), a recording of the competencies youth have completed, becomes part of youth's academic and probation discharge files to help prevent youth from having to redo competencies they have already achieved. The required portfolio is also intended to easily transfer work completed and documents obtained in placement back to the community as the youth re-integrates into their community. Similarly, making basic certifications available to these youth in the community provides them with the opportunity to complete any of these certifications that they may have begun in placement. Lastly, aligning the CTE tracks with industry standards ensures youth progress along competencies that are

## PACTT Initiative

recognized by district career/technical schools and employers. This increases the likelihood that youth will be able to enter CTE schools upon returning to the community and continue working from where they left off.

Going forward, PACTT recognizes the importance of connecting youth to jobs. Beyond the work experience opportunities that are afforded in placement, it is necessary that youth have opportunities for employment in safe work environments that understand their unique needs and that are willing and able to make allowances for them. To facilitate these accommodations, PACTT is working in a number of counties to identify potential employers and build job development centers that not only connect youth to these employers but that also provide the youth with case management services to facilitate their transition to the work world.

PACTT's mission is to improve the academic and career/technical education opportunities for youth in placement and upon their return to the community (Putter, 2010). It does this by working to make academics relevant to youth, providing them with the skills to pursue some form of post-secondary education (not necessarily a four-year degree), and offering preliminary training in high-priority or high-employment careers that pay family-sustaining wages. PACTT further works to address the systemic barriers to positive outcomes for these youth (Putter, 2010).

As presented in the literature review, the focus of this study is to assess the effectiveness of PACTT's efforts. Using data collected by the providers as a requirement of their affiliation, and additional data obtained from probation, this study examines if youth placed at PACTT affiliated programs are more likely to engage in school and work upon return to the community. The following chapter further explains the study's methodology.

## **Chapter Four**

### **Methodology**

As stated in the prior section, this research is intended to evaluate feasibility of the PACTT elements in PACTT affiliated programs (previously described) to impact youth's engagement in school and/or work upon their return to the community. A discussion of the methodology began with a review of the population from which the sample was drawn.

#### **Participant Characteristics**

The population of youth for this research was all youth meeting PACTT's eligibility requirements who had been committed to a PACTT-affiliated facility since its inception in 2008. More specifically, the youth had to be between the ages of 14 and 21, an adjudicated delinquent, and committed for a minimum of three months. The three-month commitment criterion was significant as a number of participating residential facilities offered programs that served youth for fewer than 90 days. These short-term programs were not considered to be part of the PACTT Initiative as their short time frame did not afford a sufficient amount of time for the elements to be completed. However, facilities may have offered multiple programs of differing lengths which qualified the facility as a PACTT affiliate. Lastly, to be included in the database a youth had to discharge from placement to probation within the state of Pennsylvania, which ensured the post-discharge outcome data could be collected.

PACTT placement decisions were largely at the discretion of the committing judge, although youth demographics were occasionally considered in placing youth. For example a youth's age may necessitate a particular residential facility designed for that age group. Similarly, some residential facilities are intended for youth with more extensive delinquent histories. Further, while demographic variables may offer insights into youth outcomes around



school/work engagement in the community, they do not play a role within the facility in determining a youth's participation in the PACTT elements. However, the researcher recognized the value of these variables in evaluation and, when available, included them in the analysis. Demographic variables that may have been pertinent to the research but were unavailable were addressed in the limitations section of the discussion chapter.

### **Sampling Procedure**

As noted, all youth committed to a PACTT-affiliated program and that met the requirements put forth above were eligible for inclusion in the study. Therefore the population of youth was comprised of youth from all counties committed to any of the PACTT-affiliated programs from the point of inception. This study included only those youth from Allegheny County where Pittsburgh is the largest city committed to PACTT-affiliated programs serving Allegheny County youth, who were released from placement between July 1, 2011 and June 31, 2012, and who returned to Allegheny County on juvenile probation upon discharge. This yielded an initial sample size of 118 youth who were included in the database provided for this research. The final sample size was 77 youth (65% of the initial sample) who had returned to Allegheny probation, were discharged during the stated time frame, and who met the general population requirements. The criteria for removal from the dataset are included in the procedures section.

Of these 77 youth, 84% ( $n = 65$ ) were males and 16% ( $n = 12$ ) were females. With regards to Allegheny County specifically, 486 youth who had been committed to a residential facility in 2012 were identified for a comparison to determine the representativeness of the sample. There are number of reasons why all 486 of these youth were not part of the initial population and subsequent sample. First, the PACTT sample is based on youth that discharged from placement between July 1, 2011 and June 31, 2012, not on the time frame in which they

were committed. In contrast, these 486 were all committed during 2012, but it is unknown when they discharged, therefore while this provides the closest demographic comparison, there is no way to know that these youth would have discharged from placement during the requisite time frame. Additionally, even if the youth were discharged during the time frame of the study they may not have been included in the sample because they were not committed to a PACTT-affiliated program, were not committed to placement for a minimum of three months, and/or their case was closed at time of discharge resulting in no outcome data from probation. Despite these drawbacks, the researcher determined that the demographic information about the full 2012 Allegheny county population of committed youth served as the best available comparison to the sample used in the current study.

Among the 486 youth in PACTT during 2012 84% ( $n = 409$ ) were male and 16% ( $n = 77$ ) were female, thus, the sample obtained for the current study was well aligned with the gender profile of Allegheny County youth. In regards to the racial distribution of Allegheny County committed youth, 75% ( $n = 366$ ) identified as Black, Non-Hispanic and 21% ( $n = 104$ ) as Caucasian, Non-Hispanic with less than 1% ( $n = 2$ ) identifying as Hispanic. Throughout the PACTT population, 3% of the youth ( $n = 13$ ) reported being multi-racial and 1% as other as recorded in the Pennsylvania Juvenile Court Management System database (D. Evrard, personal communication, April 6, 2013). Here too, the committed youth population of Allegheny County in 2012 was consistent with the sample used in this study in which 77% ( $n = 59$ ) identified themselves as Black, Non-Hispanic and 17% ( $n = 13$ ) as Caucasian, Non-Hispanic. Of the remaining youth 5% ( $n = 4$ ) reported being multi-racial and the remaining 1% ( $n = 1$ ) identified as other/unknown (which includes Asian). None of the participating youth in the sample identified themselves as Hispanic.

## PACTT Initiative

The age range of the 77 youth in the sample was from 14-20 ( $M = 17.4$ ,  $SD = 1.2$ ). The mean age of the youth in this study was consistent with statewide disposition data revealing that 17-year-olds account for almost 27% of all dispositions, which account for the greatest proportion of dispositions for any age group in 2012 (Pennsylvania JCJC Disposition Report, 2012). The length of stay (LOS) for the 77 youth ranged from 84 to 470 days ( $M = 190.7$ ,  $SD = 78.5$ ). Of the 77 youth, a majority (79%) had more than one prior offense (misdemeanor or felony), including the committing offense, with the highest number of prior offenses being 11 ( $M = 3.1$ ,  $SD = 1.9$ ).

The remaining predictors used in this research also provided descriptive information about the youth at time of discharge from placement. As a result, the predictors are also presented with their frequencies. Of the 77 youth 21% ( $n = 16$ ) discharged from placement having earned a high school diploma, GED, or both (a legitimate option in Pennsylvania); the other 79% of the youth did not complete high school or GED. Fifteen of the youth (20%) were discharged having received a basic certification; the remaining 62 youth (80%) did not complete a certification. Twenty (26%) youth completed a Career/Tech Ed (CTE) track; the remaining 57 youth (74%) did not complete a CTE track. The data also revealed that 20 of the youth (26%) had completed at least half of the PACTT Employability Soft Skills Manual (ESSM) by time of discharge, with 20 youth (26%) completing less than 50% of the ESSM competencies, and data were missing for the remaining 37 youth (48%). Lastly, 12% of the 77 youth ( $n = 9$ ) completed 50 hours of work experience prior to discharging placement; the remainder of the sample (88%) completed less than 50 hours. The determination of these thresholds (half the ESSM and 50 hours of work experience) will be explained below.

### Measures

All data used in this research was secondary data presented in a Microsoft Excel workbook to the researcher by Allegheny County Juvenile Probation. The dataset was comprised of information from three sources: information gathered at the residential facilities, data collected by probation, and data coming directly from the Allegheny County Juvenile Probation administrative database.

The residential facilities, as a component of being a PACTT affiliate, were required to collect data reflective of youth's participation in and completion of the PACTT elements. Many of the facilities entered this data into a database developed by PACTT and distributed to all sites. Other facilities used their own pre-existing databases that were adjusted to include all the requisite PACTT variables in a uniform manner. All of the facilities collected data at intake and discharge, which reflected youth's participation in and completion of PACTT-specific elements. For a more thorough description of the PACTT Initiative including its focus and specific elements, refer to the PACTT chapter earlier in this document.

The data obtained from probation was collected by the administration at Allegheny County Juvenile Probation from each of the probation officers serving any youth in the sample. This information was collected as part of a survey (see Appendix C) created specifically for this research, which asked probation officers to answer questions about a youth's academic and employment status at six months post-discharge. To account for the imprecision of recall among probation officers completing the survey at varying points post-discharge from placement, the date of survey completion was included in the database with the intent of being included in the analysis. However, it proved to be unreliable due to excessively high variability ( $M = 278.4$ ,  $SD = 187.5$ ). Thus, it was excluded from the analysis.

Lastly, data was culled from Allegheny County Juvenile Probation administrative database used for the regular collection of state-required data. This data is largely demographic and includes information on gender, race, date- of- birth, prior delinquent history, and recidivism.

In the current study, recidivism is defined as any youth who, while under supervision, is charged with a new offense that resulted in consent decree, adjudication of delinquency, a plea of Nolo Contendere, or a finding of guilt in a criminal proceeding. Or, a juvenile who while under supervision has charges for a new offense pending in criminal court (D. Evrard, personal communication, April 6, 2013). It also includes a juvenile who within two years of case closing commits a felony or misdemeanor that has results in an adjudication of delinquency or a criminal conviction (Fowler, 2013).

## **Procedures**

SPSS 21.0 (IBM Corp., 2012) was used to conduct the analyses. The data were exported into an SPSS dataset from the original Microsoft Excel workbook and different files were merged into a single dataset using each youth's unique identifier. As indicated, the resulting dataset contained 118 youth.

The process of cleaning the data for export to SPSS resulted in the removal of additional youth from the final dataset for any of the following reasons: youth enrolled in their facility for fewer than three months, youth was missing important data such as their discharge date or probation information, youth had conflicting data from different data sources such (e.g., different birthdays or genders listed for the same ID number). Those youth who had been enrolled for fewer than three months were removed because, as previously indicated, PACTT determined a minimum of three months was required for adequate involvement and/or completion of the

## PACTT Initiative

PACTT elements. Youth missing their discharge date were removed because there would be no way to determine their length of stay in placement to ensure that it met the three-month minimum and because it would prohibit inclusion in the analysis of two of the research questions. Those missing their probation information were excluded from the dataset because the data on the probation survey were among the outcome variables in the analyses. Youth containing conflicting information from different data sources were excluded because given that it is a secondary database, it was not possible to determine which data were accurate.

Establishing the final database also involved the collapsing of the following categories: school enrollment, school attendance, and employment questions into dichotomous variables (i.e., Yes/No) to retain youth in the dataset and optimize the small sample size. The original PACTT database tracked the variable regarding completion of the PACTT ESSM at multiple levels including completion of 100% of the ESSM and completion of 75% of the ESSM. However, given the insufficient number of youth in each category, the variable included in the data analyses conducted for the current study represented the number of youth completing a minimum of 50% of the ESSM. Specifically, of the 77 youth there were 37 youth for whom no definitive determination of their degree of completion could be made. Of the remaining youth, 10 completed at least 75% of the competencies; when the threshold was lowered to 50% of the competencies, 20 youth were found to have met that threshold. Ultimately, the 50% threshold was selected to enable more balanced comparisons among youth who did and did not meet the threshold. Though, due to the large number of youth for whom no information was available it was not feasible to include in the logistic regression. Instead, chi square tests of independence were used to explore the relationship between partial ESSM completion and school and work outcomes.

Similarly, the probation survey was initially designed to capture not only whether a youth was enrolled in school at six months post-discharge, but their degree of attendance (i.e., attending regularly, attending occasionally, not attending, not enrolled) and type of schooling (i.e., community high school, CTE high school, GED, community college, post-secondary trade, four year university). The probation survey also included a series of questions about youth employment pertaining to type, length, and number of employments post-discharge from placement. However, as noted, the sample size did not permit for this degree of specificity. Instead, the analysis included three dichotomous variables (Yes/No), which addressed school enrollment, school attendance, and youth employment.

The following section presents the predictors and outcomes used in this research. Four analyses were conducted and logistic regression was used in three of the analyses; the remaining analyses were conducted using chi square. The chi square analysis was used to examine the relationship within a subset of the sample which was too small to accommodate a logistic regression. This will be discussed later.

To meet the assumptions required for maximum likelihood estimation in logistic regression, the ratio of cases to variables was kept around 10:1 (Hosmer & Lemeshow, 2001; Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996). Thus, given the sample size of 77, the number of predictors was limited to five.

