

SELF-DETERMINATION IN COLLEGE PROGRAMS FOR STUDENTS WITH  
INTELLECTUAL DISABILITIES

by

Melody M. Wright

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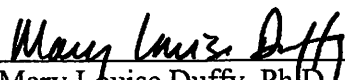
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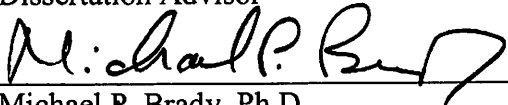
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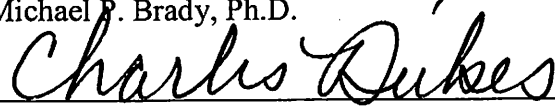
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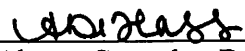
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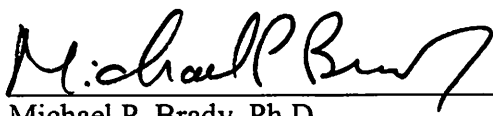
  
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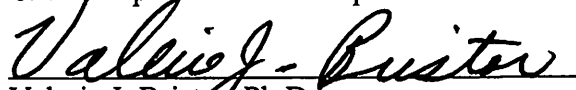
  
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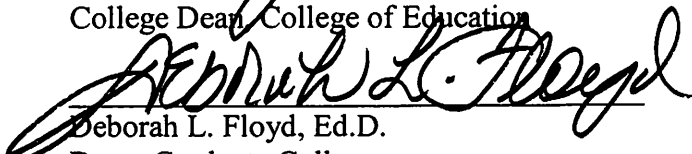
  
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## ABSTRACT

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Title: Self-Determination in College Programs for Students with Intellectual Disabilities  
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One of the ways students with an intellectual disability (ID) can reach their fullest potential is by attending an institution of higher education; too few universities and colleges offer programs for these students. There are over 3,000 universities and colleges throughout the United State, yet only 272 of them offer programs for students with an ID (Think College, 2017). Within the identified programs, there is variation in location, length, goals, and methods (Grigal, Hart, & Weir, 2012). This study used an iterative classification process to first identify the programs serving students with ID located on college campuses, then analyze program websites to determine how they increase self-determination (SD). Phase 1 of the study used categorical sorting to identify programs that (a) served students with identified intellectual disabilities who had exited the school system; (b) were located on a college campus; (c) were run by a college; and (d) followed a college semester/quarter calendar. Phase 2 involved reviewing the websites for the programs meeting those criteria to identify self-determination activities and classes. In

Phase 3 of the study, an online survey was sent to program administrators to verify and expand the description of self-determination activities. Results of this study show college programs for students with ID promote SD through instruction; however, the teaching methods vary from program to program. SD instruction is delivered by staff, peer mentors, and faculty. Programs measure SD outcomes; however, the tools used vary from program to program, and they are not applied systematically. The examination of college program practices and outcomes is central to further program development. Future research is needed to determine long-term independent living and employment outcomes of students with ID who attend college programs.

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## CHAPTER 1: INTRODUCTION

Central to self-determination (SD) theory is the distinction between autonomous motivation and controlled motivation. Autonomy involves acting with a sense of volition and having the experience of choice (Gagné & Deci, 2005). When people are autonomously motivated, they gain self-support and self-advocacy through their own actions. When people are controlled, they must act, think and feel in certain ways. Controlled motivation can be a function of external contingencies of reward or punishment (Gagné & Deci, 2005). Wehmeyer (2005) proposed the following definition: “Self-determined behavior refers to volitional actions that enable one to act as the primary causal agent in one’s life and to maintain or improve one’s quality of life” (p. 117). Supporting adults with an intellectual disability (ID) to increase their self-determination skills and to lead self-determined lives has been a strong focus of both research and disability services for more than two decades (Wehmeyer & Abery, 2013).

There are over 3,000 universities and colleges throughout the United States, and only 272 of them offer programs for students with intellectual disabilities (Think College, 2017). Self-determination should be a central organizing concept in college programs for all students with an ID (Wehmeyer, 2003). Given the importance of self-determination in the transition process for individuals with disabilities, it should be evident that self-determination takes a front seat in college programs (Wehmeyer, 2003). Yet, there is no shared understanding of the effective practices within college programs for students with

intellectual disabilities to promote increased self-determination and measure student progress.

This study was an in-depth look at where and how self-determination is taught, promoted, and measured in college programs for students with intellectual disabilities.

### **Research Questions**

The research questions of this study were:

1. What courses or activities are offered to promote self-determination in college programs for students with intellectual disabilities?
2. How do college programs for students with intellectual disabilities assess or measure student progress in self-determination?

## CHAPTER 2: LITERATURE REVIEW

This chapter reviews the legislation, policy, and research central to understanding the concept of how self-determination (SD) is promoted and assessed in college programs for students with ID. The first section outlines the laws that have led us to the development of college programs for students with intellectual disabilities, describes what college programs for these students look like, and presents a review of research on students with intellectual disabilities in college programs. The second section defines SD and describes how it is a predictor of college success. This section continues with information on how SD is promoted and assessed. A review of literature on the efficacy, instruction, and measurement of SD sums up the previous literature and the chapter closes with a rationale for this study. A literature review map outlines this in Table 1.

Table 1

*Literature Review Map*

---

**Legislation Impacts on College Programs for Students with ID**

Education for All Handicapped Children's Act (1975)

No Child Left Behind Act (2001)

Ayres, Lowrey, Douglas, & Sievers (2012); Dukes, Darling, & Bielskus-Barone (2017); Stodden, & Whelley (2004)

Individuals with Disabilities Education Act (2004)

Rehabilitation Act (1973)

Higher Education Opportunity Act (2008)

Goodman, Hazelkorn, Bucholz, Duffy, & Kitta, (2011); Kleinert, Jones, Sheppard-Jones, Harp, & Harrison (2012); Madaus, Kowitt, & Lalor (2012)

**College Programs for Students with Intellectual Disabilities**

**Program models.**

Grigal & Hart (2010); Thoma (2013)

**Program options.**

Thoma (2013)

**Dual enrollment.**

Gaumer, Morningstar, & Clark (2004); Grigal & Hart (2010); Hart (2006); Thoma (2013);

**College initiated.**

Grigal & Hart (2010); McDonnell & Hardman (2010); Thoma (2013)

**Individual or family initiated.**

Grigal & Hart (2010)

**Research related to College Programs for Students with ID**

**Program design and implementation.**

Folk, Yamamoto, & Stodden (2012); Hart (2006); Hart, Grigal, & Weir (2010); Hendrickson, Carson, Woods-Groves, Mendenhall, & Scheidecker (2013); McEathron, Beurhing, Maynard, & Mavis (2013); Morgan (2014); Papay & Bambara (2011); Plotner & Marshall (2014, 2015); Thoma (2013)

**Faculty, family, and student perceptions.**

Gallinger (2013); Griffin, McMillan, & Hodapp (2010); Griffin, Summer, McMillan, Day, & Hodapp (2012) Hafner, Moffatt, & Kisa (2011); Ryan (2014); Westling, Kelley, Cain, & Prohn (2013)

**Efficacy and outcomes.**

Gallinger (2013); Grigal, Hart & Migliore (2011); Grigal, Hart, & Weir (2012); Moore & Schelling (2015); Shogren, Wehmeyer, Palmer & Paek (2013); Uditsky & Hughson (2012); Zafft, Hart, & Zimbrich (2004)

---

(table continues)



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Table 1 Literature Review Map (continued)

