CHAPTER 6 INCARCERATED DELINQUENT YOUTHS: EDUCATIONAL DEFICIENCIES AND RELATED BEST PRACTICES

6.1 Introduction

Poor school performance has historically been one of the strongest and most consistent predictors of delinquency and criminality. Conversely, improvements in school performance have more recently been associated with desistance from delinquent and criminal activity. As a result, criminological and educational research suggests a strong link between education and crime. This chapter assesses the link between the educational characteristics of delinquent youths and the educational best practices that target these characteristics. To elaborate, the chapter identifies empirically validated best practices for the educational deficiencies of incarcerated delinquent youths. The fundamental question addressed in this chapter is: What are the common educational deficiencies of incarcerated delinquent youths and the best practices for addressing these common deficiencies?

Due to the paucity of empirical research on best practices in juvenile justice education (JJEEP, 2005), this chapter uses an alternative approach to the identification of best practices. Rather than limiting coverage to studies based on incarcerated offenders, this literature review first identifies the characteristics of incarcerated students. Following the identification of these specific characteristics, educational strategies targeting populations with these particular characteristics are examined. In this manner, the chapter presents the results of a literature review on best practices for achieving academic improvement—and thereby decreasing the likelihood of delinquent and criminal onset and persistence—among students with specific disabilities and educational disadvantages.

This chapter is comprised of this and three subsequent sections. Section 6.2 identifies and describes characteristics common to incarcerated delinquent youths. This is followed by Section 6.3, which provides strategies for overcoming the special needs of incarcerated youths as identified in the previous section. The final section, Section 6.4, provides a summary discussion of the chapter in which the best practices found in the literature are summarized and categorized into a typology of juvenile justice education best practices.

6.2 Characteristics of Incarcerated Youths

Incarcerated youth in Florida and throughout the nation continuously struggle with a variety of emotional, social, and educational disadvantages. Moreover, many of these traits have been shown to have a negative impact on educational attainment, school attachment, and employment opportunities. This section provides a review of the literature on the

characteristics of incarcerated youths, namely, a disproportionate presence of disabilities, poor prior school academic performance, and poor prior school-related behavior. See Chapters 6 and 7 for an in-depth discussion of the educational characteristics and outcomes of students within Florida's juvenile justice system.

High Rates of Disabilities and Low IQs

A large body of research has demonstrated that several forms of mental and emotional disabilities disproportionately affect juvenile justice populations, as well as adult offender populations. Typically, estimates of the prevalence of disabilities among incarcerated youths range from 32 to 43% (JJEEP, 2006; Leone, Christle, Nelson, Skiba, Frey, & Jolivette, 2003; Quinn, Rutherford, Leone, Osher, & Poirier, 2005), although individual facilities may house numbers of disabled students well outside of this range. Among the most common forms of disabilities are emotional and/or behavioral disorders, learning disabilities, mental retardation, and Attention Deficit Hyperactivity Disorder (Zabel & Nigro, 2001). Of the disabled population in Florida's juvenile justice institutions, youths are most commonly diagnosed as emotionally handicapped or severely emotionally disturbed, followed by specific learning disabilities, mentally handicapped and, lastly, some other type of disability (JJEEP, 2005).

A common finding within the fields of biological, genetic, and cognitive criminology is that delinquents and criminals often possess below-average IQs (Leone et al., 2003; Raine, 1993). The fact that, by definition, low IQs and specific disabilities cannot occur together (Raine, 1993) there is likely an additional and substantial proportion of delinquent youths and criminal adults who have more global intellectual deficits (i.e., low IQ). Some research suggests that such intellectual disadvantages may be concentrated in the area of verbal IQ rather than performance IQ (Quay, 1987; Wilson & Herrnstein, 1985). The fact that verbal IQ is consistently lower than performance IQ in children with conduct problems suggests a specific and pervasive deficit in language that may affect the child's receptive listening and reading, problem solving, expressive speech and writing, and memory for verbal material (Caspi & Moffitt, 1995). Six mechanisms that contribute to the relationship between verbal and language deficits and delinquency have been proposed:

"(1) verbal deficits may interfere with the development of social control; (2) low verbal intelligence is associated with a here-and-now cognitive style that fosters irresponsible and exploitative behavior; (3) verbal deficits may interfere with delaying gratification, anticipating consequences, and associating delayed punishment with transgressions; (4) verbal deficits may interfere with learning to label behaviors as bad, naughty, or wicked, requiring that the meaning of these terms be learned via more costly trial-and-error methods; (5) verbal deficits may lead to difficulties in labeling emotions in others, which may lead to a lack of empathy; and (6) verbal limitations may narrow response options, leading to physical actions such as hitting, rather than verbal options such as negotiation and discussion (Mash & Wolfe, 1999, p.199)."

Aside from the obvious direct negative impact these disabilities generally have upon educational attainment and social interaction, research has also indicated that youths identified as learning disabled are more prone to later delinquency and criminality (Bureau of Justice Statistics, 2003; Hill, Howell, Hawkins, & Battin-Pearson, 1999), including persistent offending (Bullis, Yovanoff, Mueller, & Havel, 2002). Similarly, persons with intellectual deficits, as indicated by low IQ, are more likely to commit later crime (Hodgins, 1992). In this sense, education may indeed serve as an important transition, as it could potentially mediate the effect of such cognitive deficits on delinquency and criminality. Alternatively, these findings also suggest that these deficits may pose an impediment to educational intervention efforts directed at delinquent populations.