## **Variables**

**Predictor Variables.** The predictor variables were grouped into three categories: general/demographic variables, those that were focused on academics, and variables that addressed career/tech education. In total there were 11 predictors applied across three exploratory questions and two hypotheses.

**General/Demographic.**

***Length of stay in placement.*** This variable was calculated by subtracting the date of the youth's arrival from the date of discharge from the residential facility. In the programs designed to be three months or longer, PACTT is implemented across the program making a youth's length of stay a general indicator of dosage of exposure to the PACTT elements.

***Youth's age.*** Age of the youth at the time of return to community could have had an impact on the youth's engagement in school or work upon return to the community. Thus, youth's date of birth was used to determine their age at the time of return to community (i.e., discharge). To determine age at discharge, the number of days from date of birth until date of discharge was calculated and converted into years.

***Youth's adjudicatory history.*** Adjudicatory history was operationalized as the total number of misdemeanors and felonies for which the youth had been adjudicated, including the committing offense for this study. Due to the limitations in the number of variables that could be included in the analyses to maintain appropriate statistical power, number of misdemeanors and felonies were summed rather than entered as separate predictors.

**Academic.**

***GED/High school diploma.*** For this variable, four groups—youth completing either high school, GED, both high school and GED, or neither high school nor GED during placement—were collapsed into two groups: completed high school/GED or did not complete high school/GED. Here, too, the limited sample size and power considerations required that the four groups be collapsed into two.

**Career/Technical Education.**



***ESSM completion.*** This variable represented one of the PACTT elements in which a youth could participate. To ensure that there were a sufficient number of youth for analysis, the variable represented the percentage of youth that completed a minimum of 50% of the manual, though ideally a youth would have completed the entire manual, or at least 75%. As indicated above, the distribution of percentage of ESSM completed showed that only 21% completed 75% or more of the ESSM and that 30% completed 50% or more. Thus, the decision was made to set the cutoff at 50% to allow for a more even comparison among youth on the basis of completing the majority of ESSM.

***Completion of PACTT basic certifications.*** PACTT focused on three specific basic certifications: OSHA 10, ServSafe, and MOS. However, completion of basic certification was operationalized as earning *one or more* basic certifications; thus, youth in the sample were placed into one of the following groups: completed one or more certifications or did not complete any certification. Again, the limitations in sample size and statistical power prevented the separate entry of each of the certifications into the analysis.

***Completion of a career/tech education track.*** Across the PACTT programs there were a number of different career/tech education (CTE) tracks offered including masonry, culinary arts, indoor/outdoor building maintenance, etc., but each of the content areas must adhere to industry standards and be offered in tracks that require a minimum of 90 hours of training. As with the other variables, youth were not categorized according to which track they completed, but rather, they were assigned to groups based on their completion of a track. Specifically, a dichotomous variable was created with two categories: completed at least one CTE track and did not complete any CTE track.

## PACTT Initiative

***Work experience.*** Based on the number of hours completed in work programs, youth were placed into two groups: under 50 hours and 50+ hours. This cutoff was established by PACTT as a minimum hour requirement to count a youth's work experience in the database.

***Completion of PACTT components.*** A variable was created to measure the overall impact of the PACTT components. One point was assessed for each of the following: receipt of one or more certifications, completing 50 or more hours of work during placement, completing 50% or more of the ESSM competencies, and completing high school/GED during placement. Scores on this variable range can range from 0-4. Completion of 50% of ESSM competencies was not included as part of the variable because data were missing for this variable for 37 of the 77 youth.

***Outcome variables.*** Two outcome variables were examined in this study: engagement in school upon return to the community and engagement in work upon return to the community. Engagement in school was defined as being enrolled in school six-months after being discharged from PACTT; thus, youth in the sample were placed into either the enrolled or non-enrolled group. For this research, the term school includes secondary, post-secondary, vocational/career technical education, and GED education.

Similarly, engagement in work was defined as being employed six months post-discharge. Youth in the sample were placed into either the employed or non-employed groups on the basis of their employment status. Both variables are intended to reflect the youth's status at six months post-discharge from placement and are reported by the youth's probation officer.

### **Research Questions and Hypotheses**

**Questions 1a & 1b.** To what extent do the program elements— CTE completion, receipt of certifications, work experience, ESSM competencies, completion of high school/GED—

spearheaded by PACTT impact the likelihood of youth's engagement in school and/or work upon return to the community? What is the relative influence of each of the PACTT components on school and work engagement post-discharge?

***Hypothesis 1.*** The receipt of a high school diploma/GED during placement will increase the likelihood that youth will engage in school and/or work upon their return to the community. The predictors associated with these questions included completion of the ESSM (at least 50% of the skills), completion of a basic certification, completion of a CTE track, sufficient work experience (50+ hours), and obtaining a high school diploma/GED during placement. These variables were included because they represented key elements of the PACTT program and independently or collectively were thought to impact a youth's connectedness to school and/or work upon return to the community.

Logistic regression was used for analysis of four of these five predictors in assessing their relationship to youth's engagement in school and/or work. The fifth predictor, completion of 50% of the ESSM, was assessed with chi square. This was because data were missing for 37 of the 77 youth in the sample. However, the fundamental nature of the ESSM to PACTT necessitates that it be examined in the analysis, and, by using chi square, it was still possible to analyze the relationship between this variable and outcomes of interest.

**Question 2.** To what extent does the degree of exposure (i.e., dosage) to the PACTT elements (i.e., length of stay and number of PACTT elements in which youth participated during placement) impact youth's engagement in school and/or work upon discharge?

With regards to assessing the interventions, the predictors included the summed score indicating the number of PACTT elements completed and the length of placement in PACTT.

## PACTT Initiative

Logistic regression was used to assess the effect of PACTT dosage on engagement in school and/or work upon return to the community.

This research question addressed the impact of dosage<sup>6</sup> understood as the amount of exposure to PACTT and number of elements that a youth completes (with the exception of completion of ESSM)<sup>6</sup> on engagement in school and/or work upon return to the community. Here, length of stay, previously explained to be derived from the Date Entering Placement and Date Released from Placement variables, served as a predictor based on the understood program-wide implementation of PACTT.

**Question 3.** To what extent do youth's personal characteristics (i.e., age and number of prior offenses) impact their likelihood of engaging in school and/or work upon discharge?

**Hypothesis 2.** Youth, 17 and older, which had a paid work experience during placement will be more likely to engage in work upon their return to the community.

This question was also examined via logistic regression. The predictors were age and number of offenses, while the outcomes were engagement in school and/or work upon return to the community.

Finally, although the small sample size limits the generalizability of the findings, this research served as an evaluation of the feasibility of the PACTT approach to influencing outcomes of interest (i.e., engagement in school and employment). Ultimately, the study provides some preliminary information about the effectiveness of PACTT. However, only a larger-scale study including data collected over a longer duration (to increase sample size), that has more tightly controlled data gathering procedures for a more complete dataset, and that offers additional follow-up intervals at 12 and 24 months post-discharge, will provide more conclusive data about PACTT's effectiveness.

## Chapter Five

### Results

#### Question 1: Influence of PACTT components on employment and school engagement

**PACTT components' influence on employment.** Logistic regression was conducted to determine the influence of the PACTT components—completing 50+ work hours, receiving CTE, basic PACTT certification received, and GED/High School diploma earned in placement—on engagement in work post-discharge. The analysis included 77 cases and resulted in a model that was inadequate in predicting engagement in work (omnibus  $\chi^2 = 6.50$ ,  $df = 4$ ,  $p = 0.165$ ). The model accounted for between 8.1% and 15.7% of the variance in engagement in work. Although the model correctly predicted group membership for 85.7% of youth, it failed to correctly predict group membership for any of the employed youth, whereas it correctly predicted group membership for 97.1% of non-employed youth.

Table 1 shows the odds ratios, their confidence intervals and the associated Wald tests. The table shows that high school diploma/GED earned during placement was the only statistically significant predictor (from among the four predictors included in the model) of employment post-discharge ( $OR = 11.80$ , 95% CI [1.56, 89.37]). Thus, after controlling for the influence of the other PACTT components, youth who earned a degree in placement have about 12 times better odds of being employed six months post-discharge than those without a degree, although the confidence interval indicates that the actual odds ratio may be somewhere between 1.56 to 89.37.

Table 1

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*Logistic regression predicting engagement in work (i.e., employment) six months post-discharge with PACTT components*

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# PACTT Initiative

Variable	OR	95% CI	Wald test	df	p
Degree earned in placement	11.80	1.56-89.37	5.71	1	0.017
Complete/earned CTE	0.32	0.04-2.53	1.16	1	0.282
Basic certification received	0.28	0.03-3.19	1.05	1	0.306
Completed 50+ work hours during placement	0.31	0.02-4.27	0.76	1	0.384

NOTE: CI = Confidence Interval; OR = Odds Ratio

As indicated in the Method section, a separate analysis was conducted to examine the relationship between completion of 50% of the ESSM and employment six months post-discharge because of the relatively small sample of youth who have data on this PACTT component. The chi square analysis revealed no relationship between ESSM completion and employment ( $\chi^2(1, N = 40) = 0.00, p = 1.00$ ). Specifically, among the six youth who were employed, three completed 50% or more of the ESSM and three did not. Among the youth who were not employed, 17 completed 50% or more of the ESSM and 17 did not.

**PACTT components' influence on school engagement.** Similarly, logistic regression was conducted to determine the influence of the PACTT components (Completing/earning CTE, work experience, basic certification received, and GED/High School Diploma earned in placement) on engagement in school post-discharge. Here too, the analysis included 77 cases and resulted in a model that was inadequate for predicting engagement in school (omnibus  $\chi^2 = 2.19, df = 4, p = .702$ ). The model accounted for between 2.8% and 3.9% of variance in engagement in school. Overall, the model predicted group membership correctly for 68.8 percent of the youth, with 100% of enrolled youth being accurately predicted and 7.7% of non-

enrolled youth correctly predicted. Table 2 shows that none of the variables predicted engagement in school to statistically significant level.

Table 2

<i>Logistic regression predicting engagement in school six months post-discharge with PACTT components</i>					
Variable	OR	95% CI	Wald test	df	p
Degree earned in placement	0.69	0.16 ó 3.09	0.23	1	0.632
Complete/earned CTE	2.30	0.61 ó 8.61	1.52	1	0.218
Basic certification received	1.09	0.31 ó 3.85	0.02	1	0.898
Completed 50+ work hours during placement	0.55	0.10 ó 3.00	0.48	1	0.491

NOTE: CI = Confidence Interval; OR = Odds Ratio

As with the relationship between ESSM completion and engagement in employment, a separate analysis was also conducted to examine the relationship between completion of at least 50% of the ESSM and engagement in school at six months post-discharge. Here too, the additional analysis was done because of the relatively small sample of youth who have data on the ESSM component. The chi square revealed a statistical trend between ESSM completion (of at least 50%) and school enrollment status ( $\chi^2 (1, N = 40) = 3.75, p = 0.053$ ). Of the 24 youth that were enrolled in school at six months post-discharge, nine (37.5%) completed at least 50% of the ESSM and 15 did not (62.5%). Of the 16 youth that were not enrolled, 11 (68.8%) completed at least 50% of the ESSM and five (31.2%) did not.

## Question 2: Influence of PACTT dosage on employment and school engagement

**PACTT dosage influence on employment—four components.** As presented in the methods section, the second question addresses the impact of dosage on a youth's engagement in work and school post-discharge from placement. Logistic regression was used to determine the influence of dosage operationalized as time in placement and number of PACTT elements completed (only four of the elements of completing 50+ work hours, receiving CTE, basic PACTT certification received, and GED/High School diploma earned in placement that are summed into the predictor) on engagement in work at six months post-discharge. The analysis included 77 cases and resulted in a model that was inadequate in predicting engagement in work (omnibus  $\chi^2 = 0.113$ ,  $df = 2$ ,  $p = 0.945$ ). The model accounted for between 0.1% and 0.3% of the variance in engagement in work and correctly predicted overall group membership for 88.3% of the youth, with all of non-employed youth being accurately predicted and none of the employed youth accurately predicted. Table 3 shows the odds ratio, the confidence intervals, and the associated Wald tests. It is evident from Table 3 that neither of the variables was significant in predicting engagement in work.

Table 3

<i>Logistic regression predicting engagement in worksix months post-discharge with PACTT dosage (four components)</i>					
Variable	OR	95% CI	Wald test	df	P
Time in placement months	1.02	0.78 to 1.33	0.01	1	0.914
Number PACTT components completed <sup>a</sup>	1.10	0.58 to 2.07	0.08	1	0.777

NOTE: CI = Confidence Interval; OR = Odds Ratio



<sup>a</sup> The total number of PACTT components completed from among the four components for which all 77 youth had data available.