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**Self-Determination**

Anctil, Ishikawa, & Scott (2008); Bracken (2005); Deci, Koestner, & Ryan (2001); Deci & Ryan (1985); Field & Hoffman (2007); Field, Martin, Miller, Ward, & Wehmeyer (1998); Martin & Marshall (1995, 1997); Nota, Ferrari, Soresi, & Wehmeyer (2007); Ward (2005); Wehmeyer (2003); Wehmeyer & Palmer (2003); Wehmeyer & Shalock (2001)

**SD as predictor of college and employment success.**

Anctil, et al. (2008); Field, Sarver, & Shaw (2003); Hoffman, Field, & Sawilowsky (2004); Getzel & Thoma (2008); King, Baldwin, Currie, & Evans (2005); Wehmeyer & Schwartz (1997); Sarver (2000); Wehmeyer (2005); Wehmeyer & Palmer (2003)

**SD instruction.**

Agran (1997); Bartholomew, Test, Cooke, & Cease-Cook (2015); Cantley, Little, & Martin (2010); Denney & Daviso (2012); Durlak, Rose, & Bursuck (1994); Farmer, Allsopp, & Ferron (2015); Hoffman, et al. (2004); Lamb (2014); Lee, Wehmeyer, & Shogren (2015); Mazzotti, Test & Wood (2013); Mazzotti, Wood, Test, & Fowler (2012); McGlashing-Johnson, Agran, Sitlington, Cavin, & Wehmeyer (2003); Shogren, Plotner, Palmer, Wehmeyer, & Paek (2014); Shogren, Wehmeyer, Palmer, Rifenburg, & Little (2015); Wehmeyer, Agran, & Hughes (1998); Wehmeyer, Palmer, Agran, Mithaug, & Martin (2000)

**Components of SD.**

Agran, Blanchard, & Wehmeyer (2000); Agran & Krupp (2011); Belfiore, Browder, & Mace (1994); Browder, Cooper, & Lim (1998); Deci, & Ryan (1985); Field, et al. (2003); Getzel & Thoma (2008); Loman, Vatland, Strickland-Cohen, Horner, & Walker (2010); Parsons (1990); Parsons, Reid, & Green (1998); Schleien & Larson (1986); Sigafos, Roberts, Couzens, & Kerr (1993); Wehmeyer (1995); Wehmeyer et al. (1998); Wehmeyer & Palmer (2003)

**SD measured.**

Hoffman, et al. (2004); Martin, & Marshall (1995, 1997); Mason, Field, & Sawilowsky (2004); Wehmeyer & Kelchner (1995); Wolman, Campeau, Dubois, Mithaug, & Stolarski (1994)

**Summary**

Agran, Wehmeyer, Cavin, & Palmer (2010); Curryer, Stancliffe, & Dew (2015); Deci, Schwartz, Sheinman, & Ryan (1981); Folk, et al., (2012); McGraw & McCullers (1979); Uditsky & Hughson (2012); Wehmeyer (2003).

---

## **Legislative Influence on the Creation of College Programs for Students With ID**

The Education for All Handicapped Children Act was passed in 1975 (Public Law 94-142). It guaranteed, among other rights, a free appropriate public education to each child with a disability. This had a strong impact on how children with disabilities were identified and educated. However, this law is only relevant for children through high school. It does not pertain to gaining access to a college education for students with disabilities, but it was the first law to recognize and mandate that children with disabilities deserve an appropriate education. Public Law 94-142 also contained a provision that students with disabilities should be placed in the least restrictive environment; one that allows the maximum possible opportunity to interact with typically developing students.

A consequence of federal and state legislation for k-12 special education is that it has influenced the growth and development of college programs for students with ID. One influential law is the No Child Left Behind Act of 2001 (NCLB) which was signed into law on January 8, 2002 (No Child Left Behind Act, 2001). NCLB is about accountability. It placed the focus in education on assessments, and the results of assessments. This legislation required a measure of yearly progress for all students and provided funding for states to develop tests aligned with state standards. It may not have been designed to change the curricula, as nothing in NCLB requires or even encourages states to attach “high-stakes” consequences to student achievement on large-scale assessments. It has been at the state and local levels where decisions about use of the test results has been observed. However, in many states, students and teachers have been held accountable based on these annual test scores. Schools identified as

underperforming could be closed. Teachers whose students failed to make adequate yearly progress could be denied bonuses, or be transferred to other less desirable schools. Students could be retained or be required to attend summer school.

This law refocused the measurement of educational achievement on statewide standards. Standardized testing and accountability pushed out authentic assessment and personalized learning goals. Individual Education Plans (IEP) were linked to grade level standards as opposed to goals based on student needs. The accountability principle of NCLB focused on all students achieving grade level standards. High standards created a push towards the thinking that all students, including those with ID should have opportunities in higher education. A benefit of this legislation was that those taking full advantage of this law could prepare some students with ID for success in college (Stodden & Whelley, 2004).

This thinking was not always beneficial for some students with ID. Grade level standards are not always relevant for all students. For example, state standards that require mastery of historical facts are not as valuable for some students with ID as mastery of more practical skills such as resume writing or interviewing skills. This researcher acknowledges that this is an area where there is some professional disagreement. Few professionals suggest that students with intellectual disabilities should not have access to, or instruction in grade level work, most agree, however that there should be a functional skill option for the students who cannot achieve grade level standards. Functional skills have importance in educational programs for students with disabilities and should be part of the school day and linked to the student's future goals

(Ayres, Lowrey, Douglas, & Sievers, 2012). College programs for students with ID can provide those functional skills.

Another piece of legislation which has influenced college programs for students with ID is the reauthorization of the Individuals with Disabilities Education Act of 2004 (IDEA) which was signed into law on December 3, 2004 with the purpose of aligning special education legislation (IDEA, 2004) to legislation related to general education (NCLB, 2002). IDEA mandates equity, accountability, and excellence in education for children with disabilities. This law required states and districts to develop alternate assessments aligned with the State's academic content standards and student academic achievement standards (IDEA, 2004). For students with an ID, this meant learning was focused on state standards, and minimized an emphasis on the IEP goals. Students who could not tie their own shoes were learning algebra and biology because that is what the standards required for a given grade level, and what the students would be tested on it. Independent living skills that used to be important for students with intellectual disabilities to learn and transfer to the community through community-based instruction replaced with more traditional science, history, and mathematics courses. Standards based curriculum was given greater emphasis than functional skills.

Unfortunately, a consequence of this legislation created a change in focus that lost the idea that an individualized, meaningful curriculum is the most appropriate curriculum to help students attain meaningful adult outcomes (Ayres et al., 2012). NCLB and IDEA's focus on accountability issues, to the exclusion of more functional skills, created a situation where students with intellectual disabilities frequently leave high school without life skills (Goodman, Hazelkorn, Bucholz, Duffy, & Kitta, 2011). However, the

changes authorized in IDEA, 2004 included clarification of transition services, like daily living skills and SD skills that prepare students with disabilities to move from school to post-school life, to begin at age 16. Students with disabilities require support to develop daily living and SD skills (Dukes, Darling, & Bielskus-Barone, 2017).

There are other laws relevant to college programs for students with disabilities. The first relevant law is the Rehabilitation Act of 1973 (Section 504). Section 504 is a federal law designed to protect the rights of individuals with disabilities in programs and activities that receive federal financial assistance from the U.S. Department of Education. It provides that no “qualified” person with a disability shall be denied participation in any program that receives federal financial aid (Rehabilitation Act, 1973). This law pertains to students with disabilities who are pursuing a degree at any college institution that receives federal monies.