Poor Academic Performance

Another common feature of incarcerated juveniles is poor academic performance in school prior to their commitment to the juvenile justice system. In particular, this deficiency generally manifests itself in two observable fashions: low grades and low rates of advancement (i.e., being behind the average grade level for a given age). Moreover, incarcerated students tend to perform poorly in the particular areas of language arts, math, and speech. Each of these areas of academic deficiencies will be discussed, then their relationship with delinquency will be explained.

First, juvenile justice students and other students with disabilities generally receive low grades on assessments (Nelson, Benner, Lane, & Smith, 2004); consequently, they often have poor grade point averages (GPA) (Wang, Blomberg, & Li, 2005). Specifically, it has been found that students with emotional and behavior disorders (e.g., aggression and attention problems) are at a higher risk for academic achievement deficits than those with internalizing disorders (e.g., withdrawal and depression) (Nelson, et al., 2004). In a study comparing delinquents in Florida to nondelinquents, Wang, et al. (2005) found that the mean GPA for delinquents was 1.46; whereas, non-delinquents had a mean GPA of 2.12. Furthermore, incarcerated youths with identified disabilities are more likely than their nondisabled counterparts to exhibit poor academic performance (Zabel & Nigro, 2001), suggesting a double disadvantage.

Second, youths who are in or will soon be in the correctional system tend to be below grade average when compared with their same-age peers (Parent, Lieter, Kennedy, Livens, Wentworth, & Wilcox, 1994; Wang, et al., 2005). Over half (51%) of the students in Florida's juvenile justice programs are below grade level (JJEEP, 2006). Wang et al. (2005) found that only 43% of the delinquent group had not been retained in schools, compared with 72% of the nondelinquent group. An important consequence of this is that, as a result of not be promoted to the next grade level, these youths are significantly less likely to earn a high school diploma and advance to postsecondary education (Armstrong, Dedrick, & Greenbaum, 2003). This problem is further complicated by the unfortunate fact that incarcerated students throughout the nation have historically received poor schooling as compared with their nonincarcerated counterparts (Dedel, 1997).

In particular, incarcerated and disabled youths tend to have the most difficulty in the specific areas of language arts (i.e., reading, writing, and spelling), mathematics, and speech (Cohen, Barwick, Horodezky, Vallance, & Im, 1998; Davis, Sanger, & Morris-Friehe, 1999; Hollin, 1996; Nelson et al., 2004; Sanger, Moore-Brown, & Alt, 2000; Sanger, Moore-Brown, Magnuson, & Svoboda, 2001; Snow & Powell, 2002; Warr-Leeper, Wright, & Mack, 1994). For example, it has been suggested that poor literacy, numeracy, and nonverbal functioning contribute to delinquent behavior (Putnins, 1999). Specifically, Hollin (1996) explained that such skills mediate the relationship between behavioral disorders and delinquency, in that children with disorders are unable to use these skills to regulate their own behavior. Similarly, Cohen et al. (1998, p. 463) explained the link between language impairments (LI) and delinquency: "LI may also increase risk for delinquency by interfering with the ability to understand others' perspectives, affecting both social competence and moral development." Moreover, researchers have documented the quite frequent failure of juvenile justice entry assessments to identify students with such impairments (Sanger et al., 2001; Warr-Leeper et al., 1994) which, consequently, suggests that prevalence rates of incarcerated students with disabilities are in fact underestimates that disguise the true number of students in need of special education services within juvenile justice institutions.

Poor School-Related Behavior

One of the most obvious features common to delinquent youths and youths at risk for delinquency is their poor school behavior, including conduct problems, absenteeism, suspensions, expulsion, and dropout. What is less obvious, however, is the potentially strong link between the cognitive deficits described above and these disciplinary problems. Moreover, a significant body of research has suggested that these school-related behavior problems may, in fact, be preceded by warning signs related to this population's generally unfavorable opinions of their schools and teachers. This section will address these issues in a linear fashion, beginning with school attachment, continuing with in-school conduct and disciplinary problems, and culminating in suspension, expulsion, and dropout.

First, several researchers have documented a link between lack of school attachment and criminal onset and persistence (Arum & Beattie, 1999; Chung, Hill, Hawkins, Gilchrist, & Nagin, 2002; Farrington & Hawkins, 1991; Hill, Howell, Hawkins, & Battin-Pearson, 1999; Jang, 1999; Le Blanc, M., Cote, G., & Loeber, R., 1991; Lipsey and Derzon, 2001; Loeber & Farrington, 2000; Sampson & Laub, 1993; Smith et al., 1995; Stouthamer-Loeber, M., Loeber, R., Wei, E., Farrington, D.P., & Wikstrom, P.H., 2002). Moreover, a direct association between disabilities and school attachment has been discovered, such that students with disabilities disproportionately report greater dissatisfaction with teachers, poorer bonds with school, and higher perceptions of school danger than their nondisabled counterparts (Murray & Greenberg, 2001). The frustration and demoralization associated with school failure may cause students to detach from school, thus becoming more susceptible to delinquent behavior. As measurements of school attachment and engagement, researchers have used school motivation, educational aspirations, self confidence in regards to academic ability, quality of student-teacher relationships, student-to-teacher ratio, satisfaction with school, perceptions of school safety, student interest in school, and so on. In sum, students who have negative perceptions of their school, their teachers, and their own

academic abilities tend to be at a higher risk of later criminal onset and persistence than are students with more positive views of their schools and teachers.