**PACTT dosage influence on employment—five components.** This relationship was also examined using logistical regression with 40 cases but included the variable representing the number of components completed from among all of the five components that comprise PACTT (completing 50+ work hours, receiving CTE, basic PACTT certification received, GED/High School diploma earned in placement, and completing at least 50% of ESSM). This full-PACTT model was also inadequate in predicting engagement in work (omnibus  $\chi^2 = 0.054$ ,  $df = 2$ ,  $p = 0.973$ ) and accounted for between 0.1% and 0.2% of the variance. The model did predict overall group membership for 85% of youth, but over-classified youth as not employed. Specifically, the model correctly predicted group membership for all of the youth that were not employed but incorrectly predicted that all of the employed youth would not be employed. Table 4 shows that that neither of the variables predicted work engagement to a statically significant level.

Table 4

<i>Logistic regression predicting engagement in work six months post-discharge with dosage (five components)</i>					
Variable	OR	95% CI	Wald test	df	P
Time in placement months	1.03	0.74 -1.44	0.03	1	0.862
Number PACTT components completed <sup>a</sup>	1.03	0.52 -2.00	0.01	1	0.942

NOTE: CI = Confidence Interval; OR = Odds Ratio

<sup>a</sup> The total number of PACTT components completed from among the five components for which a subset of 40 youth had data available.

**PACTT dosage influence on school engagement—four components.** As noted, question two also addressed the impact of dosage on engagement in school at six months post-discharge and logistic regression was again used to determine this relationship. The analysis of the 77 cases revealed that the model did not adequately predicting engagement in school (omnibus  $\chi^2 = 0.004$ ,  $df = 2$ ,  $p = 0.998$ ). Both goodness of fit metrics indicated that the model accounted for 0% of the variance in engagement in school. Although, the model predicted overall group membership for 66.2% of youth, none of the non-enrolled youth were correctly predicted, whereas all of the enrolled youth were correctly predicted. As can be seen below in Table 5, neither of the variables were statistically significant predictors of school engagement.

Table 5

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*Logistic regression predicting engagement in school six months post-discharge with dosage (four components)*

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Variable	OR	95% CI	Wald test	Df	P
Time in placement months	1.00	0.83- 1.21	0.00	1	0.988
Number PACTT components completed <sup>a</sup>	1.01	0.64- 1.60	0.00	1	0.958

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NOTE: CI = Confidence Interval; OR = Odds Ratio

<sup>a</sup> The total number of PACTT components completed from among the four components for which all 77 youth had data available.

**PACTT dosage influence on school engagement—five components.** With regards to the effect of dosage on school engagement<sup>ô</sup> taking into account all five components<sup>ô</sup> with the subset of 40 youth, a statistical trend was found in the omnibus test of model fit (omnibus  $\chi^2 = 4.88$ ,  $df = 2$ ,  $p = 0.087$ ). Furthermore, the two-predictor model of PACTT dosage accounted for between 11.5% and 15.5% of the variance<sup>ô</sup> an improvement relative to the other models

previously mentioned. However, the model did a relatively poor job of predicting group membership with overall group membership correctly predicted for 57.5% of youth with ESSM completion data, 70.8% of enrolled youth, and 37.5% of non-enrolled.

Table 6

<i>Logistic regression predicting engagement in school six months post-discharge with dosage (five components)</i>					
Variable	OR	95% CI	Wald test	Df	p
Time in placement months	1.41	0.99 6 2.00	3.67	1	0.055
Number PACTT components completed	0.79	0.47 6 1.34	0.79	1	0.376

NOTE: CI = Confidence Interval; OR = Odds Ratio

<sup>a</sup> The total number of PACTT components completed from among the five components for which a subset of 40 youth had data available.

The results in Table 6 show that there is a statistical trend suggesting a relationship between time in placement and engagement in school. Specifically, for every additional month a youth spends in placement, there is 40% increase in the odds of school engagement six months post-release. However, it is important to note that the confidence interval estimates suggest that the actual odds ratio is somewhere between one and two, which suggests that there may be little to no effect or a fairly substantial effect of time in placement. Thus, the fact that the significance test was slightly above .05 and the confidence interval includes 1.00, future research should seek to examine and elucidate this relationship in order replicate or refute the finding.

### **Question 3: Influence of personal characteristics on employment and school engagement**

**Personal characteristics influence on employment.** The third question examines the relationship between personal characteristics and engagement in work and school. Personal

characteristics were defined as youth's age at discharge and total number of offenses (number of felonies + number of misdemeanors). Logistic regression was used to determine the relationship between these characteristics and engagement in work at six months post-discharge. The analysis included 77 cases and the analysis revealed that the model adequately fit the data (omnibus  $\chi^2 = 10.51$ ,  $df = 2$ ,  $p = 0.005$ ) and accounted for between 12.8% and 24.8% of the variability in engagement in work. The model correctly predicted group membership for 88.3% of the youth, with correct prediction of group membership for 11.1% of the youth that were employed and 98.5% of the employed youth that were not employed.

Table 7 reveals that age at discharge was the only statistically significant predictor (from among the two predictors in the model) of employment post-discharge. Thus, after controlling for the influence of number of offenses, an increase of one year of age corresponds to a greater likelihood of engagement in work. Specifically, the odds of employment are three times greater when age increases by one year. Note that the wide confidence interval suggests some instability in the odds ratio estimate and indicates that the actual odds ratio may be somewhere between 1.39 and 6.52.

Table 7

<i>Logistic regression predicting engagement in work six months post-discharge with personal characteristics</i>					
Variable	OR	95% CI	Wald test	df	p
Age at discharge	3.01	1.39 to 6.52	7.83	1	0.005
Total offenses	0.87	0.56 to 1.37	0.35	1	0.553

NOTE: CI = Confidence Interval; OR = Odds Ratio

**Personal characteristics influence on school engagement.** Logistic regression was also used to determine the relationship between the aforementioned personal characteristics and engagement in school at six months post-discharge. The full sample of 77 cases was included in the analysis and resulted in model whose goodness of fit statistics were statistically non-significant (omnibus  $\chi^2 = 3.24$ ,  $df = 2$ ,  $p = 0.198$ ).and accounted for between 4.1% and 5.7% of the variance in engagement in school. Overall, 63.6% of youth were correctly predicted by the model and correct prediction of group membership for 96.1% of the enrolled youth and none of the non-enrolled youth. The odds ratios, the confidence intervals, and the associated Wald tests can be found in Table 8 and show that neither of the variables were statistically significant predictors of engagement in school.

Table 8

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*Logistic regression predicting engagement in school six months post-discharge with personal characteristics*

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Variable	OR	95% CI	Wald test	df	p
Age at discharge	0.71	0.46 ó 1.09	2.48	1	0.115
Total offenses	0.93	0.72 ó 1.20	0.29	1	0.593

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NOTE: CI = Confidence Interval; OR = Odds Ratio

## Chapter Six

### Discussion

#### Review of Results

This feasibility study sought to explore the impact of the PACTT Initiative on youth's engagement in school and work at six months post discharge from residential placement. The sample population for the study included 118 youth, of which 77 had sufficient data to be included in the analyses. Three exploratory questions were developed in an effort to capture the influence of PACTT and the specific components, on these outcomes. The first question examined the influence of four of the PACTT components (high school diploma/GED completed during placement, completion of a CTE track, receipt of a basic certification, and completion of 50+ work hours) on employment and school engagement. The model as a whole was inadequate in predicting engagement in work or school post discharge. However, it did reveal a significant relationship between having a high school diploma/GED by the time of discharge and engagement in employment but not engagement in school. This finding supported the hypothesis that possession of a high school diploma and/or GED at discharge would increase a youth's likelihood of engagement in work, but failed to support the hypothesis that it would increase engagement in school.

As defined in the method section, PACTT is comprised of five components, four of which were examined together described in the paragraph above. The fifth component, completion of at least 50% of the ESSM, was assessed separately due to there being available data for only 40 youth. Thus, a chi square test was used to conduct the analyses, and it revealed no relationship between completion of at least 50% of the ESSM and engagement in employment. However, a statistical trend was revealed showing a relationship between ESSM

completers (at a minimum of 50%) and school engagement status, with a greater proportion ESSM completers not enrolled in school, relative to the proportion of enrolled ESSM completers.

The second exploratory question examined the influence of dosage (i.e., time in placement and the number of PACTT components completed) on youth's engagement in employment and/or school post-discharge from placement. As with exploratory question one, the initial analysis included all of the PACTT components besides 50% ESSM completion and revealed that neither the number of components completed nor length of stay was adequate in predicting engagement in work or engagement in school. A second analysis to was conducted to examine the influence of total number of components<sup>o</sup> from among all five components<sup>o</sup> and time in placement on both work and school engagement. For this model, only 40 cases from among the original 77 participants were included in the analysis because it was this subset of the sample for which there was data available on completion of all five PACTT components, (including completion of 50% of the ESSM). When 50% ESSM completion was included in the total number of PACTT components completed, the model was inadequate in predicting employment. However, when the effect of dosage (as defined by the time in placement) on engagement in school was assessed taking into account all five components, a statistical trend was found between time in placement and school engagement.

The third exploratory question addressed the influence of personal characteristics (i.e., age at discharge and total number of offenses) on engagement in employment and school at six months post discharge. Here, the model adequately fit the data and age at discharge was found to be a statistically significant predictor of engagement in employment. With regards to engagement in school, personal characteristics were not statistically significant predictors.

## PACTT Initiative

Overall, the results of this feasibility study suggest that PACTT, as a whole, and the component parts, did not have a substantial impact--with a few exceptions--on youth engagement in work and/or school at six months post discharge. The following offers an interpretation of these results.

### **Interpretations**

Since the period of the reform schools, education has been a key component of serving youth (Platt, 1977). More recently, education came to include career technical education (Coffey & Gemignani, 1994), and the value of learning these skills in placement was expanded to capture the connection to youth successfully reintegrating into the community upon discharge (Nellis & Wyman, 2009). The recognition of the relationship between access to academic and career/tech education and work experience to a successful return to the community encouraged the inclusion of these opportunities in placement (Dundi & Roelofs, 1984; Coffey & Gemignani, 1994; Gemignani, 1994). This understanding was foundational to the forming of PACTT and its emphasis on academics, career/tech education -including the basic certifications, career/tech tracks, employability and soft skills, and work experience-- the five components defining PACTT.

Given the above, the overall lack of statistical significance of these predictors and the small amount of outcome variance accounted for by models including the predictors was unexpected. Before examining possible explanations for the non-significant findings, it is important to point out that having a high school diploma/GED completed during placement increased the likelihood of engagement in employment, which supports the corresponding hypothesis. This relationship makes sense on its face given that youth who have a high school diploma /GED at time of discharge are generally older and subsequently also legally able to



work without the limitations that a younger youth may have (e.g., younger youth may be attending school and are thus limited in the time they can spend working at their job). This outcome is consistent with the finding from question three (to be discussed later) that age, as a personal characteristic, was statistically significant predictor of engagement in employment post-discharge.

Interestingly, possession of a high school diploma/GED at discharge from placement was not a statistically significant predictor of engagement in school post-discharge, counter to the corresponding hypothesis. It is certainly possible that the youth in the study opted not to pursue post-secondary education. This would not be an anomaly given that few youth returning from placement pursue a college education due, in part, to many youth in the system possessing a learning disability<sup>6</sup> which is, itself, a barrier to attending college, is exasperated by their adjudicatory history and academic experience in placement (Mears & Travis, 2004). Moreover, in 2013, only 65.9% of youth in the United States who graduated high school during that year were enrolled in some form of post-secondary education, very similar to the 66.2% of 2012 high school graduates that enrolled in post-secondary education (Bureau of Labor Statistics, 2014). This is indicative of the reality that a youth's choice to pursue<sup>6</sup> or not pursue<sup>6</sup> post-secondary education is not necessarily a result of their participation in PACTT or their having been adjudicated. However, it is also possible that small sample size and resultant low statistical power was insufficient to detect a relationship if it did exist. Thus, it is possible that a larger sample of youth may yield a higher incidence of engagement in post-secondary education after discharge from PACTT.

Also, potentially contributing to the statistically non-significant findings is a shortcoming of the data collection process. Outcome data was collected via probation officers reporting on

the school and work status of youth at six months post-discharge. However, many times the probation officers were responding to these items well beyond the six months post-discharge time frame. As a result, the probation officers who completed beyond six months post-discharge may have had to rely on documentation actually made at six months post-discharge, on documentation that may have been made by a different probation officer, or on their memory. These limitations in the data collection process leave open the possibility that any number of the 16 youth who were not enrolled in school post-discharge may have, at some point, enrolled and attended school prior to or after the six month mark or they attended a school unbeknownst to the probation officer. Recognizing that tracking enrolled and attending at a single point in time and doing so over a broad and varied amount of time is a limitation of the study, an analysis was run to assess the impact time elapsed between discharge and probation officer recall on youth outcomes. As was noted in the results section, this analysis revealed a statistically non-significant impact on the outcome variables; however, this result does not necessary indicate that the elapsed time between six months post-discharge and recall ( $M = 278.4$  days,  $SD = 187.5$  days) had no impact/limited impact on the accuracy of recall. Any time there is such a long lag between recall and data entry there is a prima facie case for limitations with the data. Further, the large variability in this variable also detracts from its impact on the outcome (i.e., potentially reducing the impact). As a result, the time elapsed between discharge and recall variable should be included in future research, especially with a larger sample size to provide more statistical power and potentially reduce the variability in time to recall.