Another relevant piece of legislation is the reauthorization of the Higher Education Opportunity Act (HEOA). Enacted in 2008, the HEOA contains several provisions to improve access to college opportunities for students with an ID (Madaus, Kowitt, & Lalor, 2012). With this law came the opportunity for students enrolled in a college program to work toward an educational credential, not necessarily a degree (Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012). This legislation was a victory for all students with an ID, as well as the colleges and universities providing a college program. For the first time in history, students with an ID were given the same right to apply for financial aid as their peers who did not have an ID, and to pursue a college education.

In the past, students with an ID were not eligible for financial aid for college, as they were not working toward a degree; nor could they, as many did not earn a regular high school diploma or a General Educational Development (GED) equivalency. New provisions for financial aid and funding were established in the HEOA (2008), along with a National Coordination Center (Think College). HEOA and the National Coordination Center devised criteria and a process to recognize college programs that were comprehensive in design and inclusive in delivery. Programs that met or exceeded those criteria were identified as Comprehensive Transition Programs and students in those programs were permitted to apply for (and receive) federal financial aid, including Pell Grants. The HEOA together with the Rehabilitation Act, allowed college education to become a reality for students with intellectual disabilities.

Public Law 94-142 required students to be educated with their peers. IDEA (2004) required transition planning to begin at age 16 to provide instruction in skills needed for post-school living. Section 504 of the Rehabilitation Act declared that no “qualified” person with a disability shall be denied participation in any program that receives federal financial aid. Finally, new provisions for financial aid and funding were established in the HEOA (2008), along with the Think College, which made it possible to provide programs for students with ID in the college setting. With each new piece of legislation, the stage was set for the development of college options for students with disabilities.

### **College Programs for Students with ID**

Until recently, entrance requirements for college programs have kept students with an ID from admittance by requiring a diploma that met state testing and/or

curriculum requirements. For example, completion of four credits of high school math and science to include Algebra, Geometry, Biology, and Chemistry is frequently required to receive a standard high school diploma for college admittance. With the waiver of the diploma criteria in the HEOA, college became available for students with ID, including universities, colleges, vocational schools and other career colleges that award academic degrees or professional certifications.

Think College ([www.ThinkCollege.net](http://www.ThinkCollege.net)) is a project at the Institute for Community Inclusion at the University of Massachusetts Boston funded by grants from the National Institute on Disability and Rehabilitation Research, the Administration on Developmental Disabilities, and the Office of Special Education Programs. Think College has collected data on programs for students with an ID for a nationwide database. This database includes programs run by IHEs, local school districts, private schools, and agencies. Programs may run anywhere from one to four years, and course requirements vary from program to program. Some programs have a specific course of study students must take (e.g., childcare, computers, hospitality) or a plan of study that has certain course requirements; yet others open the program to any course the students wish to take. Both program models and options will be further described in turn.

**Program models.** College program models for students with ID are categorized by the amount of time students interact with typical students. The amount of interaction with typical students (inclusion) distinguishes between the three college models. These models include: (a) substantially separate, (b) mixed or hybrid, and (c) inclusive with individual supports (Grigal & Hart, 2010). Thoma (2013) found that in addition to the level of inclusiveness, programs differed by program components and experiences.

Differences included employment options, residential program options, student co-curricular experiences, role of parents, course instructors, and program missions/priorities (Thoma, 2013).

The first model is the most restrictive model. In the restrictive or substantially separate model, students participate only in classes with other students with disabilities and do not have access to typical college classes (Grigal & Hart, 2010). There are different versions of this model. In some cases, the classes already exist at the college and are available to any member of the community with a disability; they are not created specifically for students with ID. Another version of this model uses unique coursework designed just for students with ID, which is not available to traditional college students. Students who enroll in the substantially separate model may be able to participate in general social activities on campus and may be offered work-based learning experiences.

The second model is the mixed or hybrid model. In this model, students with ID participate in academic classes and social activities with students without disabilities. Students have access, with support, to typical college classes for audit, credit, or noncredit. In addition, students may also take classes designed particularly for students with disabilities. Not only does this type of program provide access to college courses, this model also provides students with access to a wide range of activities, including employment experiences, life skills classes, and student clubs and organizations.

The third model is the most inclusive model. In the inclusive model, students are provided individual support to participate in college courses. Individual student goals determine the services provided. They take credit, noncredit, and classes for audit in both degree or certificate programs. Students take advantage of the services for students with



disabilities offered on the college campus and sometimes, support services for the students are provided through for profit or nonprofit companies. These students are just typical college students, but with extra support.

**Program options.** The term “college programs for students with ID” is an umbrella term for a range of programs with often very different goals, components, participants, and funding sources (Thoma, 2013). There are three options available for students with ID to pursue a college program: (a) dual enrollment, (b) college initiated, or (c) family initiated.

***Dual enrollment programs.*** These are also known as concurrent enrollment programs, “community-based transition programs” (CBT programs), or Transitional Programs for Students with Intellectual Disabilities (TPSID) and include programs not located on college campuses (Gaumer, Morningstar, & Clark, 2004). TPSID programs are grant funded, and established through five-year cooperative agreements between institutions of higher education and local education agencies (most often the local school district) to create or expand inclusive transition programs for students with ID. Students in TPSID programs are still students served under IDEA program policies, and are considered attendees of their local high school, but are bussed to a college to participate in activities and attend classes. Programs designed as dual enrollment programs face additional challenges as they not only need to follow the university system and policies, they must do so while also implementing policies and procedures of the local school district (Thoma, 2013).

Dual enrollment programs (concurrent enrollment, CBT, and TPSID) provide an environment of natural supports for employment and independent living skills, which

may not be available to students on a high school campus. These programs allow student the opportunity to participate in both academic courses and functional skills training needed for adult living (Grigal & Hart, 2010). Dual enrollment programs are specifically designed for students ages 18-21 who choose the option of remaining in high school and deferring graduation, as allowed by law until their 22nd birthday.

*College initiated programs.* Once a student exits high school, other options are available. The second college option, college initiated programs, are degree, certificate, or non-degree programs offered by an institution of higher education, designed to support students with intellectual disabilities who seek to continue academic, career, and independent living instruction at an institution of higher education to prepare for gainful employment. Students admitted to college initiated programs are required to demonstrate greater independence and motivation through interviews, personal statements, and on-campus orientation meetings (Thoma, 2013). These programs include an advising and curriculum structure (McDonnell & Hardman, 2010, p. 18). For students with an ID, they provide the opportunity for students who have exited high school to learn the skills they need in the environment where they will use them (Grigal & Hart, 2010).

Some colleges allow students in college initiated programs to audit classes, or take continuing education classes on campus with the support of outside agencies. Many of these programs provide support services for students with ID through a partnership with the local adult service agency (e.g., Department of Vocational Rehabilitation), community based disability organizations (e.g., The Arc), or grant funded programs (e.g., foundation supported). These programs are designed to support adult students with an ID on college campuses. They are usually tuition or fee based, and require the students to

apply for admission. These programs include employment skills and pre-employment training. Some include residential experiences and instruction in independent living skills. Others focus on social inclusion and make use of peer mentoring to achieve that goal. Still other college initiated programs have agreements with outside agencies to provide services for students with ID. Although some of the outside agencies provide services on a college campus, the colleges do not decide on the program of study, or provide supports identified by the agency. For example, *College Steps*, uses a peer mentor program to provide social support, tutoring, and individual supports on a partner college campus.