These negative perceptions, in turn, may adversely affect the in-school conduct of delinquent and disabled youths. Importantly, many school-related conduct problems appear to be associated with emotional, behavioral, and learning disabilities (Cocozza & Skowyra, 2000; Loeber & Farrington, 2000; Mears, 2001; Nelson et al., 2004). In particular, Loeber and Farrington (2000) explained that serious and violent adult offenders during childhood have a higher than average involvement in disruptive problem behaviors such as ADHD. Nelson et al. (2004) similarly found that special education students exhibiting aggression and attention problems were both more likely to be delinquent and more likely to experience academic failure. In particular, aggressive behavior toward peers and antisocial behavior seem to be strongly correlated with a variety of negative outcomes, such as later delinquency and criminality, school failure, and dropout (Chung et al., 2002; Dishion, Patterson, Stoolmiller, & Skinner, 1991; Ensminger & Slusarcick, 1992; Kupersmidt & Cole, 1990). Further, inschool delinquency and substance abuse are predictive of school dropout (Fagan & Pabon, 1990).

As a consequence of both their unfavorable opinions of school and the myriad of conduct problems these students tend to exhibit, it is not surprising that these students also experience significantly higher rates of absenteeism, suspension, expulsion, and dropout than do nondelinquent and nondisabled youths. First, high rates of absenteeism have been associated with both dropout and delinquency (Kupersmidt and Cole, 1990; Wang et al., 2005). Second, it has been documented that suspension is a significant determinant of later incarceration (Arum and Beattie, 1999; Wang et al., 2005). In addition, Atkins et al. (2002) found that students with detentions and suspensions were highly aggressive, lacked social skills, and were very hyperactive as rated by their teachers and peers. Thus, there also appears to be a link between social, cognitive, and behavioral disabilities and disciplinary referrals. Third, regularly truant students appear to be at a higher risk for dropout (Fagan & Pabon, 1990). One study found that over half of a sample of students classified as at-risk dropped out of school when they were teenagers (Ensminger & Slusarcick, 1992).

Section Summary

The characteristics common to at-risk and delinquent youths pose formidable challenges to juvenile justice educators. A high proportion of these students evidence not only conduct and social problems, but also serious emotional and cognitive disabilities. Research indicates, however, that a notable percentage of these disadvantaged youths are not currently being identified as in need of special education services. As a consequence, these unidentified but disabled students are not receiving the proper services (Cook & Hill, 1990; Rutherford, Nelson, & Wolford, 1986). Moreover, given the high incidence of conduct problems, Brendtro and Shahbazian (2004) point out that it is difficult for teachers and custody staff to manage classroom behavior without resorting to punitive or coercive measures. In fact, juvenile justice teachers warn that their students "frequently present legal, social, behavioral, emotional, psychological, and instructional challenges that they are

unequipped to address" (Ashcroft, Price & Sweeney, 1997, referring to Ashcroft, Price, & MacNair, 1992).

Among the specific problems posed by this population are governance or jurisdictional issues, administrative demands, records exchange difficulties, fluidity of the population, safety and security issues, and problems resulting from legislative mandates, such as parent participation (Robinson & Rapport, 1999; Winters, 1997). These particular problems are exacerbated by the alarmingly high teacher attrition rate within juvenile justice institutions (Billingsley, 2005). Common reasons voiced by correctional instructors for leaving the profession or a specific program include lack of preparation and necessary qualifications, colleague and administrative support, induction and orientation services, resources, and so on (Billingsley, 2005). In addition, instructors must assume various roles (i.e., teacher, counselor, disciplinarian) when dealing with youths suffering from multiple disadvantages, which may result in role conflicts, stress, and eventual burnout (Billingsley, 2005). Moreover, the disproportionate presence of minority students within the juvenile justice system creates an added demand for qualified minority teachers, of which there is a shortage (Ashcroft et al., 1997).

6.3 Effective Strategies for Addressing the Unique Needs of Incarcerated Youths

While students in juvenile justice facilities are characterized by a multitude of academic deficiencies, much research has been conducted on effective methods for overcoming these deficiencies. The bulk of the literature on juvenile justice best practices is largely anecdotal and outdated. Therefore, this section provides the results of a literature review on promising practices that are designed to address the educational characteristics common to incarcerated youths. The organization of this section follows that of the previous section, such that the best practices are categorized by the specific type of deficiencies they are designed to address. It is important to remember from the previous section that most of these issues are interrelated; thus, the strategies for countering one particular deficit may help with other problems in overcoming the barriers presented by the unique needs of this population. Alternatively, multiple strategies may be necessary to overcome just one particular deficiency.

Addressing the Needs of Delinquent and Disabled Students

In order to successfully identify and treat student disabilities and other disadvantages, two general courses of action have been suggested. The first is a rigorous assessment and monitoring system of student abilities and progress. The second is the integration of a wide range of agencies, disciplines, and instructional strategies in order to address the multiple needs of delinquent youths.

