Chapter Two: Literature Review

Introduction and Theoretical Framework

For this chapter, I focused on the research on employment data for individuals with intellectual disabilities in general, framing a background for the need for intervention/action, and then moved into an investigation of research that demonstrates outcome for students with ID who have attended a PSE program. In the attempt to narrow the scope of my inquiry, I quickly discovered both through experience and through the claims of researchers before me that there is a very limited amount of research currently available regarding outcome data for PSE programs for individuals with ID. This point is manifest in the research in three ways: (1) direct statement (Grigal, Hart, & Weir, 2012a; Hart et al., 2010; Moon & Neubert, 2006), (2) blending of ID with other disability categories for the formulation of generalizations (Smith, Grigal, & Sulewski, 2012; Zafft, Hart, & Zimbrich, 2004); and (3) attempts to provide specific outcome data for students with ID who attend(ed) PSE programs, utilizing small sample sizes (Grigal, Dwyre, Weir, 2010; Migliore & Butterworth, 2009; Zafft et al., 2004).

This paucity of information is not surprising given the recent-emergence of PSE programs for individuals with ID; indeed, the existence of this issue is one of the reasons for the importance of this study. Nevertheless, the lack of existing, focused research currently available is worth noting at the outset, as it has an immediate effect on the volume of this chapter.

In order to expand the issue and further frame the research, I approached the topic by investigating the issue of employment of individuals with ID in general, focusing on the content of my baseline data: the National Longitudinal Transition Inventory-2 (2009).
Following this, I explored literature that demonstrated the connection of PSE programming to the goal of employment for individuals with ID, which forms the bridge to my main focus and brings up the final component of this section: literature that demonstrates the degree of success that has been experienced in terms of employment for individuals with ID who have attended PSE.

One final point to make here is that despite the limited quantity of information regarding program outcomes, the Higher Education Opportunities Act of 2008 (HEOA 2008) has already demonstrated preferential treatment for some program types over others. Based on the HEOA 2008, federal funds are made available for the development of PSE programs for individuals with ID in 23 states and has enabled federal grants for students attending a recognized Comprehensive Transition Program (CTP). CTPs represent a specific set of values for PSE programs. According to the HEOA 2008, CTPs are degree, certificate, or non-degree programs that meet specific qualifications, including:

- Are offered by a college or career school and approved by the U.S. Department of Education;
- Are designed to support students with intellectual disabilities who want to continue academic, career, and independent living instruction to prepare for gainful employment;
- Offers academic advising and a structured curriculum; and
- Requires students with intellectual disabilities to participate, for at least half of the program, in:
  1. Regular enrollment in credit-bearing courses with nondisabled students,
2. Auditing or participating (with nondisabled students) in courses for which the student does not receive regular academic credit,

3. Enrollment in noncredit-bearing, non-degree courses with nondisabled students, or

4. Internships or work-based training with nondisabled individuals.

In this regard, the HEOA demonstrates preferential treatment for programs that meet requirements of program objectives, structure, affiliation, and integration practices. Put another way: theoretically, individuals with ID should experience greater success after graduating from a CTP than those who did not attend a CTP. Additionally, CTPs are here implied to have better outcome expectations than PSE programs that are not CTPs. Finally, integrated programs are given higher value than specialized programs.

The three groups (two test groups, one comparison group) represented in this current case study include individuals with ID who are graduates from a CTP, graduates from a PSE that is not a CTP, and those who did not attend any PSE program. Comparisons of these three groups thereby allow me to explore the theoretical propositions implied by HEOA 2008.

**Theoretical framework.** Bronfenbrenner’s (1979) book *The Ecology of Human Development* presented a groundbreaking insight into human behavior and development that has become seminal for other theories and practices in anthropology and education alike. Bronfenbrenner’s model suggests that humans simultaneously occupy multiple social ecosystems that maintain dynamic interactions; human development, therefore, must be understood through a holistic lens of these hierarchical ecosystems (1979). According to Bronfenbrenner, there are 4 ecological levels that can be investigated:
• **Microsystem**: “a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics” (p. 22).

• **Mesosystem**: “the interrelations among two or more settings in which the developing person actively participates (such as, for a child, the relations among home, school, and neighborhood peer group: For an adult, among family, work, and social life)” (p. 25).