***Individual or family initiated.*** The final nontraditional path, the individual or family initiated support path, is defined by families of students approaching an institute of higher education without the support of an outside agency or school (Grigal & Hart, 2010). On this path, the students apply for admission in the traditional manner as a non-degree seeking student. Once admitted, the family, and/or the student, speaks to individual instructors to gain permission to attend class. Some families work with the disability service offices at the colleges to identify courses and supports available to them. In this path, the coursework may not include employment or life skills instruction. Social inclusion is the primary focus (Grigal & Hart, 2010). It is likely that SD skills would not be explicitly addressed or developed as part of any coursework. Support for these services is dependent on the student and the family. This option for college experiences is less like a “program” and more like an opportunity for individual students to experience college life. They are likely to vary in structure and content within the same college. The individual or family initiated program is reliant on the goodwill of the

IHE, the individual faculty, and the advocacy of the family. Regardless which path the student takes, programs vary from state to state, and college to college.

### **Research Related to College Programs for Students with ID**

Since 2000, research in college programs for students with intellectual disabilities has encompassed a variety of categories. Researchers have studied various aspects of providing college programs for students with ID. Some looked at program design and implementation. Others attempted to document students' experiences in PSE programs or describe the outcomes for students and other individuals involved in PSE programs.

**Program design and implementation.** The first category of research related to college programs is descriptive in nature. The process for new program development and the supports needed for these programs were studied to provide information for subsequent programs to follow.

In 2006, Hart completed an overview of different models and found that 87% of the students, regardless of the program model were involved in employment training of some type. This study was followed a few years later when Hart, Grigal, and Weir (2010) showed the high degree of variability among programs. The study by Hart, in 2006, and the follow-up study by Hart et al. (2010) provided overviews of different models, and the Think College database was established to consolidate college programs for students with ID. Using the Think College database, they had helped develop, McEathron, Beuhring, Maynard, and Mavis completed an iterative study in 2013 to provide a taxonomy of available programs.

Papay and Bambara (2011) used a national survey to suggest that each program is dependent on the type of institution hosting it. That study used descriptive methods of

analysis to examine the general characteristics of college programs for students with intellectual disabilities and the extent to which these students participated in college classes (Papay & Bambara, 2011). Data were collected through a national survey of college program coordinators in the United States between August and December 2008. To be included in the study, programs had to provide access to a college program located at a college or university. In addition, the programs had to provide services to individuals with intellectual disabilities aged 18-21 years who were still receiving special education services under IDEA. Using the Think College database, 87 programs were identified for inclusion. Researchers received 58 responses to the survey. Six programs were excluded because coordinators reported the program did not provide access to a college campus, or did not serve students who were still receiving special education services, or did not serve students with intellectual disabilities. Findings indicated three models of service delivery were represented by survey respondents. Most programs used the mixed model (n=40) whereas individualized and separate model types were used in the rest of the programs (n=6 of each type). The distribution of program models across program settings was approximately equal. School districts operated 58.8% of programs, but they may also have been operated by the college, an outside organization, or through a collaborative partnership between the school district and the college. Papay and Bambara (2011) suggested that the benefits of students with intellectual disabilities participating in college programs are that the programs offer a promising opportunity to promote lifelong inclusion and SD.

Folk, Yamamoto, and Stodden (2012) described the process of developing and piloting a program for students in two community colleges in Hawaii. The programs

described were new TPSID programs initiated the previous year. They interviewed students and faculty and found that for students participating in the project, college represented both a new social environment and a fresh chance to learn (Folk et al., 2012). The results from the first year of the program revealed that opportunities for students to develop SD skills and self-esteem would occur outside any curriculum or course content (Folk et al., 2012).

Hendrickson, Carson, Woods-Groves, Mendenhall, and Scheidecker (2013) provided a descriptive study of the Realizing Educational and Career Hopes (REACH) program at the University of Iowa as a step toward improved understanding of a college-experience program model. The REACH program is a two-year certificate program that Hendrickson et al., 2013 described it as a holistic program. Holistic is defined as students with ID taking classes with traditional college students, living on campus, and interacting with other college students on a consistent basis. The program description by Hendrickson et al. (2013) includes student goals (independent living, career development, academics, social relationships, SD) as well as program goals (effectiveness, sustainability, evidence-based practices, high quality staff, and continuous improvement). While the research did not share outcome data, substantial detail was included to guide those implementing a new college programs for individuals with ID.

Program directors and staff involved in the process of conceptualizing and implementing a college program may find difficulty in understanding the complexities of university administration systems, program development processes, and regulations based on law and common practice (Thoma, 2013). The focus of Thoma's (2013) study was to examine college programs for students with ID from the perspective of program staff.

She examined nine college programs for students with ID to determine the development process and the range of supports and services each provided (Thoma, 2013). Many of the program directors and staff spoke about the complexity of developing, implementing, and evaluating a college program for students with ID. Thoma found those involved in the study did not fully anticipate the levels or layers of work required to implement their vision for the program prior to getting involved in this work (Thoma, 2013). Most program directors in the study discussed the complexity of making continual improvements to their programs. That was true whether the program was still in its planning phase, newly implemented, or had been around for many years (Thoma, 2013).

Morgan (2014) explored how program development team members and relevant stakeholders understood the process leading to the implementation of their college program (Morgan, 2014). Interviews were conducted with participants in the college program's implementation and comprised the primary source of data. Morgan's (2014) findings suggest four areas of concern were most critical in influencing the program's implementation: (a) addressing parental expectations, (b) supporting the inclusion of students with intellectual and developmental disabilities in college, (c) defining the organization of the program, and (d) initiating friendships. The need also influenced implementation to provide intentional assistance to college students in expanding their social lives and developing genuine relationships (Morgan, 2014).

Plotner and Marshall completed two studies in 2014 and 2015 to address critical considerations for guiding college professionals and administration in program development, and in countering the barriers to implementation of college programs for students with ID. They recommended that program development should plan for the

needs of the faculty as well as the students. The implications of their two studies included a caution for program developers to anticipate a high likelihood that emergencies will happen, and students may not always act in appropriate ways in every circumstance (Plotner & Marshall, 2014). These studies contribute to understanding needed supports and the barriers encountered when developing college programs for students with ID.

The variation in models and designs for college programs for students with ID has been studied but continues to need further research. Hart (2006), Hart et al. (2010), McEathron et al. (2013), and Papay and Bambara (2011) all provide overviews or taxonomies of different models. Folk et al. (2012), Hendrickson et al. (2013) and Thoma (2013) each described supports and services in the development of individual programs. Morgan (2014) explored how the people involved in developing a program understood the process of implementation, and Plotner and Marshall (2014, 2015) extended these studies by describing the barriers to the implementation of these programs.

**Faculty, family, and student perceptions.** The second category of research involves perceptions of individuals participating in inclusionary college settings. This research evaluated the perceptions of the programs. There is research on family perceptions, faculty perceptions, and student perceptions (both traditional students, and students with ID participating in the programs on campus). Most faculty members participating in inclusionary college programs believe that students with ID should have the opportunity to learn in a college setting (Fisher, 2008). Parents struggle to understand the process of entrance into these programs and worry about their child's safety. However, they are excited because their child is in college (Griffin, McMillan, &



Hodapp, 2010). Traditional students were found to believe the programs are beneficial to both themselves and the students with ID, and students with ID believe they are gaining skills and status in society (Hafner, Moffatt, & Kisa, 2011).

Fisher (2008) investigated the faculty perceptions about the integration of students with ID into college programs. A survey was sent to faculty members in both colleges that host a program for students with ID, and to colleges that do not have such programs. That study revealed that 71% of the faculty members thought students with ID should be granted equal access to learn in college settings with traditional students. There was no significant difference in the responses from faculty at a college with a program, or at a college without one. Ryan (2014) surveyed 12 students attending a Vermont college program and found that the staff believed the students with ID gained personal growth and life skills, and that they had a positive impact on the campus.

In 2010, Griffin, et al. surveyed 108 family members of young adults with ID to investigate the issues that families consider when making decisions regarding college program options for young adults with ID. They found families considering college program options were mostly concerned about student safety, frustrated with barriers that prevented understanding of the programs, and believed employment training to be the most important component.