Perhaps the most important step in addressing student disabilities is recognizing that a student has one (or more). Therefore, a timely and thorough assessment of each student—a practice also applicable to students in public schools—entering a facility is critical. More specifically, Levinson (1998, p.36) explained that the assessment process "should involve a variety of school and community-based professionals, utilize a variety of assessment techniques and strategies (multimethod), and require that assessment information be gathered in a variety of domains (multitrait)." Given the high propensity for incarcerated youths to have either global cognitive defects or some other specific learning disability, the following areas must be assessed: intellectual/cognitive, educational/academic, social/interpersonal/emotional, independent living, vocational/occupational, and physical/sensory (Greene & Kochhar-Bryant, 2003; Levinson, 1998). Additionally, it is necessary for the receiving juvenile justice facility to retrieve incoming students' educational records from their previous educational and/or correctional institutions (Edgar, Webb, & Maddox, 1987; Webb, Maddox, & Edgar, 1985). In doing so, the students' transition plans can incorporate as much knowledge of their academic strengths and weaknesses as possible.

An important component of this initial assessment process is to solicit both student and parent input regarding each of these domains (Greene and Kochhar-Bryant, 2003; Kohler, F.W., Ezell, H., Hoel, K., & Strain, P.S., 1994; Morningstar, Turnbull, & Turnbull, 1996; Pogoloff, 2004; Wehman, 1996). Due to the geographical issues posed by incarcerating students (i.e., who are frequently housed hours away from their parents' residence), regular and in-person parental involvement, as well as solicitation via multiple formats (e.g., letters, telephone calls) should be employed in gaining the input of parents or guardians (Pogoloff, 2004). Finally, it is critical that the results of these assessments and interviews be used in the formation of individualized academic or educational plans for the student (Gajar,1993; Pogoloff, 2004).

This leads to the second critical phase: implementing the individualized plan. The students' educational training should emphasize those needs identified by the assessments and written into the student plan (Gajar, 1993). Although this is a necessary step, it is not sufficient in planning an effective curriculum. Instead, student progress needs to be continually monitored and assessed, and modifications to his or her individualized student plan should follow. For example, student progress should be self-paced, in that the student should not progress to a subsequent lesson until having successfully completed the first lesson (Gajar, 1993).

Lastly, it is crucial that plans for students' transition back into their home communities be initiated at the time of students' entry into the program (Gemignani, 1994). Catalano, Wells, Jenson, & Hawkins (1989) explain that this exit-oriented transition planning should include academic exit assessments, school placement, and counseling assistance. It has been suggested, furthermore, that the assessments used in exit planning should be identical to those used at entry to facilitate the evaluation of academic progress during the students' period of incarceration. It is also necessary for the juvenile justice facility to forward the students' educational file to their next educational placements so that it can continue to serve as a guide for the students' educational planning (Leone et al., 1986). In sum, the transition process should be designed to "link the correctional special education services to prior

educational experiences and to the educational and human services needed after release" (Gemignani, 1994, p.2).

Interagency and Interdisciplinary Collaboration

Given both the high rate of disabilities and the negative impression these students generally have of school, instruction needs to be inclusive and incorporate a variety of teaching strategies and learning materials (Gajar, 1993; Greene and Kochhar-Bryant, 2003). In particular, incarcerated and disabled students need a curriculum that integrates academic education with life skills, career and vocational preparation, and self-determination training (Greene & Kochhar-Bryant, 2003). Additionally, community-based instruction and business and industry partnerships have also been found to improve the educational and vocational outcomes of incarcerated youths (Greene & Kochhar-Bryant, 2003). These curricular demands require that juvenile justice programs initiate and maintain reliable community linkages and foster and sustain collaborative relationships with other relevant agencies and disciplines, such as mental health and social services agencies, state and local juvenile justice and education authorities, psychologists and speech therapists, and so on (Anne E. Casey Foundation, 2002; Greene & Kochhar-Bryant, 2003; State of Connecticut Department of Children and Families Division of Mental Health and Children's Behavioral Health Advisory Committee, 2003).

The critical need for the cooperation of multiple agencies across several related disciplines itself often spawns another set of difficulties for juvenile justice educators. Complex multiagency organizational structures such as these often face the problems of differing ideological approaches to the task at hand, as well as communication issues that serve to impede the sharing of vital knowledge and resources (Anne E. Casey Foundation, 2002; Vaughan, 2001). In order to overcome these inherent barriers to interorganizational collaboration, five processes have been identified: (1) the establishment of attainable goals (Anne E. Casey Foundation, 2002; Marenin, 2003; National Mental Health Association, 1999; New Jersey Department of Human Services, 1998), (2) high quality and quantity communication (Anne E. Casey Foundation, 2002; The State of Connecticut's Department of Children and Families Division of Mental Health and Children's Behavioral Health Advisory Committee, 2003), (3) the implementation and maintenance of standards (Marenin, 2003), (4) frequent and objective evaluations (Anne E. Casey Foundation, 2002; Kim, 2004), and (5) sanctions (National Mental Health Association, 1999).

Improving Academic Performance

Several strategies have been identified as being effective in increasing the likelihood of academic success among delinquent and disabled youths. These include training teachers in progress monitoring and developing appropriate lesson plans, incorporating life skills and career training into the academic curriculum, using multiple instructional strategies, individualizing curricula to target students' identified deficiencies, and implementing credit recovery programs. Again, it must be emphasized that there is considerable overlap within and among the student disadvantages and best practices such that either a specific best

practice generally affects more than one area of student disability, or, conversely, multiple best practices are needed to address a single deficiency.