• **Exosystem**: “one or more settings that do not involve the developing person as an active participant, but in which events occur that affect or are affected by, what happens in the setting containing the developing person” (p. 25)

• **Macrosystem**: the larger cultural world or society surrounding the developing person.

This might be understood graphically as follows. In this design, the microsystems, in which the individual is a part, overlap in places creating the mesosystems. The exosystems affect the microsystems and mesosystems, but the individual him/herself is not part of the exosystems. All systems are part of the larger macrosystem.
This concept is salient for discussion of pedagogical theory in special education perhaps to an even greater extent than general education. The reason for this is that special education - by its nature - puts a high degree of focus on the developing individual him or herself. For example, this point could be demonstrated through the use
of individualized education plans (IEPs). However, Bronfenbrenner theory seems to suggest that this microscopic view of the student’s needs may ultimately be of disservice to the student if we are not considering how they interact in other roles beyond the microsystem of the classroom. A pertinent question may be not just ‘how are we helping students develop,’ but more specifically, ‘how are we helping the student develop in the context of the social systems to which they belong?’

PSE programs for individuals with IDs have emerged to explicitly facilitate the migration from one microsystem (or one set of microsystems) to another (e.g. from high school to workplace, and/or from living with caregivers to living independently) through the use of hands-on experience, training, and both direct and indirect instruction. However, there is apparent theoretical disagreement in how the PSE program’s own microsystem should be designed to facilitate student navigation of their other current and future microsystems, mesosystems, exosystems and macrosystems.

Because Bronfenbrenner's model underscores the impact of environment on the individual’s development, this is a question of great importance.

**Employment of Individuals with ID Compared to General Populace**

Because this thesis is concerned with employment outcomes for individuals with intellectual disabilities, it is necessary to establish the baseline for employment expectations. The National Longitudinal Transition Study-2 (NTLS), which was funded by the U.S. Department of Education, provides data specific to employment of individuals with intellectual disabilities (and other disability types) regardless of any other variables. As such, it represents the general body of individuals with intellectual disabilities, of whom few or none would have graduated from PSE programs at the time.
of the data collection (2009). Therefore, the NTLS-2 provides an excellent baseline/comparison group for this study.

According to the NTLS-2, young adults (aged 21-25) with disabilities of any kind had a 59% rate of employment outside the home (National Center for Special Education Research, 2009). More useful, however, are the subcategorizations in the NTLS-2, which demonstrate discrepancy among the subgroups of individuals with disabilities. For example, whereas 66.7% of individuals with learning disabilities were employed at the time of the survey, only about 35% of those with an intellectual disability or autism were likewise employed. By means of comparison during the same period, the US Bureau of Labor Statistics shows average employment rates of 90.2% for 2009 (2009).

Additionally telling are the average wages of individuals with intellectual disabilities compared to other groups. The NTLS-2 reports individuals with intellectual disabilities earning a mean (average) hourly income of $7.80/hour in 2009, when the minimum wage was $7.25/hour. It further demonstrates that among those who were employed, 40.3% made less than the minimum wage $7.25/hour, and 91.7% made less than $10.50/hour. By way of contrast, the mean hourly income for the general population in America was $20.90 in 2009 (Bureau of Labor Statistics, 2009). In summary, a contrast of employment statistics between individuals with intellectual disabilities and the general populace demonstrates gaps of 55% in terms of overall employment and 65.5% in mean income.

Though a critical analysis of the reasons for this fact is beyond the scope of this thesis, it is worthwhile to note briefly that other researchers have summarized the cause of this discrepancy as being due to both external/social issues and an internal/personal
lack of motivation among many individuals with intellectual disabilities. As reported by Leslie Francis in the Journal of Gender, Race, and Justice: “[Barriers to employment for individuals with intellectual disabilities] include negative attitudes among employers, separation between special education and vocational programs, lack of supportive services, and a tendency to segregate people with cognitive disabilities into sheltered work arrangements” (Francis, 2004). It may appear, therefore, that segregation begets segregation.

PSE Programs Designed for Increasing Employment of Individuals with ID

Attempts have been made to remedy the issue of lack of employment among individuals with ID through the provision of PSE options.