In addition to high school diploma/GED at discharge there were four other predictors included in question one; none of these other PACTT components were shown to be statistically significant predictors of engagement in school or work. These findings run counter to the

Gemignani (1994) study showing that inclusion of career/technical education and workplace competencies were instrumental in increasing youths' chances of success upon return to the community, although the specific career/technical education tracks were not indicated. PACTT looked to labor and industry and selected the tracks that could lead to careers paying family-sustaining wages that were open to youth who had been adjudicated and were feasible within the facilities.

In the current study, both the CTE and basic certification components of PACTT were included as predictors of engagement in school and/or work. However, there were several CTE tracks a youth could have taken, but, due to the small sample size it was not possible to examine the differential effects among the tracks. Rather, if a youth completed a CTE track, they were coded as such, regardless of the type track that was completed. Thus, it is possible that completing a specific track or tracks does provide an advantage in terms of work or school engagement relative to the completion of other tracks or no track at all, but the limitations of the sample precluded this examination. The same issue may have been at play with the basic certifications, of which there were several. Thus, although the current study provides some preliminary evidence to suggest that completing any CTE and/or any basic certifications does not markedly increase likelihood to engage in school or work post-discharge, future research with a larger sample size will be necessary to assess the differential impact of different CTE tracks and basic certifications.

The fourth variable in the model examining the effects of PACTT components was work experience (less than 50 hours vs. 50 or more hours). The research supports the value of work experience and on-the-job training while in placement to better youth chances of being linked to work (Gemignani, 1994). Yet, according to the current analysis, this variable was shown to be

an inadequate predictor of engagement in work. Again, although the findings of the current study provide preliminary evidence showing a statistically non-significant relationship between completion of 50 or more work hours and engagement in work, it is possible that the small sample size could be a factor especially given that of the 77 youth only nine youth (11.6%) completed at least 50+ hours of work experience. Given this small sample size, it is possible that these nine youth just chose to not pursue employment, subsequently painting a skewed picture of the outcome. To more effectively decipher the relationship between completing at least 50+ work hours and engagement in work future studies should examine the interaction effect of other variables on this relationship. One such variable is age, which is included in this research, but the small sample size precluded the inclusion of the variable in the analysis. However, similar to the significant relationship between age and employment, it is possible that age would have an interactive effect with these two variables. Additionally, a youth's education status may also impact their successful connection to employment (Meads & Travis, 2004). Family is another variable that ultimately influences a youth's likelihood of engaging in work upon return to the community. Specifically, as presented in the literature review, a youth's social networks and opportunities for successful partnerships within the community may be limited as a result of the family's social or economic status (Fraser, 1996). Future research studies should aim to examine youth's work engagement relative to these, and other, intervening variables.

In the current study work experience is shown to have no statistically significant impact on youth being engaged in school upon return to the community, but this finding may have been the result of transforming a continuous variable into a dichotomous one. Thus, an alternative approach for consideration in future research would be to examine work experience as a continuous variable (e.g., total number of hours of experience) or as an interval variable that

classifies youth by the number of hours of work completed (e.g., less than 25 hours, 25-49 hours, 50-74 hours, and 75 hours and over) to assess the extent to which different levels of work experience impact youth engagement in work at six months post- discharge.

The last predictor included in question 1ô which is also the fifth and final PACTT component is completion of at least 50% of the ESSM. This variable was assessed using a chi square analysis as a result of there being only forty youth for whom data was available. For engagement in work, no relationship with the ESSM was found, but for engagement in work, a statistically significant trend was identified showing that a higher proportion of completers of 50% or more of the ESSM competencies *were not enrolled* in school relative to the proportion of those who completed 50% or more of the competencies and *were enrolled*. In order to better understand this trend, a follow-up descriptive analysis was conducted. Although it was not possible to conduct a statistical analysis due to the small sample size, the descriptive comparison provides some evidence that suggests the presence of possible interaction between completion of ESSM competencies and time in placement. Specifically, the mean time in placement among the data of 11 youth who completed 50% or more of the competencies but were *not enrolled* in school 6.21 months ( $SD = 1.09$ ), whereas the mean among the nine youth who completed 50% or more of the competencies and who *were enrolled* in school was 10.47 ( $SD = 3.26$ ). These results suggest that length of time in placement, more than completion of the ESSM is related to school enrollment. Yet, there is important to note that the trend is stronger when the completed at least 50% of the ESSM variable is included, suggesting a possible interaction. However, future research should certainly be conducted to determine whether a true statistical interaction is present.

Yet, here too, the research supports the value of incorporating life skills and employability skills into programming to affect positive outcomes regarding school and work upon return to the community (Waintrup & Unruh, 2008). Specifically, so called “soft skills”, encompass competencies including, problem solving and cognitive skills, working as a team, and communication skills, which are captured in the ESSM and are identified as the skills a youth needs to possess to be considered “job-ready” (Juvenile Sanctions Center, 2005).

Of the skills included in the ESSM, employers participating in a Seattle study on the value of soft skills in entry-level employment report that communication, professionalism, and teamwork are among the most important and generally lacking soft skills among those seeking entry-level employment (Pritchard, 2013). They are further identified by potential employers as the skills youth are most often in need of learning (Warner, Gates, Christeson, & Kiernan, 2011). For instance, in the Seattle evaluation, referenced above, 75% of participating employers reported that soft skills were as, and generally more, important than technical skills in securing entry level employment. Though, in contrast, only approximately 46% of employers indicated that possessing soft skills credentials would increase the likelihood of gaining such employment (Pritchard, 2013). This latter finding may align with the non-significant finding in the current study showing the limited impact of completing at least 50% of the ESSM on engaging in work.

As referenced above, there is a value to learning social skills, but additional research may be informative in assessing if there is a practical distinction between the intrinsic value of the possessing social skills and their having a direct impact on youth gaining employment. This PACTT study is an initial, albeit small, step toward gathering empirical evidence on the relationship between soft skills and employability. Further research could also be valuable in discerning empirical evidence to pinpoint a particular soft skill or set of skills ineffectively

connecting youth to work. Here too, many of the same limitations that hindered the above analysis impact this variable. Most evidently, is the reality that there are fewer youth for whom there is information on completion of ESSM than there are in the sample as a whole, preventing inclusion of this variable in the logistic regression to assess the impact it would have on the model as a whole. In addition, the limited sample size prevents the examination of layered relationships among the variables to consider other factors that may be contributing to the lack of statistically significant relationship with engagement in work and school.

It is also worth reiterating, as was presented in the method section that completion of at least 50% of the ESSM is a collapsed variable and includes youth that completed 75% and 100% of the ESSM. In practice, PACTT required that all youth be taught the ESSM skills manual with an expected 100% of youth having completed all 27 competencies by time of discharge, with 75% completion being acceptable. However, there were an insufficient number of youth who completed either 75% or 100% of the ESSM, thus it was not possible to measure the effect of the full ESSM. Without the ability to assess outcomes of youth completing the intended percentage of the ESSM and to compare those outcomes to youth completing less than 75% it is inappropriate to draw conclusions on ESSM actual predictability of youth engagement in school and/or work. This limitation is due to the data, but it also calls into question the feasibility of effectively implementing the full ESSM.

Question two examined the impact of dosage on engagement in school or work. As explained in the methods section, dosage was defined by length of stay and the number of PACTT components completed. This question was examined using two sets of analyses: first with all 77 youth, but without including the completion of at least 50% of the ESSM variable and a separate analysis using all five components of PACTT, but only including the 40 youth for

whom there was a complete set of data. As with the prior question, an analysis was done for engagement in work and a separate analysis was done for engagement in school. For all but engagement in school using the full PACTT components with 40 youth, the model was inadequate to predict engagement in work or school. The relationship between dosage using all PACTT components with 40 youth and engagement in school will be discussed shortly. First, it is important to consider possible explanations for the limited explanatory power of this model.

One limitation of this data is that the variable "number of PACTT components completed" fails to capture the depth of any one youth's involvement in these components. For instance, to be counted as having completed the work experience component or the ESSM variable only a minimum of 50 hours of work experience or a minimum of 50% of the ESSM must be completed. However, some youth may have had more than 50 hours of work experience and other youth may have completed more than 50% of the ESSM. Similarly, a youth will be counted as having met the completed CTE track component by completing based on the requirements of the facility at which they were placed. However, while all facilities had to offer their CTE tracks for a minimum of 90 hours, some may have offered them for longer, potentially increasing the skills a youth would have been able to learn in any one CTE track while in placement. These distinctions are also a form of dosage, but the database failed to capture these distinctions. As a result, the completed the PACTT components is a collapsed variable that lacks the granularity to more precisely measure the dosage of the components and the effect that the dosage has on the outcomes being studied.

The second measure of dosage was length of stay. Generally, analysis of length of stay is associated with recidivism, the system's overall goal, and the findings regarding the impact of length of stay on recidivism generally indicate that longer length of stay does not reduce, and



may actually increase, the potential for recidivating (Winokur, Cass, & Blankenship, 2003). However, here length of stay is being evaluated for its impact on the intermediate outcomes of youth engagement in school and/or work at six months post discharge. To this end, Lipsey and Wilson (1998) suggested that the impact of length of stay on recidivism may be influenced by the types of characteristics of the treatment/programming available to youth in placement (Winokur, Cass, & Blankenship, 2003). This proposed relationship could be applicable to this research as well. Given a larger sample it may have been possible to determine whether length of stay had a significant impact based on a youth's participation in a specific PACTT component. For instance, as mentioned previously, many of the PACTT components could be examined as continuous variables ó completed 50+ work hours examined in groups of number of hours actually completed, completed at least 50% of the ESSM considering the number of competencies actually completed, and the CTE tracks with each track considered separately and according the number of hours from 90 upward that comprises each track. The ability to access this level of data and conduct an analysis with these variables in conjunction with youth's length of stay may inform the extent to which length of stay is related to increased dosage in any of these PACTT elements and if that relationship has an impact on youth engaging in school and/or work at six months post-discharge.

Related, the relationship between length of stay and engagement in school, when examined with a model containing all five PACTT components with only 40 youth, did reveal a statistical trend. The trend indicates that for every additional month a youth stays in placement there is a 40% increase in the odds of school engagement. However, it is important to note, that the confidence interval puts the odds ratio between 1 and 2, indicating that, in actuality, the effect could be practically nil or substantial. Further research is needed to examine this result

and either support or refute the outcome. Moreover, it is noteworthy that the trend was only evident when the smaller sample of youth for which there was data on the completed at least 50% of the ESSM variable. This supports the value, discussed in the prior paragraph, of conducting further research with the ability to examine what, if anything, of these 40 youth may be different from the larger sample that contributed to the statistical trend.

The final question considered the impact of youth personal characteristics on engagement in work and/or school at six months post-discharge. For this research, personal characteristics were defined as youth's age at discharge and total number of offenses. Research supports a relationship between these variables and recidivism (Frederick, 1999) and engagement in work and school (Bullis, Yovanoff, & Havel, 2004). The current study also revealed a relationship between personal characteristics on engagement in work. Specifically, age at discharge was a statistically significant predictor of work engagement at six months post-discharge with the odds of employment being three times greater with each one year increase in age. This relationship did not extend to engagement in school, perhaps because, after age 17 (<http://www.pacode.com/secure/data/022/chapter11/s11.13.html>) youth are no longer required to return to school and are thus more likely to seek employment. Further, youth who are employed, with each school district determining the requisite number work hours for eligibility, may withdraw at age 16 (Section 1330 of the Pennsylvania Public School Code [http://www.education.state.pa.us/portal/server.pt/community/child\\_labor\\_law/7508](http://www.education.state.pa.us/portal/server.pt/community/child_labor_law/7508)). Additionally, the small sample size prevented the examination of the extent to which the older youth were employed and/or discharging with a high school diploma/GED. In fact, both of these options are increasingly likely for youth who are older at discharge and both potentially impacting the decision to return to school at discharge.

For neither outcome was the total number of offenses shown to be an adequate predictor, although the research supports that youths' delinquent history often serves to impede their return to school post-discharge (Feierman, Levick, & Moody, 2009-2010; Shah & Darcus, 2007). It is similarly identified as a barrier to employment (Shah, & Darcus, 2007; Brown, Maxwell, DeJesus, & Shiraldi, 2002) with employers admitting their reluctance to hiring youth who are believed to have a delinquent history (Miller & Porter, 2005; Holzer, 1996). However, it is possible that simply the existence of a delinquent history is sufficient to block engagement in school, versus the total number of offenses, as may be reflected in this research.

Another potential factor contributing to the lack of a statistically significant relationship between adjudicatory history and the outcomes is the summing of the number of misdemeanors and felonies. In addition, as a result of working from secondary data where the committing offense could not be differentiated from the offense history, all offenses were counted together in this variable. The lack of differentiation within this variable may have obscured a potential differential effect of felonies and misdemeanor on the outcome variables.

Abrams (2006) touches on the significance of these distinctions when noting that arrests for property offenses, specifically, and lengthy records, in general, are also shown to have an increased risk of recidivism. This outcome may subsequently pose an additional risk to successful engagement in school and/or work and reveals a value in including a post-discharge adjudication variable in the analysis as part of future research to see if perhaps it is impacting the outcomes.