The *Cutting-Edge Program* at the Edgewood College in Wisconsin was the focus of a study by Hafner, et al., 2011. The results of their survey indicated 96% of the traditional students were comfortable being around students with ID. Similarly, a survey completed by Griffin, Summer, McMillan, Day, and Hodapp (2012) of 256 college students about their attitudes toward including students with ID returned positive results.

Overall, the typical students reported that the students with ID would benefit from inclusion, and that they were comfortable interacting with the student with ID on campus. Attitudes of typical students living on a college campus that offered an inclusive residential program were surveyed by Westling, Kelley, Cain, and Prohn, (2013). Major findings indicated a large majority of the respondents felt the program was beneficial to the participants and to typical college students. In another study, Gallinger (2013) interviewed seven students with ID who were attending a college program, about their college experiences. Gallinger found that the participants reported they perceived benefit and value in being a college student as it promoted a positive status in society. The participants consistently talked about academic growth, interpersonal relationships, employment potential, and SD as parts of their college experience.

Faculty, family, and students believe college programs for students with ID are beneficial to both traditional students and students with ID. College programs offer students with ID the opportunity to continue learning academic material, expand their social circles, gain employment experience, and develop SD skills and independence—all alongside their age peers enrolled in colleges. For these reasons, many parents consider participation in inclusive college programs to be a beneficial option for their children or young adults with ID (Griffin et al., 2010).

**Efficacy and outcomes.** The third category of research concerns the efficacy and outcomes of individual programs. A primary goal of many college programs for students with an ID involves career development, SD, and positive employment outcomes (Grigal et al., 2012; Moore & Schelling, 2015; Uditsky & Hughson, 2012). The studies by Uditsky and Hughson (2012) and Gallinger (2013) showed that students with an ID

benefit from college by securing meaningful employment, gaining knowledge and skills, developing friendships, increasing their sense of achievement and self-confidence, and increasing SD.

Shogren, Wehmeyer, Palmer, and Paek (2013) completed a longitudinal study on the relationships between SD and postschool outcomes for students with ID. Participants were 779 students recruited from six states and 50 school districts. Baseline data included demographic information and measures of SD, including *The Arc's Self-Determination Scale*. One outcome found in this study was the observation that higher SD led to higher levels of community access and employment.

Recent research demonstrates positive employment outcomes for students with ID who attend a college program. Zafft, Hart, and Zimbrich (2004) reported that participation in a college program for 40 students with ID correlated positively with increases in competitive and independent employment. Similarly, results from 18 college programs in Canada described by Uditsky and Hughson in 2012, indicated employment for students completing college programs exceeded 70%. As did a study by Moore and Schelling (2015) that indicates graduates from a college program had higher rates of employment than students who did not attend a college program.

Another study addressing outcomes, conducted by Grigal, Hart, and Migliore (2011) presented a secondary analysis of variables from the National Longitudinal Transition Survey 2 (NLTS-2) (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). While the NLTS-2 (Newman et al., 2010) involved surveying more than 530 students with ID and 11,000 students with disabilities as they transitioned from high school, Grigal et al.'s (2011) study focused on a subset of this data. Grigal et al. (2011)

considered how students with ID compared in employment outcome goals to the outcomes from students with other types of disabilities. Students with ID had less positive education and employment outcomes than did students with other types of disabilities. The only predictor associated with a greater likelihood of employment for students with intellectual disabilities was a post-school transition goal of attending a 2-year or 4-year college. “Having ever attended PSE, including a 2-year or 4-year college, was associated with a greater likelihood of employment for students with ID ( $p \leq .05$ ), but this relationship was not evident for students with other types of disabilities” (Grigal et al., 2011, p. 9). The sample size represented in this study provided opportunities for generalizing findings regarding student outcomes relative to any college program for students with ID.

Many adults with ID are either unemployed or underemployed, despite their ability, desire, and willingness to work. Research demonstrates that college program outcomes can lead to better employment (Gallinger, 2013; Grigal, et al., 2011; Grigal et al., 2012; Moore & Schelling, 2015; Shogren et al., 2013; Uditsky & Hughson, 2012; Zafft, et al., 2004;). These programs provide the opportunity to make choices, set goals, and develop problem solving and self-management skills (Gallinger, 2013). These skills can lead to increased opportunities for employment.

Since 2000, research in college programs for students with intellectual disabilities has encompassed a variety of categories. Researchers have studied various aspects of providing college programs for students with ID. Some investigate program design and implementation. Others attempted to document students’ experiences in PSE programs or describe the outcomes for students and other individuals involved in PSE programs.

These programs provide the opportunity for students with ID to increase employment opportunities and independent living skills, which in turn requires SD skills.

### **Self-Determination**

Self-determination continues to be one of the most critical concepts in the field of education (Wehmeyer & Shalock, 2001). Many definitions of SD have been offered in the literature (e.g., Deci & Ryan, 1985; Field & Hoffman, 2007; Martin & Marshall, 1995, 1997; Ward, 2005). Several of those definitions were summarized by Field, Martin, Miller, Ward, and Wehmeyer not cited correctly (1998) in the following consensus definition:

“Self-determination is a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one’s strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults.” (Field et al., 1998, p. 2)

Self-determination theory applied to education promotes students’ interest in learning, the value of education, and increased confidence in students’ capacities and attributes (Deci & Ryan, 1985). The theory distinguishes between self-determined (autonomous) and controlled types of intentional regulation (Deci, Koestner, & Ryan, 2001). Actions by people are motivated to the extent that they are engaged in and willingly endorsed by one’s sense of self (Deci et al., 2001). SD has been widely viewed as a fundamental human right “to govern or direct one’s own life without unnecessary interference from others” (Wehmeyer & Palmer, 2003, p. 132).

To put it simply, the more self-determined someone is, the more one directs his or her own life, and the less others make decisions for him or her. Fully self-determined people know what they want and how to get it. They choose and set goals, then work toward reaching their goals. They advocate on their own behalf; they are involved in solving their own problems, and they make decisions about their own lives. Promoting SD, a greater sense of choice, and greater personal responsibility is an important developmental goal, and research has shown that people who are more self-determined have more positive employment and independent living outcomes, and report that they have a higher quality of life (Anctil, Ishikawa, & Scott, 2008; Bracken, 2005; Nota, Ferrari, Soresi, & Wehmeyer, 2007; Wehmeyer, 2003; Wehmeyer & Palmer, 2003). Studies in SD show that it is an important goal for the typically developing population, as well as for those with various disabilities.

Self-determination theory identifies three fundamental needs for optimal function and growth: competence, relatedness, and autonomy (Deci, & Ryan, 1985). Competence is the desire and ability to have control and experience mastery of goals. In the education of students with ID, this can be as simple as pushing a red button to indicate “no”, or as complex as taking a foreign language course. Relatedness is the universal want to interact, connect, and care for others. In the education of students with ID, this can be as simple as waving hello to a classmate, or as complex as having an intimate relationship. Autonomy is the urge to be an agent of one’s own life. This does not necessarily mean to be independent of others, but for some students with ID, it may. For others, it might be making decisions about who is going to assist them with daily tasks. Although each student with ID may have different fundamental SD needs, the core needs are the same.