Teacher Training

Perhaps one of the most important features in determining the quality of a student's education is the student's teacher(s). Indeed, one of the more consistent findings within the field of educational best practices is that full teacher certification and in-field teaching are among the strongest predictors of their students' academic achievement (Darling-Hammond, 2000). Teacher preparation and experience also have been identified as significant determinants of student achievement (Darling-Hammond, 2000; Fetler, 2001).

Specifically, Browder, Karvonen, Davis, Fallin, & Courtade-Little (2005) found that teacher training in the following areas significantly improved the academic outcomes of their students, as compared with students with teachers not trained in these areas: *curriculum access* (i.e., how to select skills appropriate for students with disabilities), *data collection* (i.e., how to develop and utilize data collection systems to design curriculum), and *instructional effectiveness* (i.e., how to improve instruction if students do not make adequate progress). Moreover, those students whose academic achievement was increased via teacher training also demonstrated progress in their specific individual plan objectives (Browder et al., 2005). The parallel between this practice and the previously described progress monitoring and individualized plan modification best practice is clear: in order for students' progress to be successfully monitored, teachers need to be trained in monitoring and using the results to adjust their instructional techniques.

Integrated and Holistic Curriculum

While educational attainment should certainly be the primary objective within any juvenile justice institution, it is also important for program administrators and lead educators to recognize that many of their students will not be returning to school or attending post-secondary schooling following their release. Instead, many incarcerated students are of an age at which continued schooling is not mandatory, and they have come to believe that they are academically unsuccessful. Moreover, even those students who plan to continue with their education frequently have limited vocational training and work experience, and the literature already discussed demonstrates that these students are in particular need of social and independent living skills instruction. As such, all of these domains must be included into the regular academic curriculum (Greene & Kochhar-Bryant, 2003).

In particular, Carter and Lunsford (2005) identified four crucial areas of student development. The first is *social skills training*, which should be directly tailored to the student's deficits, frequent and intense, and delivered in multiple settings. Second is *vocational skills training*, which necessitates actual participation in vocational coursework throughout high school. *Academic skills* are third and not only should include improvements in the core subject areas, but also should ensure that the student earns a diploma. The fourth area is *self-determination skills*, which essentially increase the students' self-direction, self-management, decision-making, problem solving, and goal setting abilities.

Additionally, GED programs are also useful in aiding the educational enrichment of students who are unlikely to return to school following release. In fact, GED completion has been significantly associated with reduced recidivism among adult incarcerated populations (New York State Department of Correctional Services, 1989).

Credit Recovery Programs

Earning a diploma during incarceration has been found to significantly reduce the likelihood of recidivism following release (JJEEP, 2005). Moreover, these higher performing students have been found to demonstrate more successful community reintegration than their lower performing incarcerated counterparts (JJEEP, 2005). Because juvenile justice students are generally two years behind their same-age peers (JJEEP, 2005), it is important for juvenile justice educators to formulate and implement credit recovery programs so that students have an opportunity to advance to their age-appropriate grade level, thereby decreasing the odds of recidivism and increasing the students' chance for successful community reintegration. Moreover, academic achievement also has a significant positive effect on students' sense of belonging to the school and the extent to which the student values school (Radziwon, 2003). This issue will be discussed in more detail below; however, the important point is that improving academic achievement has strong and positive effects on several areas that relate to school academic performance, school attachment, and delinquent and criminal outcomes.

Targeting Reading and Speech Deficiencies

Due to the staggering extent of reading and speech deficiencies among incarcerated populations—as well as the correlation between these disadvantages and antisocial and aggressive behavior—individualized student plans and classroom lesson plans must have a strong focus on improving the reading and speech skills of the students. In fact, several strategies have been identified as helpful in doing so. For example, Stanford (1995) found that incorporating conflict management skills with English course content not only improved students' literature and writing skills, but also reduced student behavior problems. Similarly, Snow and Powell (2002) noted the importance of a strong emphasis on speech deficiencies in juvenile justice institutions; specifically, they argued for social skills interventions that incorporate language processing and production skills.

In addition to incorporating life skills and problem-solving skills into regular lesson plans, researchers also have suggested that multiple grouping formats (i.e., pairing, small groups) are more effective than class lectures for learning disabled students (Elbaum, Vaughan, Hughs, & Moody, 1999). Also, giving disabled students some input into their lesson plans has been associated with improvement in spelling performance (Killu, Clare, & Im, 1999). Further, Crowe (2005) found that Communicative Reading Strategies (CRS) meaning-based feedback (e.g., monitoring, discussion, prompts) was more effective in improving the reading comprehension of students with low reading abilities than were more traditional feedback techniques (e.g., pre-teaching vocabulary, sounding out words). Likewise, Devault and Joseph (2004) also recommended multiple learning formats for increasing the fluency levels of reading disabled students; in particular, they found positive effects resulting from the combination of repeated readings and word box phonics.

Furthermore, a variety of print and non-print materials, including libraries and instructional support services, have been identified with increased student academic performance in correctional settings (Coffey and Gemignani, 1994). In sum, this section suggests that targeting oral and written language arts deficiencies will be aided by the integration of life and social skills lessons, the use of several instructional techniques and materials, and close monitoring by and feedback from the teacher.

Improving School-Related Behavior

In addition to effective ways of improving the academic performance of incarcerated youths, several strategies have been documented to directly reduce the incidence of conduct problems for delinquent and disabled youths. These include a safe and positive school atmosphere, appropriate classroom organizational structure, multiple instructional strategies and the incorporation of technology, teacher training, student involvement, parent involvement, and community and business partnerships. Each of these practices will be discussed, and a suggestion for the organization of this information will be advanced in the following section.