Recent paradigm shifts have led to awareness of the fundamental similarities of individuals with ID and those without, and thereby an assumption has emerged that that which benefits the general populace may also benefit individuals with ID. By extension, PSE attendance could increase the employability of individuals with ID as it does individuals without (Wehman & Yasuada 2005; Gilmore, Bose, & Hart, 2001; Migliore & Butterworth, 2009).

Researcher Dr. Meg Grigal states this point explicitly as: “Going to college is and always has been connected to greater rates of employment and higher wages. It is likely given the opportunity, and the means to document the outcomes, that students with intellectual disabilities would mirror these trends” (Grigal & Hart, 2010, p. 2) and is also made manifest in literature documenting reflections of pilot programs such that of The College of New Jersey (Carroll et al., 2008). In 2003, the administrators anticipating the development of a PSE program for individuals with ID at The College of New Jersey
sought to use integrative methods of programming in order to promote outcomes for students with ID that were hoped to be similar to the outcomes of students without ID (Carroll et al., 2008).

Though there are many purposes for attending college including practical skill development (Grigal & Hart, 2010); social development (Thoma, 2012); self-determination skills (Grigal, Hart, & Weir, 2012b); etc, employment outcomes remain the pragmatic focal point of the vast majority of PSE programs for individuals with ID (Papay & Bambara, 2011; Thoma, 2012). Indeed, the movement toward provision of PSE programming for individuals with ID is based on the presupposition that postsecondary education correlates strongly with employment and income (Migliore & Butterworth, 2009) as well as that attaining some PSE is becoming an “increasingly important prerequisite to independent adult living” (Zafft et al., 2004, p. 45).

The focus on provision for increased employment outcomes of individuals with ID was demonstrated early in the development of inclusive PSE programming as a 2004 study showed that among 11 pilot programs in the Maryland area “Almost all students (87%) were involved in employment training in the community or on a college campus” (Neubert, Moon, & Grigal, 2004, p. 22). During the same time, student enrollment in college courses was limited to just 36% (Neubert et al., 2004). A follow-up, expanded national survey of transition programs in 2011 confirmed the primary focus on employment outcomes saying that “almost all program coordinators [of the 52 programs surveyed in this study] responded that the purpose of students [with an ID] being on a college campus was for opportunities for employment or vocational training” (Papay & Bambara, 2011, p. 90). Course enrollment continues to be low (25% in the Papay
survey), which further underscores the employment-based focus of PSE programs for individuals with ID.

**Employment of Individuals with ID Who Have Attended a PSE Program**

Given the poor employability of individuals with ID (National Center for Special Education Research, 2009) and the explicit attempt by PSE programming to rectify this issue (Grigal, Hart, & Weir, 2012b), it follows to investigate the level of improvement in terms of employability for individuals with ID who have graduated from the said PSE programs. However, this is an area in which current literature is significantly lacking, as the overwhelming majority of the literature available regarding PSE programs for individuals with ID is descriptive in nature (Gaumer, Morningstar, & Clark, 2004; Grigal, Hart, & Weir, 2012a; Grigal, Neubert, & Moon, 2001; Hart & Grigal 2008; Hart, Mele-McCarthy, & Pasternack, 2004; Neubert et al., 2004; Papay & Bambara, 2011; Zafft et al., 2004).

Some of the most recent literature directly expounds on this present issue. For example, Thoma, et. al., comment in a thorough 2012 review of literature:

*The majority of research studies are descriptive in nature. Most research in this area describes specific programs at institutions of higher education or an individual student’s experience. Overall, studies reported positive experiences for individual students with ID who participated in PSE; however there is little empirical evidence to support claims that the same kind of improved outcomes exist for other groups of students who go on for PSE.* (p. 1123)

Researchers Grigal, Hart, and Weir concur suggesting that “there is a need for further research to understand how PSE impacts employment outcomes for people with
an ID, and to fully understand how the various characteristics and practices used by PSE initiatives impact employment outcomes” (2012a, p. 232).

That being said, there have been some reports regarding outcome of individuals with ID who have attended PSE programs. Data collected from these different studies show wide variation in the degree to which PSE programs are successful in providing for employment-based outcomes of students, but nevertheless consistently demonstrate increased success compared to those without postsecondary experience.