Associated with question three was the second hypothesis of the study that youth 17 and older, who have a paid work experience during placement, will be more likely to engage in work

upon their return to the community. However, there were no youth under the age of 17 with work experience for a comparison. This could be the result of the small sample size, but also a result of a standard practice whereby facilities may be predominantly offering work experience only to youth 17 and older. Either way, this hypothesis is worth further consideration in future research, which perhaps can come to inform practice.

### **Limitations and Recommendations**

As referenced throughout this document there are numerous limitations to this study. Perhaps most limiting is the small sample size which, as noted above, restricted the scope of analysis that could be done in terms of the number and dimensionality of the predictors included in the models. This translated into an inability to acknowledge the distinctions (and variability) that exist within the various tracks that comprised the PACTT components (e.g., all CTE tracks and basic certifications were grouped together, rather than being analyzed separately). As a result, the research was constrained in what it was able to say regarding the impact of these predictors on youth engagement in work or school at six months post-discharge although it does offer some initial indications that PACTT has not had the desired effect thus far. Subsequently, the fact that most of the findings were not statistically significant raises multiple follow-up questions:

1. Using the same definitions of the variables (i.e., most are dichotomous) to examine the same models that were used in this work, would an increase in sample size/statistical power lead to the detection of statistically significant results?
2. Using different definitions of the variables by allowing for more variance through the use of continuous variables and interval variables-- would the impact of PACTT components be more evident?

## PACTT Initiative

3. Would the inclusion of mediating variables (i.e. family, geography, peers, etc.) alter the current results?
4. Is it that PACTT *is not* sufficiently or appropriately being applied in practice (e.g., adherence to the program may be low among practitioners)?
5. Is it that PACTT *cannot* sufficiently or appropriately be applied (e.g., most youth completed 50% or less of the ESSM, whereas 100% is recommended to have the maximal impact)?

Research with a larger sample size and greater statistical power is needed to evaluate the pieces of each of the PACTT components to determine whether any of those specific pieces yield a statistically significant relationship to youth engaging in school and/or work at six months post discharge would bring valuable insight to future practice.

The small sample size is a result of another key shortcoming: missing data. The method section presents the multiple points at which cases had to be removed from the sample size due to incomplete data. This is illustrative of the drawbacks of using a secondary dataset, where one is reliant on others to input, collect, and organize the data. This database included data that was collected at the residential facilities by the various facility staff. Although PACTT staff provided training and a data coding manual which provided operationalization of the variables, data recording instructions, and offered on-going technical assistance and quality assurance checks on submitted data, there remained inconsistencies in facility staff's interpretation of the and entry of the data. For this research, the database was cleaned to the best of the researcher's ability and if there was a question as to the accuracy of the data the decision was to err on the side of caution and exclude the variable from the dataset. Or, as in the case of the ESSM—a key component of PACTT and thus not expendable--the decision was made to remove all the cases for which the

data was missing or unreliable. The removal of these cases likely resulted in an underreporting of youth who completed at least 50% of the ESSM. If, in the future, new data is collected with greater quality assurance and/or that includes additional variables, these same questions could be worth re-visiting.

The database also included data provided by probation and reflective of youth's employment and academic status at six months post-discharge. As previously acknowledged, the probation officers were entering this data at times well beyond six months from the time of a youth's discharge. Clearly, this raises concerns regarding the integrity of the data. To account for this, all cases for which any data was missing or for which there were notable inconsistencies were removed. Further, time between youth discharge and probation officer recall was initially included in the logistic regression models described above, but because their impact on the outcomes fell well above the  $p < .05$  level, a second round of analyses were conducted without this control variable in the models. Yet, being able to capture the outcome data at the intended six months post-discharge time frame would likely enhance the probation officer's recall resulting in a greater amount of complete data as well as increase the likelihood that the youth's probation officer is present to provide the data thereby decreasing the number of cases with no data. Collectively, this could increase the sample size and allow for greater detail perhaps preventing the need to collapse the outcome variables.

Challenges to the quality of data, limited variables, and varied time frames for data entry reflect key limitations of using secondary data, especially when there is minimal ability to seek clarity or additional information from the original data source. In the future, it will be important to include continuous and polytomous outcome variables so that valuable questions regarding whether youth pursue post-secondary education and the types of employment (full-time, part-

time, or seasonal) youth are getting and, if they are earning more than minimum wage, can be answered.

An additional restriction associated with using a secondary dataset is being limited to the available variables as well as in the relationships that can be examined. The data collected by PACTT and used in this research focused primarily on the PACTT components and a limited number of personal characteristics. However, there are other variables, such as age at onset of delinquency that research indicates could impact youth engaging in work and/or school upon return from placement (Bullis, Yovanoff, & Havel, 2004). Another such variable comes from the literature on "drop outs" the increase in likelihood of dropping out of school if a youth is at least one grade behind (Goldschmidt & Wang, 1999; Gleason & Dynarski, 2002)--serving also as a potential contributor to whether a youth would return to school post-discharge. Further, the research identifies factors such as involvement with delinquent peers, which has been associated with a greater propensity for continued involvement in delinquent behavior (Mears & Travis, 2004; Howell, 2003), geographic environment (Frederick, 1999) and mental health (Bullis & Yovanoff, 2002) as potentially impacting a youth's successful engagement in school and work. The family is another variable frequently referenced as having a significant impact on a youth's outcome including their connection to and success in school (Goldschmidt & Wang, 1999; Steinberg, Chung, & Little, 2004; Finn, 1989). As noted in the literature review, family included a specific focus on the following components, income; parental occupational levels; the nature of the relationship between the parent and the child (Goldschmidt & Wang, 1999; Steinberg, Chung, & Little, 2004); and single-parent household status (Corcoran & Nichols-Casebolt, 2004; Rumberger, 1987; Steinberg, Chung, & Little, 2004).

## PACTT Initiative

However, as with the above variables, inclusion of the family variable is outside the scope of this research due to the limited variables in the existing database. Future research should aim to include these variables as potential mediators/moderators between the PACTT components and the outcomes in the analyses to assess what, if any, effect they have on the relationships between PACTT predictors and the outcomes. The scope of this research is also limited by the population which includes youth from only one of Pennsylvania's counties that participated in PACTT. Although delinquent youth from Allegheny County are demographically comparable to those from Philadelphia County, the research is not able to account for differences in the counties that may impact a youth's capacity for engaging in work and school upon return to the community (e.g., unemployment rate). A more accurate reflection of PACTT's impact would come from an analysis that includes youth from all participating PACTT counties. Similarly, limiting the study to youth discharging between July 1, 2011 and June 30, 2012 fails to capture the improvements in PACTT over the subsequent years and the impact that the changes may have had on youth outcomes. To capture the effect of PACTT changes on youth outcomes, this research should be repeated with youth who discharged from placement in the years following this research.

Lastly, it seems important to acknowledge that this research is not intended to examine the impact of PACTT on recidivism rates. Recidivism reduction is recognized as the primary goal of the juvenile justice system (Winokur, Cass, & Blankenship, 2003), but in understanding recidivism it is important to study intermediate outcomes with identified relationships to recidivism. The relationship between education and employment to preventing recidivism has been referenced in the literature review, which supports the value of assessing engagement in school and/or work upon return to the community.



## Conclusion

This research was a feasibility study intended to assess the impact of PACTT on youth engagement in school and work at six months post-discharge. In addition the study serves to help future researchers formulate other questions to be answered through larger-scale studies.

As explained, this study explored the impact of PACTT on youth engagement in school and work at six months post-discharge. Based on a small sample of youth ( $n = 77$ ) from one PACTT participating county, the findings revealed that, with few exceptions, the PACTT components had no statistically significant impact on youth engagement in school and/or work at six months post-discharge. However, the research did reveal a relationship between a few predictors and the outcomes: a high school diploma/GED at discharge and engagement in work, a statistical trend between length of stay and engagement in school, and age at discharge on engagement in work. Moreover, it led to multiple suggestions for future research such as replicating the analysis using a larger sample size and conducting the analysis again with the same variables but operationalized differently to allow for more variance and determining whether either results in statistically significant results. In addition, it is recommended that mediating/moderating variables on the relationship of the predictors to the outcomes be included to assess if they in anyway alter the results. Further, it is important that future research examine the integrity of PACTT's implementation across participating sites as well as the feasibility of the components.

This study served as the first research of the Pennsylvania Academic and Career Training Alliance (PACTT) Initiative and was intended to assess the feasibility of implementing an academic and career/technical education focus to serving youth in juvenile residential facilities toward the end of their being engaged in school and/or work at six months post- discharge. The

## PACTT Initiative

first step toward this goal being the actual implementation of the PACTT components into the residential facilities, the reality of, and extent to which had also never been evaluated prior to this study. While, as noted above, the number of statistically significant outcomes of this study were limited, they do indicate that the PACTT components were being implemented in, at minimum, the residential facilities included in this research and provided some insight into the success of that implementation and preliminary measurements pertaining to the effects of the PACTT components, individually and collectively, on youth outcomes.

## Appendix A



### **PACTT AFFILIATION AGREEMENT**

The PACTT Affiliation refers collectively to delinquent residential and day-treatment facilities that have chosen to meet the Pennsylvania Academic and Career/Technical Training Alliance standards for academic and career/technical education (CTE). Participation as a PACTT affiliate entails an agreement between the Provider Agency and PACTT with each entity agreeing to provide specified services in accordance with this Agreement. The Agreement will be renewed each year based on verified ongoing compliance with the standards. The list of Affiliated Agencies will be updated for the Pennsylvania Council of Chief Juvenile Probation Officers on a quarterly basis. .

To become a PACTT Affiliate the provider must sign this Agreement and implement, at a minimum, the following program elements:

- Teach the PACTT Employability/Soft Skills Manual to all of its youth. Note: The ESSM checklist is to be completed for youth committed to 90-day programs or longer and for youth who are 14 years old and older. Subsequently, only youth meeting the above criteria should be counted in the data; however, if possible, all youth in your program should be exposed to employability skills training.
  - Employability competency check list is to follow youth at time of discharge, as part of the youth's educational record and probation discharge packet. Note: Checklist completion is not a requirement of PACTT; however, progress to completion is expected. Data indicate this progress.
- Facilitate the development of a portfolio for every youth
- Provide the opportunity for youth to complete at least one of the following basic certifications: OSHA 10, ServSafe, MOS, or International Computer Driver's License (ICDL)

## PACTT Initiative

- Offer at least one CTE track, aligned with industry standards and identified as high priority and/or high employment. Note: For affiliation, one CTE program must be at least one hour in length at a time for a minimum of 10 hours a week and offer 90 total hours of training. The 90 hours can be any combination of classroom time, lab work, and practical work experience. It can also include time spent on certifications aligned with the CTE track. However, it does not include classroom time spent working on the 27 competencies of the Employability Soft Skills Manual.
  - A list of completed industry competencies is to follow youth at time of discharge and reflect the progress youth has made
- Maintain a rigorous academic curriculum fully aligned with PA Academic Standards
- Offer credit recovery and acceleration opportunities
- Offer opportunity for remediation (numeracy and literacy)
- Make every effort to secure school records within 10 days of admission, and send school records back to home school and/or subsequent placement according to the requirements of the receiving district. If there are no special requirements, school records should be sent to receiving district and/or subsequent placement 15 days prior to discharge, if possible, but no later than 5 days post discharge.
- Provide data to PACTT on a quarterly basis
- Provide PACTT staff with the opportunity to assess progress and compliance with PACTT expectations on a yearly basis
- Make every effort to provide opportunities for youth to earn real life work experience while in placement. In order to be counted in the data as having had a work experience, a student must have worked 50 hours. Please note that any work experience included as part of the required 90 hours for a CTE track cannot also be counted as work experience in this category. Only work experience meeting the following conditions should be recorded
  1. Application procedure exists
  2. List of responsibilities/duties hold student accountable
  3. work experience is aligned to ESSM and/or CTE track
  4. the youth must participate for a minimum of 50 hours
- Providers are further expected to make a serious effort to develop a working relationship with their local Workforce Investment Board (WIB) in order to access their extensive network of partners, to leverage resources and to seek funding for subsidized payment for work.

The PACTT Alliance agrees to provide the following services to all PACTT Affiliated programs:

- On-site visits to assist and monitor the provider success in meeting (or exceeding) the basic program elements listed above
- Continued Technical Assistance around the CTE and academic expectations
- Professional development for the teachers, with an initial emphasis on learning/literacy strategies
- Information from area Workforce Investment Boards (WIBs) and the Pennsylvania Department of Education (PDE) as well as other system partners as appropriate

## PACTT Initiative

- Liaison services between the facilities, the Council of Chief Juvenile Probation Officers and represented probation departments, school districts, PDE, WIBs, and community based agencies serving these youth
- Assistance in accessing WIB funding and developing opportunities to provide work experience for youth in placement
- General data reports on the implementation of PACTT across the agencies
- Opportunities for peer networking and to contribute to the continued development of program elements spearheaded by PACTT
- PACTT will continue to work with the Council and with individual Chiefs to improve the flow of information at referral to and discharge from placement
- PACTT will thoroughly consult and communicate with affiliated agencies prior to making any changes or modification of current PACTT affiliation requirements, allowing providers time to respond and make adjustments necessary to meet new requirements.