**Self-determination as predictor of college and employment success.** Self-determination has been identified as central to positive employment and independence for young adults with an ID. Wehmeyer and Schwartz (1997) examined adult outcomes of students with learning or intellectual disabilities one year after leaving high school. Those with higher levels of SD were more than twice as likely to be employed and earned an average of \$2.00 per hour more than employees with lower SD levels. Wehmeyer and Palmer (2003) conducted a study to examine outcomes of students with ID who were leaving high school as a function of their SD status. SD of 34 students with ID was measured at graduation from secondary school and follow-up surveys administered at the 1-year and 3-year anniversaries. Those with higher levels of SD were more likely to have moved away from home. Additionally, individuals with higher SD made significant advances in obtaining job benefits than their peers with lower SD.

The link between SD and postsecondary success is apparent when considering that the skills of SD are most effectively learned through real-world experience, which involves taking risks, making mistakes, and reflecting on outcomes (King, Baldwin, Currie, & Evans, 2005; Wehmeyer, 2005). These experiences help test strengths and limitations and identify goals. Studies also show that SD is the key to success in college education (Anctil et al., 2008; Field, Sarver, & Shaw, 2003; Getzel & Thoma, 2008). Success in college requires diligence, self-control, self-evaluation, decision-making, and goal setting. In short, success requires SD.

The importance of SD is supported by numerous studies, including a study by Sarver (2000), who investigated the relationship between SD and academic success for students with learning disabilities enrolled in a college program. The 88 chosen students

were administered the *Self-Determination Student Scale* (SDSS) (Hoffman, Field & Sawilowsky, 2004). Results from the 92-item self-report instrument were compared with the participants' grade point averages (GPA) at the time of the study, which were interpreted as a measure of their academic success. Total scores on the SDSS were found to be positively and significantly correlated with students' GPAs (Sarver, 2000).

Individuals with disabilities who learn and apply SD skills can be more independent than those with fewer SD skills (Wehmeyer, 2005). Students require prerequisite skills for active planning for the future that include setting goals, self-advocacy, self-regulation, and self-monitoring (Mason, Field, & Sawilowsky, 2004). These prerequisite skills are foundational components of SD (Mason, et al., 2004). Students with ID need the core components of SD skills to be directly taught and applied in community based experiences.

**Components of self-determination.** Self-determination emerges across the lifespan as children, adolescents, and adults learn skills and develop attitudes that enable them to become causal agents in their own lives. The attitudes and abilities they develop are the core components of SD. For those who fail to develop these skills naturally, instruction becomes necessary.

Self-determination for students in school many times begins with person-centered planning (PCP). For students with ID, decisions are frequently made for them, sometimes without any input from the individual. PCP involves a planning meeting led by the student where the most important issues in that student's life are addressed, including relationships, hopes and dreams, and barriers to realizing those dreams. Then a plan to find the supports to make the life they want is outlined, including who is



responsible for making that happen, and when. The PCP process emphasizes the individual's strengths and abilities, rather than limitations. It focuses on what is most important to have a life the individual considers worth living, rather than what professionals consider is best for them. It involves having the person with the disability be actively involved in making these decisions.

Self-determination begins with making choices. The ability to choose is critical to a positive quality of life for people with disabilities (Wehmeyer & Palmer, 2003). Choice making in the classroom involves giving students opportunities to choose instructional activities, partners, and schedules. Choice making in the college classroom may be addressed by the instructor providing choice-making opportunities related to assignments or activities.

Studies have demonstrated that individuals with disabilities can learn to make choices that affect their lives (Agran & Krupp, 2011; Belfiore, Browder, & Mace, 1994; Browder, Cooper, & Lim, 1998; Parsons, 1990; Parsons, Reid, & Green, 1998; Schleien & Larson, 1986; Sigafos, Roberts, Couzens, & Kerr, 1993). The range of individuals included in these choice-making studies indicates that cognitive functioning is not an exclusionary factor for making good choices; neither were the types of choice-making activities. The studies indicated that individuals with disabilities can learn to make good choices in school-based, home-based, and community-based settings. Loman, Vatland, Strickland-Cohen, Horner, and Walker (2010) recommended that students with disabilities be explicitly taught choice making skills and be given opportunities to use those skills as much as possible. When the choices are relevant they enhance motivation, learning, and well-being (Deci, & Ryan, 1985).

Choice-making and decision-making are connected. Self-determined individuals make choices, act on those choices, experience the results, then make new choices. Decision making involves analyzing a situation to determine possible outcomes, choosing the best scenario for oneself at that time, and following through with one's decision. Students who are more self-determined will consider how their decisions affect themselves and others (Field et al., 2003).

Problem solving refers to the capacity to identify a problem, generate possible solutions, evaluate the effect of each alternative, and ultimately choose the best option (Field et al., 1998). Often, students use problem-solving skills during activities, tasks, or situations that do not have an obvious or pre-determined solution. For students with an ID, the ability to problem solve is a valuable skill as they learn to overcome daily obstacles and determine for themselves how to obtain their goals when transitioning post school.

Goal setting requires students to identify something they wish to work toward and develop a plan to reach that objective. Learning how to set and attain goals enable students to understand and work toward what is most important to them. Getzel and Thoma (2008) found college students with disabilities believed goal setting to be very important for them to achieve independence. Participants in their study discussed the need for setting short-term goals that were realistic for careers and living on their own (Getzel & Thoma, 2008). Agran, Blanchard, and Wehmeyer in 2000 completed a study that used the *Self Determined Learning Model of Instruction* (SDLMI), a curriculum to teach students to set goals, act on goals and adjust goals and plans as needed. Nineteen students, diagnosed with intellectual disabilities who attended middle school, high

school, and PSE took part in the study showing that all but two of the participants improved their performance of target behaviors after receiving instruction using the SDLMI which focused on goal setting (Agran et al., 2000).

Self-management and self-regulation skills involve students monitoring and assessing their own behavior, and learning goals. Self-management requires the ability and confidence to believe in one's choices and do what needs to be done. Self-management requires awareness of strengths and weaknesses, and the ability to recognize when, and what assistance is needed to achieve one's goals.

Social skills are the skills used to communicate and interact with others, both verbally and non-verbally, through gestures, body language and personal appearance. It is not often that an individual can remain isolated in their office and still excel at their job. Most employers are seeking individuals with a skill set, and the ability to work well as a member of a team. Social skills are necessary in the workplace, in school, and in life. Navigating the complexities of getting and reaching goals is enhanced through good social relationships.

Whether the SD components and skills are taught in isolation, embedded in the general curriculum, or even taught as part of a SD course, the premise is that students need to develop and practice SD to become successful members of the community. Many students with ID may have limited opportunities to make choices and act independently. Research on the impact of each of these components of SD has shown positive changes in behavior in students with ID. Yet, no studies been completed on students with ID in college programs.

**Self-determination instruction.** Self-determination has a positive impact on employment, career goals, and community access (Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015), and it can be both taught and measured (Lee, Wehmeyer, & Shogren, 2015). The National Science Foundation sponsored a 3-year transition project (Bridges), which provided funding for a project, *College Success Class*, at Lansing [Michigan] Community College. The dual purpose of the project was to support student transition to college and to develop SD and self-advocacy skills. Data from all 20 students indicated that taking the *College Success Class* was beneficial in developing skills in SD and self-advocacy (Lamb, 2014).

A study by Durlak, Rose, and Bursuck in 1994 used direct instruction to teach students with specific learning disabilities the different components of SD. The study showed that all students used and generalized the skills they were taught. Farmer, Allsopp, and Ferron (2015) investigated the impact of a *Personal Strengths Program* on the SD levels of seven college students with learning disabilities. The study was a multiple baseline design which utilized the SDSS (Hoffman, et al., 2004) to measure SD. The SDSS was administered three times during the program. All participants had a higher score on the SDSS post-assessment than the pre-assessment, demonstrating a statistically significant increase. In the research by Durlak et al. (1994), Farmer et al. (2015), and Hoffman, et al. (2004) the consensus was that SD skills taught in classes show generalization and improvement of SD component skills. Those results lead to the understanding that SD skills can be taught successfully.