For example, a 2012 analysis of American Community Survey Data revealed some justification for the promotion of PSE as a means of increasing employment in that 43% of individuals with ID who attended college without earning a degree and did not have Social Security income were employed in 2010, compared to 31% of the same demographic who had attained only a secondary school diploma and 19% who had attended, but not completed, secondary school (Smith et al., 2012).

Likewise, a 2009 study following individuals with ID who employed the services of Vocational Rehabilitation showed that where 32% of individuals who did not attend any PSE were employed; this number moved up to 48% of those who did attend, but did not earn a degree, and 58% of those who attended a PSE and did earn a degree (Migliore & Butterworth, 2009).

A 2010 case study of two transition-program schools in Connecticut and Maryland, respectively, demonstrated even higher degrees of success as 83% and 72% of respective graduates earned paid employment upon exiting the program (Grigal et al., 2010).

In addition to positive correlation between employment and level of education, other employment-related benefits have been chronicled. For example, a 2004 case study
of 40 youths with significant disabilities who did and did not attend PSE revealed that

(a) students with postsecondary education experience were more likely to be employed in competitive work than in sheltered employment\(^4\) and (b) students who participated in postsecondary education and who were engaged in competitive employment were less likely to need employment supports, compared to their counterparts without postsecondary education. (Zafft et al., 2004, p. 50)

These reports, though few and limited in nature, begin to provide a pattern whereby the original assumption that postsecondary education may increase the employability of individuals with ID appears to be correct. Nevertheless, the limitation of available data does justify the call for further and more comprehensive quantitative studies present in recent literature (Grigal, Hart, & Weir, 2012a, Thoma, 2012).

**Summary and Chapter Conclusion**

Individuals with intellectual disabilities are substantially less likely to be employed and earn substantially less than those who do not have an ID. The vast majority of literature related to PSE for individuals with ID is dedicated to the description of emerging PSE programs. The National Longitudinal Transition Study-2 (2009) offers data that may be used as a baseline indicator of the degree to which this is true. The study demonstrates a 35% employment rate for individuals with ID in 2009, which contrasts with 90.2% overall employment for the general adult population in the same year, according to the US Bureau of Labor Statistics.

Substantial discrepancy was also noted in hourly rate for those who are employed. There was a $7.80/hr mean for employed individuals with ID in 2009 (National Center

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\(^4\) A type of employment for individuals with ID whereby an employer may pay employees wages below the minimum wage, reflecting the outcome of work performed.
for Special Education Research, 2009) compared with $20.90 mean income for the average American in the same time period (Bureau of Labor Statistics, 2009).

Postsecondary programs designed to accommodate individuals with ID began emerging in the early 21st century with the explicit purpose of combating this discrepancy by providing the means to higher education, which has traditionally correlated with positive employment outcomes for people with and without disabilities (Hart et al., 2010; Wehman & Yasuada 2005; Gilmore, Bose, & Hart, 2001).

Given the relative newness of this initiative, the significant majority of literature regarding PSE for individuals with ID is descriptive in nature (Grigal, Hart, & Weir, 2012a; Hart et al., 2010; Moon & Neubert, 2006). However, a few surveys and studies have been published to date. While sample sizes are consistently small, which prevents generalization of the data, there is an emerging pattern that demonstrates increased educational attainment correlates positively with employment outcomes. (Smith et al., 2012; Migliore & Butterworth, 2009; Grigal et al., 2010; Zafft et al., 2004).

More (and more comprehensive) quantitative outcome research is needed.

**Conclusion.** Given that PSE programs have emerged for the explicit purpose of increasing the employment of individuals with ID, the lack of quantitative studies demonstrating the efficacy of the programs in meeting this purpose is problematic. Some of the most recent and most comprehensive literature reviews focus on quantitative studies as a critical next step for research in this emerging field. This study, therefore, is designed to step into that current gap to help provide a case study in response to the call for research to help “understand how PSE impacts employment outcomes for people with an ID, and to help develop understanding of how the various characteristics and practices
used by PSE initiatives impact employment outcomes” (Grigal, Hart, & Weir, 2012a, p.232).