Safe and Positive School Atmosphere

The link between unfavorable impressions of school and delinquency has been established; however, so have several techniques for altering these unfavorable impressions. In particular, Payne, Gottfredson, & Gottfredson (2003, p. 754) identified two concepts that are critical to establishing school order:

Communal organization refers to the existence of a specific social organization that is external to the individual; this is the existence of supportive relations, of collaboration and participation, and a set of shared norms and goals. *Student bonding*, however, refers to the internal processes that result from the existence of this communal organization in the school (italics added).

According to Bryk and Driscoll (as cited in Payne et al., 2003), communal organization has been found to positively and significantly increase the levels of teacher efficacy, work enjoyment, morale, student academic interest, and student math achievement, while also serving to reduce the extent of teacher absenteeism, student misbehavior, and student dropout. Communal organization is best achieved by developing and maintaining five basic policies: shared and reasonable school goals, open and honest communication, consistent and understood standards, frequent and objective student or school evaluations, and the possibility of sanctions for breeches of the standards and unsatisfactory evaluation results. Contracts between agencies have been found to be effective in meeting these organizational recommendations (Kim, 2004; The Change Foundation, 2004). Specifically, Tankersley (2000) suggested that such interagency contracts are most effective when they include strict financial and general management controls and client-oriented policies. Essentially, these authors proposed that a formal accountability system in which the roles and responsibilities of each participating agency are clearly outlined is necessary to achieve communal organization at the more complex level of inter-organizational alliances.

To generate and maintain communal organization within individual institutions, additional recommendations have been put forth. In particular, Harrell, Leavell, van Tassel, & McKee (2004) identified three critical factors in retaining teachers: increased income, administrative support, and improved workload (i.e., appropriate workload, manageable class sizes, adequate resources, safe working conditions, and a desirable teaching assignment and schedule). Similarly, Billingsley (2005) suggested that a positive working environment (e.g., reasonable work assignments, stress reduction efforts) was one of two main strategies for retaining quality special education teachers (the other was the identification and cultivation of high quality teachers). An important component of a positive working environment, moreover, is the creation of inclusive and collaborative schools wherein all teachers and support staff work together to meet the needs of students with disabilities (Billingsley, 2005). For example, he recommended that principals support the work of special education teachers when they explicitly recognize the importance of special education services and that a collaborative work environment can be achieved when special and general educators work together toward mutually defined goals (Billingsley, 2005). Gemignani (1994) added that the recognition of education as the most important part of the rehabilitation process is critical in establishing an effective school environment.

Second, according to Battistich et al. (1996), (as cited in Payne et al., 2003) "student sense of community [is] significantly correlated with the students' liking for school, empathy, prosocial motivation, academic motivation, self-esteem, conflict resolution, and altruistic behavior" (p. 752). Moreover, Radziwon (2003) found that students' perceptions that their peers believe school is worthwhile and important significantly affects their identification with school, while students' perceptions of the extent and sincerity of their teachers' support positively affects their perceptions of school meaningfulness and decreases problem behavior in school (Brewster & Bowen, 2004). Brendtro and Shahbazian (2004), furthermore, identified four practices associated with student feelings of belonging and respect: fair and helpful discipline, positive support from teachers, multiple opportunities for success, and the prevention of verbal insults and bullying by peers. The possibility of incentives (e.g., certificates, awards) for academic achievement is also conducive to fostering an effective school environment (Gemignani, 1994).

Appropriate Classroom Organizational Structure

A second key practice in combating misbehavior in juvenile justice schools is the implementation of appropriate student-to-teacher ratios and class sizes. Finn, Pannozzo, & Achilles (2003), for example, found that small classes increase prosocial behavior (e.g., obedience to rules, positive classroom interaction), while simultaneously decreasing antisocial behavior (e.g., disruptive behavior, withdrawal). Other positive outcomes include increasing student time on task, attentiveness, and participation in learning activities (Finn et al., 2003). In determining appropriate student-to-teacher ratios, Gemignani (1994) suggested that four issues be taken into consideration: student needs, subject area demands, equipment resource availability, and legal mandates.

Multiple Instructional Strategies and the Incorporation of Technology

Although this particular area of juvenile justice best practices has already been discussed, it is worth reiterating that a variety of instructional strategies, especially the use of modern technology, has been found to positively affect student school performance. Specifically, Bewley (1999) found that the use of multimedia presentations had a beneficial effect on student attitudes, motivation, and participation. Coffey and Gemignani (1994), moreover, found that computers, calculators, and video equipment are helpful in teaching mathematical concepts, problem-solving skills, and high-order thinking skills. A useful model for instructional delivery was provided by the Hudson River Center for Program Development (HRCPD, 1995). This model incorporates the five major learning modalities: visual, auditory, kinesthetic, print-oriented, and group-interactive. Finally, it is worth recalling the significant positive effects of the integration of problem-solving and life skills training into core-course lesson plans (e.g., Stanford, 1995).