Failure to maintain the required services would result in the dissolution of this Agreement and the provider agency would no longer be considered a PACTT Affiliate.

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Name of Facility

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Signature of Provider/Date

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Signature of PACTT Director/Date

PACTT Initiative

**Appendix B**

PACTT Alliance Employability/Soft Skills Checklist

Student Name \_\_\_\_\_

In order to mark youth as successfully having completed a competency all the indicators of the competency must be met. For those competencies that utilize a rubric youth must achieve the indicators on the rubric with nothing less than a satisfactory.

Competency	Date Completed and Staff Signature
<b>DOMAIN – Post Secondary Education</b>	
1. Recognize the connection between one's interests, abilities, and aptitudes for post secondary education and career options	
2. Identify and explore career/vocational areas of interest	
3. Identify the education, qualifications, and experiences necessary to achieve these careers	
4. Develop a plan for career and technical post secondary education	
5. Complete financial aid applications	
<b>DOMAIN – Job Seeking Skills</b>	
6. Identify, secure, understand, and complete all documentation needed to gain employment	
7. Develop and complete a resume and cover letter	
8. Conduct a job search	
9. Demonstrate mastery of interview skills	

# PACCTT Initiative

10. Develop a follow up strategy	
<b>DOMAIN - Job Keeping and Career Advancement Skills</b>	
11. Take initiative in completing job tasks using problem solving, decision making and analytical skills and demonstrate dependability and reliability	
12. Work professionally and respectfully with a diversity of co-workers, supervisors, and customers resolving conflict in a constructive manner	
13. Work as a contributing member of a team	
14. Participate fully in a work task or project from initiation to completion, using appropriate time management skills	
15. Know how to ask for help when learning new task at the work site	
16. Demonstrate effective communication techniques in the workplace	
17. Give and receive constructive feedback at the work site	
18. Know how to apply rules of the workplace to maintain employment	
19. Know the importance of personal hygiene and appearance required by the employer	
20. Know how to change jobs in a healthy way	
21. Develop a plan for career advancement	
<b>DOMAIN – Life Skills</b>	
22. Manage personal finances effectively	
<b>DOMAIN – Personal and Social Development Skills</b>	
23. Identify and practice conflict resolution strategies to mediate problems at work, home, and school	
24. Understand the culture and its effects on language, behavior, and thoughts	

PACTT Initiative

25. Understand one's own cultural heritage and experience, as well as those of others	
26. Understand the role that family and peer networks play in personal, educational, and employment decisions	
27. Understand and practice leadership qualities, values, and behaviors	



# PACTT Initiative

## Appendix C

### Probation Survey

**PACTT PO Survey** As Of date:\_\_\_\_\_ JID:\_\_\_\_\_ ID\_\_\_\_\_

PO\_\_\_\_\_

Please complete the following questions for the list of youth you have received. Please note that the information being requested needs to reflect youth's status at six (6) months post discharge from placement (from which they have returned to the community). Using the youth's date of discharge from placement please answer the questions, to the best of your ability, reflective of youth's status at 6 months post discharge. However, if the youth's Supervision Status at six months post discharge was: Case Closed; Warrant; Detainer; or Placement then complete the survey as of the date the supervision status changed.

<b>1 Is youth enrolled in some form of academic program:</b>		<input type="checkbox"/> YES	<input type="checkbox"/> NO
If yes, please note which types:			
<input type="checkbox"/> Community High School	<input type="checkbox"/> Community College		
<input type="checkbox"/> CTE school ó High School	<input type="checkbox"/> Post secondary trade school		
<input type="checkbox"/> GED program	<input type="checkbox"/> 4 year university/college		

<b>2 If youth is enrolled in an academic program, what is youth's degree of attendance:</b>		
<input type="checkbox"/> Attending regularly	<input type="checkbox"/> Attending occasionally	<input type="checkbox"/> Not attending

<b>3 Did youth complete a basic certification while in the community:</b>		<input type="checkbox"/> YES	<input type="checkbox"/> NO
If yes, please note which one:			
<input type="checkbox"/> OSHA 10	<input type="checkbox"/> Microsoft Office Specialist (MOS)		
<input type="checkbox"/> SERVSAFE	<input type="checkbox"/> ICDL (International Computer Driving License)		

PACCTT Initiative

<b>4 Is youth employed:</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
If yes, please answer the following questions: (if youth had more than one job since discharge please answer on the most recent)		
Start date of job:		
End date if youth no longer working: <i>(N/A if youth still working)</i>		
Type of job:		
Is the position full time (unemployment benefits)?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Is the job seasonal?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Did youth have more than one job since discharge from placement?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

<b>5 Was youth re-arrested within 6 months of discharge from placement:</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
a If yes, was youth adjudicated on the new offence	<input type="checkbox"/> YES	<input type="checkbox"/> NO
b If yes, was youth re-placed on the new offense	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<b>6 Was youth re-placed on a VOP within 6 months of discharge from placement</b>	<input type="checkbox"/> YES	<input type="checkbox"/> NO

## References

- Abrams, L. S. (2006). From corrections to community: Youth offenders' perceptions of the Challenges of transition. *Journal of Offender Rehabilitation*, 44 (2/3), 31-53.  
doi:10.1300/J076v-n02\_02
- Alexander, K. I., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of a high school dropout. *Sociology of Education*, 70, 87-107.
- Altschuler, D. M., & Brash, R. (2004). Adolescent and teenage offenders confronting the challenges and opportunities of reentry. *Youth Violence and Juvenile Justice*, 2(1), 72-87. doi:10.1177/1541204003260048
- Andrews, D. A., & Bonta, J. (2003). *The psychology of criminal conduct* (3<sup>rd</sup> ed.). Cincinnati, OH: Anderson Publishing CO.
- Arditti, J. A. (2005). Families and incarceration: An ecological approach. *Families in Society: The Journal of Contemporary Social Services*, 86(2), 251-260.
- Arthur, P. (2007). *Issues faced by juvenile leaving custody: Breaking down the barriers 2*. Retrieved from the National Center for Youth Law website:  
[http://www.youthlaw.org/events/trainings/juvenile\\_justice\\_training\\_materials/](http://www.youthlaw.org/events/trainings/juvenile_justice_training_materials/)
- Austin, J., Johnson, K. D., & Weitzer, R. (2005). *Alternatives to the secure detention and confinement of juvenile offenders*. Juvenile Justice Bulletin. Washington DC: Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Bales, W. D., Benebey, D., Blomberg, T. G., Ciftci, S., Dwyer, C., Jensen, E.,...Wang, X.

- (2006). *2005 Annual report to the Florida Department of Education*. Tallahassee, FL: Juvenile Justice Education Enhancement Program. College of Criminology and Criminal Justice Florida State University.
- Balfanz, R., Spiridakis, K., Curran-Neild, R., & Legters, N. (2003). High-poverty secondary schools and the juvenile justice system: How neither helps the other and how that could change. *New Directions for Youth Development*, 99, 71-89. doi: 10.1002/yd.55.
- Barboza, G. E., Schiamberg, L. B., Oehmke, J., Korzemiewski, S. J., Post, L. A., & Heraux, C. G. (2009). Individual characteristics and the multiple contexts of adolescent bullying: An ecological perspective. *Journal of Youth and Adolescence*, 38, 101-121. doi:10.1007/s10964-008-9271-1
- Benda, B. B., & Tollett, C. L. (1999). A study of recidivism of serious and persistent offenders among adolescents. *Journal of Criminal Justice*, 27, 111-126.
- Bilchick, S. (1997). *Juvenile justice reform initiatives in the states: 1994-1996*. Program Report National Criminal Justice Association/OJJDP.
- Blomberg, T. G., Bales, W. D., Mann, K., Piquero, A. R., & Berk, R. A. (2011). Incarceration, education, and transition from delinquency. *Journal of Criminal Justice*, 39, 355-365.
- Blomberg, T. G., Blomberg, J., Waldo, G. P., Pesta, G., & Bellows, J. (2006). Juvenile justice education, No Child Left Behind, and the National Collaboration Project. *Corrections Today*, 68(2), 143-146.
- Blomberg, T. G., & Waldo, G. P. (2001). Implementing research-based best practices in juvenile justice education. *Corrections Today*, 63(7), 144-147
- Borden, C., & Richardson, P. (2008). *The effective use of technology in correctional*

*education*. Retrieved from John Jay College of Criminal Justice website:

[http://www.jjay.cuny.edu/roundtable\\_monograph.pdf](http://www.jjay.cuny.edu/roundtable_monograph.pdf)

Brazzell, D., Crayton, A., Mukamal, D. A., Solomon, A. L., & Lindahl, N. (2009). *From the classroom to the community: Exploring the role of education during incarceration and reentry*. Retrieved from The Urban Institute website:

[http://www.urban.org/uploadedpdf/411963\\_classroom\\_community.pdf](http://www.urban.org/uploadedpdf/411963_classroom_community.pdf)

Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child Development*, 45(1), 1-5.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1994). Ecological models of human development. *International Encyclopedia of Education*, 3(2), 1643-1647.

Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the life span: Emerging methods and concepts* (pp. 3-28). Washington, DC: American Psychological Association Press.

Brown, D., Maxwell, S., DeJesus, E., Schiraldi, V. (2002). *Barriers and promising approaches to workforce and youth development for young offender*. Baltimore, MD: Annie E. Casey Foundation.

Browne, J. (2003). *Derailed: The schoolhouse to jailhouse track*. Retrieved from The Advancement Project website:

[http://b.3cdn.net/advancement/c509d077028b4d0544\\_mlbrq3seg.pdf](http://b.3cdn.net/advancement/c509d077028b4d0544_mlbrq3seg.pdf)

Bullis, M., & Yovanoff, P. (2002). Those who do not return: Correlates of the work and school engagement of formerly incarcerated youth who remain in the community. *Journal of Emotional and Behavioral Disorders, 10*, 66-78.

Bullis, M., Yovanoff, P., & Havel, E. (2004). The importance of getting started right: Further examination of the facility-to-community transition of formerly incarcerated youth. *The Journal of Special Education, 38*, 80-94.

Bureau of Labor Statistics. (2014). *College Enrollment and Work Activity of 2013 High School Graduates. Economic News Release* (USDL-14-0657). Retrieved from <http://www.bls.gov/news.release/pdf/hsgec.pdf>

Butts, J., & Harrell, A.V. (1998). *Delinquents or criminals? Policy options for young offenders*. Retrieved from [www.urban.org/publications/307452.html](http://www.urban.org/publications/307452.html)

Butts, J. A., & Mears, D. P. (2001). Reviving juvenile justice in a get-tough era. *Juvenile Justice, 33*, 169-198.

Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school dropouts: Configurations and determinants. *Child Development, 60*, 1437-1452.

Carr, T. H., Cooke, T. P., Strain, P. S., & McMillan, D. (1976). An ecologically oriented approach to youth deviance. *Journal of Community Psychology, 4*, 389-400.

Carroll, M. (2008). Educating expelled students after no child left behind: Mending an incentive structure that discourages alternative education and reinstatement, *UCLA Law Review, 55*.

Carter, E. W., Lane, K. L., Pierson, M., & Glasser, B. (2006). Self-determination skills of

- transition age youth with emotional disturbances and learning disabilities. *Exceptional Children*, 72(3), 333-346.
- Cecil, D. K., Drapkin, D. A., Mackenzie, D. L., & Hickman, L. J. (2000). The effectiveness of adult basic education and life skills programs in reducing recidivism: A review and assessment of the research. *The Journal of Correctional Education*, 51, 207-217.
- Center on Crime, Communities, and Culture (1997). *Education as crime prevention* (Occasional Paper Series No. 2). New York: Author.
- Cernkovich, S. A., & Giodarno, P. C. (1992). School bonding, race, and delinquency. *Criminology*, 30, 261-291.
- Christen, A. (2009). Transforming the classroom for collaborative learning in the 21<sup>st</sup> Century. *Techniques (Association for Career and Technical Education)*, 83(9), 28-31.
- Coffey, O. D., & Gemignani, M. G. (1994). *Effective practices in juvenile correctional education: A study of the literature and research 1980-1992*. Office of Juvenile Justice and Delinquency Prevention (Dept. of Justice), Washington, D.C.
- Coleman, J. S. (1988). Social Capital in the creation of human capital. *The American Journal of Sociology*, 94, Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structures, S95-S120.
- Corcoran, J. (2000). Ecological factors associated with adolescent sexual activity. *Social Work in Health Care*, 34, 93-111.
- Corcoran, J., & Nichols-Casebolt, A. (2004). Risk and resilience ecological framework for assessment and goal formulation. *Child and Adolescent Social Work Journal*, 21, 211-235.
- Cornille, T. A., Pestle, R. E., & Vanwy, R. W. (1999). Teachers' conflict management styles

- with peers and studentsøparents. *The International Journal of Conflict Management*, 10, 69-79.
- Coulter, G. (2004). Using one-to-one tutoring and proven reading strategies to improve reading performance with adjudicated youth. *The Journal of Correctional Education*, 55, 321-333.
- Cronniger, R. G., & Lee, V. E. (2001). Social capital and dropping out of high school: Benefits to at-risk students of teacherø support and guidance. *Teacher's College Record*, 103, 548-581.
- Cullen, F. T. (2005). The twelve people who saved rehabilitation: How the science of criminology made the difference. *Criminology* 43(1), 1-42.  
doi: 10.1111/j.00111348.2005.00001.x
- Cullen, F. T. (2006). Itø time to reaffirm rehabilitation. *Criminology and Public Policy*, 5, 665-672
- Curran Neild, R., & Balfanz, R. (2006). *Unfulfilled promise: The dimensions and characteristics of Philadelphia's dropout crisis, 2000-2005*. Retrieved from Philadelphia Youth Network  
website:[http://www.pyninc.org/downloads/Unfulfilled\\_Promise\\_Project\\_U-turn.pdf](http://www.pyninc.org/downloads/Unfulfilled_Promise_Project_U-turn.pdf)
- Dilulio, J. J. (1995). The coming of the super-predators. *The Weekly Standard*, 1(11) 23.
- Donker, A. G., Smeenk, W. H., Van der Laan, P. H., & Verhulst, F. C. (2003). Individual stability of antisocial behavior childhood to adulthood: Testing the stability of postulate of Moffitø Developmental Theory. *Criminology*, 41, 593-608.
- Donlevy, J. (2001). Workforce development: Building effective programs for children in correctional settings ó A look at the Elite Schools model. *International Journal of*



*Instructional Media*, 28, 215-222.