Curricula have been developed to teach SD in elementary and secondary school programs for individuals with varying disabilities. Other curricula have been developed

for teaching SD to transitioning students. Two examples of SD curricula designed specifically for students with disabilities include *Teaching self-determination to students with disabilities: Basic skills for successful transition* (Wehmeyer, Agran, & Hughes, 1998), and *Student-directed learning: Teaching self-determination skills* (Agran, 1997). Wehmeyer et al.'s (1998) book describes instructional methods for teaching basic SD skills to students with disabilities in elementary through high school. After an introductory chapter, each section provides strategies for individual components of SD. The final section provides a description of strategies and methods that enable teachers to promote SD through all phases of the transition process. Agran's book is a practical text that provides strategies teachers can use to help students manage their own behavior. It is based on the theory that self-management is more effective than teacher-directed instruction because it empowers students by allowing them to be more actively involved in their own decision making. Again, this curriculum is designed for k-12 learners.

More recently, studies have been completed on teaching SD in conjunction with state standards and the Common Core (Bartholomew, Test, Cooke, & Cease-Cook, 2015). This led to the development of a SD curriculum linked to Common Core Standards, called *ME!* (Cantley, Little, & Martin, 2010). Numerous studies have been conducted using the SDLMI developed by Wehmeyer, Palmer, Agran, Mithaug, and Martin in 2000, with positive results.

Regardless of the curricula used in the subsequent studies, both academic and behavioral improvements were observed in the participants of the studies (Lee et al., 2015; Mazzotti, Test & Wood, 2013; Mazzotti, Wood, Test, & Fowler, 2012; McGlashing-Johnson, Agran, Sitlington, Cavin, & Wehmeyer, 2003; Shogren, Plotner,

Palmer, Wehmeyer, & Paek, 2014; Wehmeyer et al., 2000). Other curricula are based on individual components of SD, such as making choices or goal setting.

Between 1990 and 1996, the U.S. Department of Education's (USDOE) Office of Special Education Programs (OSEP) funded 26 model demonstration projects intended to develop SD programs and practices for youths with disabilities (Denney & Daviso, 2012). These programs were designed to assist students in the development of specific SD skills such as self-awareness, goal setting, and decision-making (Mason et al., 2004). None of the studies were conducted at the college level, and most of the projects focused either on teaching self-advocacy to individuals with learning disabilities or mild intellectual disabilities, or on teaching choice making to individuals with moderate and severe intellectual disabilities (Denney & Daviso, 2012). Research is lacking in teaching SD skills to students with ID post high-school.

**Self-determination measured.** Not only does SD require direct instruction for students with ID, but also SD needs to be tracked and monitored. Some type of assessment is needed to measure the impact SD curriculum has on an individual's life. It is important to measure, and document increases in SD to determine the benefits to students. Five measures, based on research and positive outcomes, currently exist.

***ARC's Self-Determination Scale.*** The *ARC's Self-Determination Scale* (Wehmeyer & Kelchner, 1995) was developed by Wehmeyer and his colleagues. It was designed for two reasons: to assess individual strengths and weaknesses in SD, which would facilitate student involvement in their own life planning, and to be used as a tool to conduct research (Wehmeyer, 1995). This instrument is available free of charge on the Internet.

***The AIR Self-Determination Assessment.*** The American Institutes for Research (*AIR*) *Self-Determination Assessment* (Wolman, Campeau, Dubois, Mithaug, & Stolarski, 1994) focuses on two main components: capacity and opportunity. Capacity refers to the knowledge, and ability for students to manage their own decisions. Opportunity refers to the student's chances to use their knowledge and abilities both at home and in school settings.

***The ChoiceMaker Self-Determination Assessment (CM).*** The *ChoiceMaker Self-Determination Assessment* (Martin & Marshall, 1995) is the only curriculum-referenced tool to measure students' SD skills. It is designed to match the *ChoiceMaker Self-Determination* curriculum and objectives. Developed by Martin and Marshall, it is applicable for students with mild to moderate disabilities and measures SD goals, involvement and attainment of IEP meetings and goals (Martin & Marshall, 1997).

***The Self-Determination Assessment.*** Both the *Field Hoffman Self-Determination Assessment Battery* (SDA) and *The Self-Determination Assessment<sub>Internet</sub>* (SDA<sub>i</sub>) were developed at Wayne State University by Hoffman et al. (2004). These assessments include three instruments that measure cognitive, behavioral, and affective characteristics associated with SD. These characteristics are assessed from the perspectives of students, parents, and advisors. The instruments can be administered together or individually. This approach to SD assessment focuses on and delineates those variables related to SD that are within the individual's control and are potential targets for instructional intervention (Mason et al., 2004).

Each of the five measures assesses different components of SD as shown in Table 2. Along with the method used to measure SD (self-report, parent, faculty perceptions),

the appropriate age group is indicated for each. Only the SDA and ADA<sub>i</sub> include standards for young elementary aged students as well as standards for college aged students. Table 2 also lists the components of SD measured in each assessment. It is important for users to consider the objectives of their instruction to determine the most appropriate measure to be used.

Table 2

*Comparison of Self-Determination Assessments*

	AIR	ARC	CM	SDA & SDA <sub>i</sub>
Self-Report	X	X		X
Parent Report	X			X
Teacher/other	X		X	X
Age of students	All	Adolescents	Adolescents	Young children Adolescents College Students
# of items	10	72	62	30
Categories	Knowledge Abilities Perception Chances to use knowledge	Autonomy Self- Regulation Psychological empowerment Self- realization	Goal setting Person- centered planning Attainment of goals	Self-knowledge Self-acceptance Goal planning Acting on plans

*Note.* AIR = American Institutes for Research; ARC = Arc Self-determination Scale; CM = Choice Maker Assessment; SDA= Self-Determination Assessment; SDA<sub>i</sub> = Self-Determination Assessment, Internet.

All five of the SD assessments described here collect data using self-reporting from students as well as parents or teachers. Self-reporting can have issues with validity, such as accuracy or image management. Some participants are more concerned with managing how they appear than they are with accuracy in their reports. The level of accuracy may vary significantly between different groups that a study is trying to compare. Even if a participant is trying to be accurate, they may lack the introspective ability to provide an accurate response to a question. Additionally, they may have



difficulty understanding the true meaning of the question. Using a Likert Scale has its own issues, as each participant may determine the value of the numbers differently.

SD theorists (Martin & Marshall, 1997; Field et al., 1998; Wehmeyer et al., 1998) list numerous components of SD. This is to facilitate both teaching and assessment skills. In this study, select SD skills were identified to help unite the study parameters. Key to this study are the SD components of PCP, choice making, decision making, problem solving, goal setting, self-advocacy, self-management, and social skills.

### **Chapter Summary**

IDEA (2001) promotes the concept of placement of students with disabilities into the least restrictive environment (LRE) and promotes instruction with same age peers while students are in the care of public school systems. In 2008, the HEOA enabled students with intellectual disabilities to attend college and to apply for financial aid to assist them in their post high school endeavors. Regulations established by the HEOA (2008) allowed for students with an ID to apply and be accepted to college programs regardless of the diploma they completed in high school (a regular or standard diploma is not required for programs identified as comprehensive transitions programs [CTP]), nor limit them to pursue a degree (HEOA, 2008). The HEOA (2008) continued the concepts of LRE and inclusion to the college setting.