Teacher Training

In order to successfully address the varying needs and ability levels of incarcerated youths, juvenile justice educators need training in a variety of different areas, such as technology instruction, progress monitoring and lesson modification, cultural awareness, and so on. Essentially, Bullock and McArthur (1994) identified eight general areas in which special education teachers should be trained: (1) *knowledge competencies* (i.e., juvenile justice system correctional education), (2) *diagnosis*, (3) *interventions* (i.e., programming, curriculum, and instructional skills), (4) *communication* (i.e., inter-disciplinary team skills, working with parents and public agencies), (5) *evaluation skills*, (6) *professional development*, (7) *vocational education*, and (8) *behavior management*. In fact, relatively recent research discovered a strong negative relationship between the teacher experience and certification and student dropout rates (Darling-Hammond, 2000). In addition, juvenile justice teachers need a thorough orientation, or induction, process (Billingsley, 2005). See Chapter 5 for an in-depth discussion of teacher qualifications and experience in juvenile justice schools.

Importantly, there is a small but developing body of research that suggests that simultaneous teacher and student training in these areas may be highly effective in reducing student behavioral problems and improving their academic performance (Frey, Hirschstein, & Guzzo, 2000; Grskovic, Hall, Montgomery, Vargas, Zentall, & Belfiore, 2004). For example, Grskovic et al. (2004) found that student and teacher training in a positive reinforcement behavior management system decreased the teacher's need to resort to timeouts for students with emotional and behavioral disorders. Similarly, Frey et al. (2000) found that teacher and student training in empathy, impulse control, and anger management positively affected social competence. Moreover, as already mentioned, teacher training in the area of diagnostic assessments was shown to decrease the number of student discipline referrals (Tyler-Wood, Cerejio, & Pemberton, 2004). Ashcroft et al. (1997) explained that teachers, as well as their students, should be trained in a variety of settings and areas, including multicultural competencies.

Student Involvement

There is also a recognized need to increase the quality and quantity of students' participation in their own rehabilitation process. The solicitation of student involvement has been identified as a transition best practice in that it leads to greater self-determination, advocacy, and input (Greene & Kochhar-Bryant, 2003). In addition, there is evidence that student involvement in academic planning can be facilitated by providing them with published curricula prior to the meetings and by utilizing person-centered planning strategies (Test, Mason, Hughs, Konrad, Neale, & Wood, 2004). With regard to vocational and employability instruction, self-determination training has been found to increase self-direction on the job, reduce dependence on others, and improve self-management, choice making, decision making, problem solving, goal setting, and self advocacy (Carter & Lunsford, 2005). Consequently, assessments and training in these specific domains may serve to alleviate students' emotional reactivity to such situations as working under deadlines, improve their way of responding to authority and supervision, and improve their likelihood of handling stressful situations in a prosocial manner (Goss & Stiffler, 2004).

Parent Involvement

The solicitation of parental involvement in the transition process (including such issues as pre-release planning, post-release transportation, and behavior and money management) has been found to substantially increase the odds of successful employment and postsecondary outcomes for youths with emotional or behavioral disorders (Carter & Lunsford, 2005; Kohler, F.W., Ezell, H., Hoel, K., & Strain, P.S., 1994; Morningstar et al., 1996). Five suggestions have been advanced regarding how to increase parental involvement: (1) use a gradual process to establish a positive relationship, (2) recruit staff with similar cultural and ethnic backgrounds, (3) promote family and child competency rather than focusing on risk, (4) maintain a flexible orientation toward working with families, and (5) reduce pragmatic obstacles to family participation (Conduct Problems Prevention Research Group, 2002). In particular, these researchers recommend such practices as making repeated visits and invitations to parents, providing transportation for parents, and providing a welcoming atmosphere as ways to increase parent participation rates (Conduct Problems Prevention Research Group, 2002).

Community and Business Partnerships

Career and vocational training has been strongly linked to the increased incidence of both employment and continued schooling following release from juvenile justice institutions (Bullis & Yovanoff, 2002; Bullis et al., 2002). An important body of research suggests, however, that the quality of vocational training may be dependent upon the availability of community and business partnerships forged by the particular institution (Levinson, 1998; Lipsey, 2003; Sherman, Gottfredson, MacKenzie, Eck, Reuter, & Bushway, 1997; Task-Force on Employment and Training, 2000; Walker, 1997). For example, the results of a meta-analysis on vocational programs showed that the more successful programs provided actual work experience (Lipsey, 2003). In addition, other authors have identified the early involvement of employers in the lives of offenders and a paid position as soon as possible

following release as critical to success in the labor market (Sherman et al., 1997; Task-Force on Employment and Training, 2000; Walker, 1997). Also, as discussed in the earlier subsection on student involvement, such training has clear and direct effects on the behavior of this population, such as fostering prosocial reactions to job stress and authority. Community and business partnerships are vital to juvenile justice programs in a second fashion: their financial ability to provide the resources necessary to engage students in school and provide them with realistic training opportunities.

A third function of such partnerships is their potential for providing aftercare services and support for released students. Because of the myriad disadvantages faced by the majority of juvenile justice students, collaboration between multiple agencies, spanning several disciplines, is critical to the successful treatment and community reintegration of these youths (Briscoe & Doyle, 1996). The bulk of this body of literature essentially points to the need for aftercare services that integrate intensive surveillance with services (e.g., education, work, family therapy, substance abuse, peer influences, community responsibility and interaction) (Altschuler and Armstrong, 1996; Briscoe & Doyle, 1996; Goodstein & Sontheimer, 1997). Importantly, this research also recommends that such services be initiated while the youths are still incarcerated and then should be continued in the community through close contact with case managers (Altschuler & Armstrong, 1996; Haggerty, Wells, Jenson, Catalano, & Hawkins, 1989). Students who received these services demonstrated improvements in social and problem-solving skills, self-control skills, drug avoidance skills, and consequential thinking skills as compared to released juvenile offenders who did not receive aftercare (Catalano, Wells, Jenson, & Hawkins, 1989).