Drakeford, W. (2002). The impact of an intensive program to increase the literacy skills of youth confined to juvenile corrections. *Journal of Correctional Education*, 53, 139-144.

Duerden, M. D., & Witt, P. A. (2010). An ecological systems theory perspective on youth programming. *Journal of Park and Recreation Administration*, 28, 108-120.

Dumdi, E. S., & Roelofs, G. (1984). *Successful linkages between education and business/industry in Oregon: Report and handbook*. Corvallis, OR: Oregon Alliance for Program Improvement.

Empey, L. T., & Stafford, M. C. (1991). *American delinquency: Its meaning and construction*. Belmont, CA: Wadsworth.

Feierman, J., Levick, J., & Moody, A. (2009-2010). The school to prison pipeline and back: Obstacles and remedies for the reenrollment of adjudicated youth. *New York Law School Law Review*, 54(4), 1115-1129.

Fine, M. (1986). Why urban adolescents drop into and out of public high school. In G. Natriello (Ed), *School Dropouts: Patterns and Policies* (pp. 89-105). New York: Teachers College Press.

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117-142.

Foley, R. M. (2001). Academic characteristics of incarcerated youth and correctional education programs: A literature review. *Journal of Emotional and Behavioral Disorders*, 9, 248-259.

Fondacaro, M. R., Slobogin, C., & Cross, T. (2006). Reconceptualizing due process in juvenile justice: Contributions from law and social science. *Hastings Law Journal*, 57, 955-989.

- Fowler, J. (2013, November). *The Pennsylvania Juvenile Justice recidivism report: Juveniles with cases closed in 2007, 2008, or 2009*. 2013 Pennsylvania Conference on Juvenile Justice, Harrisburg, PA.
- Fraser, M. W. (1996). Aggressive behavior in childhood and early adolescence: An ecological developmental perspective on youth violence. *Journal of Social Work, 41*, 347-361.
- Frederick, B. (1999). *Factors contributing to recidivism among youth placed with the New York State Division for youth*. New York State Division of Criminal Justice Services: Office of the Justice Systems Analysis Research Reports. Retrieved from Criminal Justice NY website: [http://www.criminaljustice.ny.gov/crimnet/ojsa/dfy/dfy\\_research\\_report.pdf](http://www.criminaljustice.ny.gov/crimnet/ojsa/dfy/dfy_research_report.pdf)
- Furstenberg, F. F., & Hughes, M. E. (1995). Social capital and successful development among at risk youth. *Journal of Marriage and the Family, 57*, 580-592.
- Gaes, G. G. (2008). *The impact of the prison education programs on post release outcomes*. Retrieved from John Jay Centers Institutes website: <http://www.jjay.cuny.edu/centersInstitutes/pri/pdfs/GaesTheEffectivenessofPrisonEducationPrograms.pdf>.
- Gagnon, J. C. (2010). State level curricular, assessment, and accountability policies, practices, and philosophies for exclusionary school settings. *Journal of Special Education, 43*, 206-219.
- Gagnon, J. C., Barber, B. R., Van Loan, C., & Leone, P. E. (2009). Characteristics and approaches to curriculum. *Education and Treatment of Children, 32*(4), 673-696.
- Garbarino, J. (1992) (Ed.) *Children and families in the social environment* (2<sup>nd</sup> ed.). Hawthorne, NY: Aldine de Gruyter.

- Gemignani, R. J. (1994). *Juvenile correctional education: A time for change*. Department of Justice, Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.
- Gewertz, C. (2007, June 12). 'Soft Skills' in big demand. Interest in teaching students habits of mind for success in life is on the rise. *Education Week*, 26 (40), pp. 25-27. Retrieved from <http://www.edweek.org/ew/articles/2007/06/12/40soft.h26.html>
- Giles, D. R. (2003). *School related problems confronting New Jersey's youth returning to local communities and schools from juvenile detention facilities and juvenile justice commission programs*. Retrieved from The New Jersey Institute for Social Justice website: [http://www.njisj.org/assets/documents/giles\\_report.pdf](http://www.njisj.org/assets/documents/giles_report.pdf)
- Gleason, P., & Dynarski, M. (2002). Do we know whom to serve? Issues in using risk factors to identify dropouts. *Journal of Education for Students Placed at Risk*, 2, 25-41.
- Glickman, S. A., Aldinger, T., & Roberts, J. (2010). *Workforce Investment Act 101: A toolkit for Elected officials*. Retrieved from National Association of Workforce Boards website: <http://www.nawb.org/documents/Publications/WIA%20101%20with%20discussion%20sections.pdf>
- Goldschmidt, P., & Wang, J. (1999). When can schools affect dropout behavior? A longitudinal multilevel analysis. *American Educational Research Journal*, 36, 715-738.
- Gordon-Khler, D. (2009). Addressing the unintended consequences of No Child Left Behind and zero tolerance: Better strategies for safer schools and successful students. *Georgetown Journal of Poverty Law and Policy*, 16, 585.
- Gordon, H. R. D., & Weldon, B. (2003). The impact of career and technical education programs on adult offenders: Learning behind bars. *The Journal of Correctional Education*, 54, 200-209.

- Griffin, P. (2004). Aftercare: The sequel. *Pennsylvania Progress*. Pittsburgh, PA: National Center for Juvenile Justice.
- Griffin, P. (2010). *Models for Change: Innovations in practice*. Pittsburgh, PA: National Center for Juvenile Justice.
- Griffin, P., & Hunninen, M. (2008). *Preparing youth for productive futures. Pennsylvania Progress*. Pittsburgh, PA: National Center for Juvenile Justice.
- Griffin, P., Steele, R., & Franklin, K. (2007). Aftercare Reality and Reform. *Pennsylvania Progress*. Pittsburgh, PA: National Center for Juvenile Justice.
- Hanneken, D., & Dannerbeck, A. (2007). Practical solutions: Addressing offenders' educational opportunities and challenges. *Corrections Compendium*, 32(2), 1-4.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.
- Holzer, H. (1996). *What employers want: Job prospects for less-educated workers*. New York: Russell Sage Foundation.
- Homes and Communities (n.d.) Funding Resources: Welfare to work vouchers.
- Retrieved from
- [http://www.hud.gov/offices/pih/programs/hcv/wtw/resources/bs3/jobtraining\\_dol.cfm](http://www.hud.gov/offices/pih/programs/hcv/wtw/resources/bs3/jobtraining_dol.cfm)
- Hong, J. S., & Eamon, M. K. (2012). Students' perceptions of unsafe schools: An ecological systems analysis. *Journal of Child and Family Studies*, 21, 428-438. doi: 10.1007/S10826 0119494 8
- Hornberger, C., & Cullen, J. (2006). *Evaluation of workforce readiness programs at six residential delinquent facilities: Summary report*. Copy in possession of author.
- Hosmer, D.W., & Lemeshow, S. (2000). *Applied Logistic Regression* (2<sup>nd</sup> ed.). New York, NY: John Wiley and Sons.

- Houchins, D. E., Jolivet, K., Krezmien, M. P., & Baltodano, H. M. (2008). A multi-state study examining the impact of explicit reading instruction with incarcerated students. *The Journal of Correctional Education*, 59, 65-85.
- Houchins, D. E., Pucket-Patterson, D., Crosby, S., Shippen, M. E., & Jolivet, K. (2009). Barriers and facilitators to providing incarcerated youth with a quality education. *Preventing School Failure*, 53, 159-166.
- Howell, J. C. (2003). *Preventing and reducing juvenile delinquency: A comprehensive framework*. Thousand Oaks, CA: Sage
- In re Gault* 387 U.S.1 (1967)
- In re Winship* 397 U.S.358 (1970)
- Jackson, S., & Fondacaro, M. (1999). Procedural justice in resolving family conflict: Implications for youth violence prevention. *Law and Policy*, 21, 101-127.
- Juvenile Policy Institute. (2006). *Models for change: Building momentum for juvenile justice reform*. Retrieved from Models for Change website:  
<http://www.modelsforchange.net/publications/149>
- Juvenile Sanctions Center (2005). Overcoming barriers to employment for youth in the juvenile justice system: A practical guide. *Training and Technical Assistance Program Bulletin*, 2(5).
- Lane, K. L., & Carter, E. W. (2006). Supporting transition-age youth with and at risk for emotional and behavioral disorders at the secondary level: A need for further inquiry. *Journal of Emotional and Behavioral Disorders*, 14, 66-70.
- Leone, P. E. (1994). Education services for youth with disabilities in a state-operated

- juvenile correctional system: Case study and analysis. *The Journal of Special Education*, 28, 43-58.
- Leone, P. E., & Meisel, S. (1997). Improving education services for students in detention and confinement facilities. *Child Legal Rights Journal*, 17, 2-12.
- Lewis, J. (2006). Correctional education: Why it is only promising. *The Journal of Correctional Education*, 57, 286-295.
- Lipsey, M. W., Howell, J. C., Kelly, M. R., Chapman, G., & Carver, D. (2010). *Improving the Effectiveness of Juvenile Justice Programs: A New Perspective on Evidenced Practice*. Washington, DC: Center for Juvenile Justice Reform.
- Lipsey, M. W., & Wilson, D. B. (1998). Effective intervention for serious juvenile offenders: A synthesis of research. In R. Loeber, & D. P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks CA: Sage.
- MacLeod, J. (1987). *Ain't no makin it. Leveled aspirations in a low-income neighborhood*. Boulder, CO: Westview Press.
- Maddox, S. J., & Prinz, R. J. (2003). School bonding in children and adolescents: Conceptualization, assessment, and associated variables. *Clinical Child and Family Psychology Review*, 6, 31-49.
- Males, M. A. (1996). *The scapegoat generation: America's war on adolescents*. Monroe, ME: Common Courage Press.
- Malmgren, K. W., & Leone, P. E. (2000). Effects of a short-term auxiliary reading program on the reading skills of incarcerated youth. *Education and Treatment of Children*, 23, 239-247.
- Mathur, S. R., & Schoenfeld, N. (2010). Effective instructional practices in juvenile justice

- facilities. *Behavioral Disorders*, 36(1), 20-27.
- Mathur, S. R., Griller Clark, H., & Schoenfield, N.(2009). Professional development: A capacity building model for juvenile correctional education. *The Journal of Correctional Education*, 60, 164-185.
- Mazzotti, V., & Higgins, K. (2006). Public schools and the juvenile justice system: Facilitating relationship. *Intervention of School and Clinic*, 41(5), 295-301
- McLaren, L., & Hawe, P. (2005). Ecological perspectives in health research. *Journal of Epidemiology Community Health*, 59(1), 6-14.
- Mears, D. P. (2002). Sentencing guidelines and the transformation of juvenile justice in the twenty-first century. *Journal of Contemporary Criminal Justice*, 18(1) 6-19.
- Mears, D. P., & Travis, J. (2004). *The dimensions, pathways, and consequences of youth reentry*. Retrieved from The Urban Institute website:  
[http://www.urban.org/UploadedPDF/410927\\_youth\\_reentry.pdf](http://www.urban.org/UploadedPDF/410927_youth_reentry.pdf)
- Meltzer, L. J., Levine, M. D., Karniski, W., Palfrey, J. S., & Clarke, S. (1984). An analysis of the learning styles of adolescent delinquents. *Journal of Learning Disabilities*, 17, 600-608.
- Mennel, R. (1973). *Thorns and thistles juvenile delinquency in the United States 1825 – 1940*. The University Press of New England Hanover New Hampshire.
- Meyer, L. H. ,Harootunian, B., & Williams, D. (1991). *Identifying at-risk status and preventing school drop-out*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Miller, P. M. (2012). Mapping educational opportunity zones: A geospatial analysis of neighborhood block groups. *Urban Review*, 44, 189-218.

- Miller, C., & Porter, K. E. (2005). *Barriers to employment for out-of-school youth. Evidence from a sample of recent CTE applicants*. Retrieved from MRDC website:<http://www.mdrc.org/publication/barriers-employment-out-school-youth>
- Moody, B., Kruse, G., Nagel, J., & Conion, B. (2008). Career development project for incarcerated youth: Preparing for the future. *The Journal of Correctional Education*, 59, 231-243.
- Moon, S. S., & Ando, S. (2009). Ecological influences on school achievement in a diverse youth sample: The mediating role of substance use. *Journal of Human Behavior in the Social Environment*, 19, 572-591.
- Morrison, H. R., & Epps, B. D. (2002). Warehousing or rehabilitating? Public schooling in the juvenile justice system. *The Journal of Negro Education*, 71(3), 218-232.
- National Center on Education, Disabilities, and Juvenile Justice (2002). Characteristics of youth and educational programming in juvenile corrections. *EDJJ Notes*, 1(3). Retrieved from <http://www.edjj.org/edjjnotes/volume1number3.pdf>
- Nellis, A. (2011). Addressing the collateral consequences of convictions for young offenders. *The Champion*, (July-Aug) 20-27. Retrieved from the [sentencingproject.org](http://sentencingproject.org/doc/publications/Collateral%20Consequences%20NACDL%202011.pdf) website: <http://sentencingproject.org/doc/publications/Collateral%20Consequences%20NACDL%202011.pdf>
- Nellis, A., & Wayman, R. H. (2009). *Back on track: Supporting youth reentry from out-of-home placement to the community*. Washington, DC: Youth Reentry Task Force of the Juvenile Justice and Delinquency Prevention Coalition.
- Nelson, C. M. (2000). Educating students with emotional and behavioral disorders in the



- 21<sup>st</sup> century: Looking through windows, opening doors. *Education and Treatment of Children*, 23, 204-222.
- Nelson, C. M., Leone, P. E., & Rutherford, R. B. (2004). Youth delinquency: Prevention and intervention. In R. B. Rutherford, M. M. Quinn, S. R. Mathur, *Handbook of research in emotional and behavioral disorders*. New York, NY: The Guilford Press.
- Newman, R. P., Smith, S. M., & Murphy, R. (2000). A matter of money: The cost of financing youth development. In *Youth Development: Issues, Challenges, and Directions* (pp. 81-124). Philadelphia, PA: Public/Private Ventures.
- Nuttall, J., Hollmen, L., & Staley, E.M. (2003). The effect of earning a GED on recidivism rates. *Journal of Correctional Education*, 54, 90-94.
- New York City Administration for Children Services. (2014, July 15). *Youth and family justice*. Retrieved from [http://www.nyc.gov/html/acs/html/yfj/youth\\_family\\_justice.shtml](http://www.nyc.gov/html/acs/html/yfj/youth_family_justice.shtml)
- Office of Juvenile Justice and Delinquency Prevention (1994). *Conditions of confinement: Juvenile detention and corrections facilities*. Washington, DC: Author.
- O'Rourke, T., & Satterfield, C. E. (2005). Think exit at entry. *The Journal of Correctional Education*, 56, 189-191.
- Palmer, T. (1991). The effectiveness of interventions: Recent trends and current issues. *Crime and Delinquency*, 37, 330-345.
- Peduzzi, P., Concato, J., Kemper E., Holford, T. R., & Feinstein, A. R. (1996). A simulation study of the number of events per variable in logistic regression analysis. *Journal of Clinical Epidemiology*, 49, 1372-1379.
- Pennsylvania JCJC Disposition Report. (2012). *2012 Pennsylvania Disposition Report*. Retrieved from: <http://www.jcjc.state.pa.us/portal/server.pt/community/statistics/5040>

Pennsylvania School Code 1949 Act 14, Pa. § 30-14-1330 (1949).

Pfannenstiel, J. C. (1993). Educating juvenile offenders: Teaching techniques determine student's success or failure. *Corrections Today*, 55(1).

Philadelphia Youth Network. (2011, Nov 17). The impact. Retrieved from Philadelphia Youth Network website: <http://www.pyninc.org/aboutpyn/impact.php>

Pittman, R. B. (1991). Social factors, enrollment in vocational/technical courses, and high school dropout rates. *Journal of Educational Research*, 84, 288-295.

Platt, A. (1977). *The child savers: The invention of delinquency* (2<sup>nd</sup> ed.). Chicago and London: The University of Chicago Press.

Platt, S., Casey, R. E., & Faessel, R. T. (2006). The need for paradigmatic change in juvenile correctional education. *Preventing School Failure*, 51(1).

Platt, J., Kaczynski, D., & LeFebvre, R. (1996). Project Advance: A comprehensive model program for juvenile incarcerates. *Journal of Correctional Education*, 47, 168-172.

Ploeger, M. (1997). Youth employment and delinquency: Reconsidering a problematic relationship. *Criminology*, 35, 659-675.

Polk, K. (1984). The new marginal youth. *Crime and Delinquency*, 30, 462-480. doi: 10.1177/0011128784030003009

Pritchard, J. (2013). *The importance of soft skills in entry-level employment and post secondary success: Perspectives from employers and community colleges*. Retrieved from Seattle Jobs Initiative website: [http://www.seattlejobsinitiative.com/wp-content/uploads/SJI\\_SoftSkillsReport\\_vFINAL\\_1.17.13.pdf](http://www.seattlejobsinitiative.com/wp-content/uploads/SJI_SoftSkillsReport_vFINAL_1.17.13.pdf)

Putter, C. (2011). *WorkReady Philadelphia 21<sup>st</sup> century continuum: Description of Contracted services response to RFP*. Copy in possession of author.

## PACTT Initiative

- Putter, C. (2010). The PACTT alliance: Delinquent youth learn to earn. Copy in possession of author.
- Putter, C., Smith, D., & Wade, B. (2008). *Review of academic and career/technical training at delinquent facilities—summary report*. Harrisburg, PA: Pennsylvania Academic Career Technical Training Alliance.
- Quinn, M. M., Rutherford, R. B., Leone, L. E., Osher, D. M., & Poirier, J.M. (2005). Youth with disabilities in juvenile corrections: A national survey. *Exceptional Children*, 71, 339-345.
- Reese, S. (2005). The role of career and technical education in dropout prevention. *Techniques (Association for Career and Technical Education)*, 80(3), 18-23.
- Roberson, C. (2000). *Exploring Juvenile Justice* (2<sup>nd</sup> ed.). Belmont, CA: Wadsworth/Thompson Learning.
- Rosenthal, B. S. (1998). Non-school correlates of dropout: An integrative review of the literature. *Children and Youth Services Review*, 20, 413-433.
- Roush, D. W., & McMillen, M. (2000). Construction, operations, and staff training for juvenile confinement facilities. *Juvenile Accountability Incentive Block Grant Program Bulletin*. Washington, DC: U.S.Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Rowe, B. J. D., & Pfannenstiel, J. C. (1991). *Unlocking Learning: Chapter 1 in correctional facilities. Effective Practices Study Findings for the National Study of the Chapter 1 Neglected or Delinquent Program*. Washington, D.C.: U.S. Department of Education, Office of the Under Secretary.
- Roy-Stevens, C. (2004). *Overcoming barriers to school reentry*. OJJDP Fact Sheet, US

Department of Justice Office of Justice Programs OJJDP.

Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. *Review of Educational Research*, 57, 101-121.

Rutherford, R. B., Mathur, S. R., & Griller Clark, H. (2003). *Promising practices in transition for short term jails and detention centers and long term correctional facilities*.

Retrieved from the National Center on Education, Disability, and Juvenile Justice website: <http://www.edjj.org/focus/TransitionAfterCare/>

Rutherford, R. B., Quinn, M. M., Leone, P. E., Garfinkle, L., & Nelson, C. M. (2002). *Education, disability, and juvenile justice: Recommended practices (Fourth CCBD Mini-Library Series)* Arlington, VA: Council for Children with Behavioral Disorders.

Sampson, R. J., & Laub, J. H. (1992). Crime and deviance in the life course. *Annual Review of Sociology*, 18, 63-84.

Santrock, J. W., & Yussen, S. R. (1992). *Child Development: An Introduction* (5<sup>th</sup> ed.). Dubuque, IA: Wm C. Brown Publishers.

Schensul, J. J. (2009). Community, culture, and sustainability in multilevel dynamic systems intervention science. *American Journal of Community Psychology*, 43, 241-256.

Schlossman, S. L. (2005). *Transforming juvenile justice reform ideals and institutional realities, 1825-1920*. Dekalb, IL: Northern Illinois University Press.

Shah, R. S., & Darcus, J. K. (2007). *Juvenile Records: A know your rights guide for youth in Pennsylvania*. Philadelphia, PA: Juvenile Law Center.

Sheridan, M. J., & Steele-Dadzie, T. E. (2005). Structure of intellect and learning style of incarcerated youth assessment: A means to providing a continuum of educational service in juvenile justice. *The Journal of Correctional Education*, 56, 347-368.

- Smith, D. (2011). CTE one pager. Copy in possession of Candace Putter.
- Smith, D., & Goodman, M. (2011). *Employability Skills Manual, 3<sup>rd</sup> Ed.* Harrisburg, PA: Pennsylvania Academic Career Technical Training Alliance.
- Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review, 67*, 1-40.
- Stanton-Salazar, R. D., & Dornbusch, S. M. (1995). Social capital and the reproduction of inequality: Information networks among Mexican origin high school students. *Sociology of Education, 68*, 116-135.
- Steinberg, L., Blinde, P. L., & Chan, K. S. (1984). Dropping out among language minority youth. *Review of Educational Research, 54*, 113-132. doi: 10.3102/00346543054001113
- Steinberg, L., Chung, H. L., & Little, M. (2004). Reentry of young offenders from the justice system: A developmental perspective. *Youth Violence and Juvenile Justice, 2*, 21-38.
- Stephens, R. D., & Arnette, J. L. (2000). *From the courthouse to the schoolhouse: Making successful transitions.* Washington, DC. U.S. Department of Justice Office of Justice Programs Office of Juvenile Justice and Delinquency Prevention.
- Steurer, S. J., Smith, L., & Tracy, A. (2001). *Three states recidivism study.* Lanham, MD: Correctional Education Association.
- Snyder, H. N. (2004). An empirical portrait of the youth-re-entry population. *Youth Violence and Juvenile Justice, 2*(1), 39-55. doi: 10.1177/1541204003260046
- Tonry, M. (2009). Explanations of American punishment policies: A national history. *Punishment and Society, 11*, 377-394.
- Torbet, P., & Thomas, D. (2005). *Advancing competency development: A white paper for*

*Pennsylvania*. Pittsburgh, PA: National Center for Juvenile Justice.

- Waintrup, M. G., & Unruh, D. K. (2008). Career development programming strategies for transitioning incarcerated adolescents to the world of work. *The Journal of Correctional Education*, 59, 127-144.
- Walker, H., & Bullis, M. (1995). Comprehensive interventions in the educational settings. In C. M. Nelson, B. Wolford, & R. Rutherford (Eds.), *Developing comprehensive systems for troubled youth*. (pp. 122-148). Lexington, KY: Kellogg Foundation.
- Wang, X., Blomberg, T. G., & Li, S. D. (2005). Comparison of the educational deficiencies of delinquent and non-delinquent students. *Evaluation Review*, 29.
- Warner, L., Gates, S., Christeson, W., & Kiernan, M. (2011). *The skills gap. Reversing Washington's lack of skilled workers through early learning*. Retrieved from America's Edge website:[http://cdn.americasedge.org/clips/WA\\_AE\\_SkillsReport.pdf](http://cdn.americasedge.org/clips/WA_AE_SkillsReport.pdf)
- Warren, R. (2007). *Evidence-based practice to reduce recidivism: Implications for state judiciaries*. Williamsburg, VA: National Center for State Courts, National Institute of Corrections.
- Waters, S. K., Cross, D. S., & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health*, 79, 516-524.
- Weinberg, L., & Leone, P. (2010). *Addressing the unmet educational needs of children and youth in the juvenile justice and child welfare systems*. Retrieved from Center for Juvenile Justice Reform website:<http://cjjr.georgetown.edu/pdfs/ed/edpaper.pdf>
- Wiatrowski, M. D., Griswold, D. B., & Roberts, M. K. (1981). Social control theory and delinquency. *American Sociological Review*, 46(5), 525-541.

PACTT Initiative

Will, S. (2011). Academic one pager. Copy in possession of Marna Goodman.

Winokur, K. P., Cass, E., & Blankenship, J. (2003). *Juvenile Recidivism and Length of Stay*.

Rockville, MD: National Criminal Justice Reference Service.

Wise, B. (2009). Adolescent literacy: The cornerstone of student success. *Journal of*

*Adolescent and Adult Literacy*, 52, 369-375.

Wolford, B. I. (2000). Youth education in the juvenile justice system. *Corrections Today*, 62,

128-130