Section Summary

This section has identified dozens of effective practices for improving the behavioral performance of disabled and incarcerated juveniles. As previously mentioned, however, there is considerable overlap between the best practices discussed in this section and those covered in Section 6.2. Because disabilities are strongly related to both academic and behavioral disadvantages, this overlap should not be surprising. Instead, what is needed is a classification scheme of best practices that targets both education and behavior in juvenile justice facilities.

6.4 Summary Discussion: Best Practices in Juvenile Justice Education

This chapter began by asking the question, what are the common educational deficiencies of incarcerated delinquent youths and the best practices for addressing these common deficiencies? First, the common characteristics of the juvenile justice population were identified, thereby explaining by what mechanisms school is related to delinquency. In brief, these features include: a disproportionate presence of mental and emotional disabilities, low IQ, poor prior academic performance (i.e., low grades and low rates of advancement), and poor prior school-related behavior (i.e., lack of attachment to school, conduct problems,

absenteeism, suspensions, expulsions, and dropouts). Second, a summary of the literature examining effective techniques for improving the academic and behavioral performance of juveniles with these characteristics was presented. To address the needs of delinquent and disabled students, rigorous and ongoing assessments and individualized student plans were discussed, as was interagency and interdisciplinary collaboration. To improve the academic performance of incarcerated delinquent youths, the following general strategies were advanced: teacher training, an integrated and holistic curriculum, credit recovery programs, and targeting reading and speech deficiencies. Finally, to improve the school-related behavior of this particular population, several additional practices were provided, including a safe and positive school atmosphere, appropriate classroom organizational structure, multiple instructional strategies and the incorporation of technology, teacher training, student and parent involvement, and community and business partnerships.

The considerable overlap between best practices that are designed to address specific disadvantages clearly warrants, however, the formulation of thematic and concise categories of best practices for dealing with these disadvantageous population characteristics. Thus, the following classification scheme includes six general areas with which to categorize and summarize the best educational practices identified in Sections 6.2 and 6.3: school environment; resources and community partnerships; assessments, diagnostics, and guidance; exit and aftercare services; curriculum and instruction; and educational personnel and teachers. Each of these areas of best practices will be briefly summarized (for a more detailed explanation of these areas, refer to the case study scoring rubric in Appendix #).

School Environment—Such issues as communal organization, student bonding, an inclusive learning environment, appropriate class sizes, and student and parent involvement are included in this domain of best practices. Essentially, these components all serve to create an environment where education is the number one priority, students are all treated equally and respectfully, teachers enjoy their working environment and receive administrative support, and both students and their parents are seen as valuable resources.

Resources and Community Partnerships—This area of best practices includes adequate learning materials, technology, media resources, community and business partnerships, and collaborative relationships with relevant agencies. Viewing community partnerships as a valuable resource, this category includes those components that equip both the school and the student with the necessary means to achieve their highest academic, vocational, and social potential.

Assessments, Diagnostics, and Guidance—This area is concerned with the intake procedures and continual monitoring and adjusting of the students' individualized plans. Specifically, this area includes a rigorous assessment process, individualized student plans, constant monitoring of student progress, and providing students with guidance and feedback regarding their progress. The idea here is that the transition process must begin upon student entry into the program, be tailored to the students' individual abilities and needs, and be appropriately altered to reflect changing ability levels and/or interests.

Exit and Aftercare Services—While the previous domain is essentially intake- and program-oriented, this area is more concerned with the exit and community aspects of transition. Here, the critical components are an exit plan that is designed and implemented upon student entry; assistance with the students' return to school, their school graduation, or employment for older youths; assistance with transition back into the community; and a community-based aftercare program. The basic idea behind these components is that juvenile justice students need extensive and continuous assistance with their transition back to their schools and home communities.

Curriculum and Instruction—This area includes an individualized and holistic curriculum; credit recovery programs; an emphasis on reading, writing, and speech; and various instructional strategies. As the previous sections in this chapter illustrated, juvenile justice students generally exhibit a wide range of cognitive and behavioral disorders, and these specific strategies have been documented to have positive effects on such populations.

Educational Personnel and Teachers—While the foregoing aspects of successful juvenile justice education programs are clearly important, this area may well be the most critical in determining the success of a given program. This area focuses on the *people* involved in these systems on a daily basis and includes such topics as teacher certification, teaching experience, well-designed recruitment and retention practices, and teacher training and preparation. As Chapter 7 will demonstrate, this area of best practices is highly influential and appears to play a significant role in determining the degree to which other areas of best practices are implemented and maintained.

This classification scheme encapsulates the literature reviewed in this chapter by organizing each of the dozens of identified effective strategies for addressing the special needs of incarcerated youths into six general categories. This chapter only answers one of two crucial questions: what are the best educational practices for juvenile justice populations? The second question, which is perhaps even more important, is concerned with the implementation and maintenance of these identified best practices? Specifically, what specific program processes appear to be related to best practices? This question is the focus of the following chapter, Chapter 7: Case Studies and Demonstration Sites.

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