Educational reforms to incorporate uniform state standards into instruction and assessment resulted in many educators moving away from teaching independent living, employment, and life skills curricula to many students with an ID. Although the NCLB (2001) did increase the overall number of students with disabilities who participated in standardized tests, the impact was not universally positive, and students with an ID were

less included after NCLB (2001) than before (Cole, 2006). The types of instruction and activities that constitute promising practices and are most beneficial to students with intellectual disabilities (e.g., differentiated instruction, cooperative learning groups, authentic and applied learning experiences) are now being used in college programs for students with ID.

Many college settings now offer programs for adults with intellectual disabilities to further functional academic and vocational skills. These programs vary in design and interpret the college experience in varying degrees of authenticity and inclusion, just as they vary in the goals or skills they teach. The current objective of government-funded disability support is to provide services that recognize the needs of the individual and respond to the support preferences identified in a PCP process (Curryer, Stancliffe, & Dew, 2015).

Research by Deci and Ryan in 1985 indicates that intrinsic motivation expands through competence, autonomy, and relatedness. Students experience competence when challenged and given prompt feedback. They experience autonomy when they feel supported to explore, take initiative, and develop their own solutions to problems and they experience relatedness when they believe others listen and respond to them. There are four types of instruction available through college program coursework for students with ID that can increase SD skills: employment skills, functional academics, independent living skills, and SD skills. These skills can be taught. Employment skills are the part of the foundation in most college programs. Vocational Rehabilitation services provide support for many students in college programs and supports instruction of employment skills. Functional academics may be presented in courses in reading,

writing, and/or arithmetic, but are designed to support independence. Independent living is strongly connected to SD. It is having the right and the opportunity to make choices and having the freedom to fail. Courses in independent living involve teaching students to make decisions about their future and make the most of the individual abilities they have.

SD instruction includes teaching component skills essential for success. These skills include social skills as well as skills in decision-making about education, leisure, vocational choices, and independent living (Agran, Wehmeyer, Cavin, & Palmer, 2010). Instruction to increase SD may include teaching students how to: (a) develop problem solving skills, (b) to set personal goals, (c) to make personal choices, (d) to set goals and develop plans to reach those goals, and finally, (e) engage in self-regulation, self-awareness, and knowledge of self (Wehmeyer, 2003).

Opportunities for students with intellectual disabilities to attend college are on the rise, yet there is limited research on the SD outcomes of the programs and effectiveness for students who complete a specific program. Students with intellectual disabilities involved in college programs across Canada reported numerous benefits including meaningful employment, developing friendships, and increasing their sense of achievement, self-esteem, and self-confidence (Uditsky & Hughson, 2012). A study by Folk et al. (2012) examined an individual college program in Hawaii, and found students' perceptions of finding and developing a voice to self-advocate should be valued. As programs for students with intellectual disabilities develop, SD curriculum will need to follow.

## **Purpose of the Study**

The current study is significant because there is a gap in the literature related to college program outcomes for SWID. Research has shown that promoting SD can be an avenue to a greater sense of choice, personal responsibility, cognitive flexibility, and self-esteem, which are all important developmental goals for SWID in the college environment (Deci, Schwartz, Sheinman, & Ryan, 1981; McGraw & McCullers, 1979).

This study addresses the following research questions:

1. What courses or activities are offered to promote SD in college programs for students with intellectual disabilities?
2. How do college programs for students with intellectual disabilities assess or measure student progress in SD?

On a broad level, this study contributes to educational knowledge about college students with intellectual disabilities. More specifically, the study contributes to educational knowledge by enhancing the literature related to students with intellectual disabilities attending college programs. Finally, this study helps fill the gap in the literature on SD for students with intellectual disabilities in college programs. Information gained from this study can be used by professionals who implement those programs. Those programs can then be refined to meet students' needs in a more appropriate way, with the goal of further enhancing the SD skills of students with intellectual disabilities.

## CHAPTER 3: METHOD

### **Design**

This study was a descriptive study that used an iterative data collection process that continually classified and refined the data to describe the range of activities used by college programs to promote and assess SD within their programs. To do this, each of three data sources had a series of decision points that shaped and refined the data. Two sources established basic information about PSE and narrowed the pool to a final set of college programs that were examined in more detail. A survey was sent to contact persons representing the final pool of programs to determine activities used to promote and assess SD.

This study collected the following data related to skills used to increase SD:

- Information and skills that foster a person's capacities for choice making and self-advocacy (e.g., strategies for planning and achieving goals);
- Access to opportunities to express SD (e.g., participation in a full range of educational opportunities, having a choice in supports); and
- Facilitative support from others (e.g., family, teachers, mentors).

The three sources of data for this study built upon each other. The first source of descriptive program data was obtained from the ThinkCollege.net website. The second source of data came from individual program websites. The third source of data

consisted of responses from survey participants. Each data source is described in more detail.

**Phase One: Selecting college programs.** The first data source was the Think College database (ThinkCollege.net) which lists current college programs for students with ID. By using systematic classification that included as well as excluded programs based on a set of criteria, the resulting group of programs became the basis for the programs included in this study. The Think College website has a search engine that allows the user to sort information. For this study, the sorting protocol included the following:

- Whom does the program serve? (ID and/or other disability groups)
- Where the program is located? (On a college campus or in the community)
- What is the source for initiation? (TSPID, agency, grant, college)
- What is the structure of the IHE? (2-year, 4-year, or trade)
- What is the length of the program? (Summer, 1-year, 2-year, 3-year, 4-year)

The Think College database identifies 264 schools to examine with a total of 272 programs (some schools had more than one program). The program information for each school was entered into an Excel© database. The iterative process used in this study required the researcher to go back to the inclusion criteria to answer both research questions. That is, each inclusion criterion (serves students with ID, located on a college campus, etc.) served to further define the population and signal movement to the next phase in the study. The six criteria to be included in this study are: programs must serve students with ID; programs must be located on a college or university campus; programs must not be a TPSID program; programs must not be run by an outside agency; programs

must not be school district transition programs; and programs must be at least one 16-week semester in length.

The first inclusion criterion was the requirement that the program accept students identified as having an intellectual disability. The iterative process began by eliminating programs which did not served students with intellectual disabilities. There were programs that served students identified with autism, or other disabilities and these students may or may not have ID as well, but intellectual disability had to be the identifying disability to remain in this study.

The second inclusion criterion was the requirement for the program to be located on a college campus. For example, some programs supported by community agencies provided post-secondary experiences, but are not located on a college or university campus. Students attending these programs participate in age appropriate activities within the community. Although these programs may promote SD, and the students may have access to classes in the community, they were not college-run programs for students with intellectual disabilities. Therefore, they do not meet the criterion of LRE where education is provided with same age peers and were eliminated.

The third criterion in the decision-making process was to determine if the programs were TPSID programs. Students in TPSID programs are students served under IDEA program policies, and are considered attendees of their local high school, but make use of a college campus to participate in activities and attend classes. These programs were eliminated because they have curriculum decided by the local school district, and the curriculum may not include a focus on the development of SD skills.

The fourth criterion in this process identified programs that are administered by the college, not an outside organization or agency. There are programs which provide services to students through an outside agency. These agencies vary in supports and in classes offered. Some programs, like *College Steps*, provide peer mentors for support, outside professionals to teach courses, and cooperative agreements with disability services on campus to assist students with ID. These programs are not located on a college campus, and many classes are not taught by faculty or staff of the college. For these reasons, these programs did not meet the criterion of programs run by the college and were eliminated.

The fifth criterion for inclusion was to identify programs run by the local school district. These programs are dual enrollment programs and make it possible for students to take classes at the local college, but they are still students at the local high school and are bussed to the college to attend class. They are not part of a program implemented by a college. If identified as connected to the local school district, they were removed from the group of programs included in this study.

The final elimination in this first phase of the study was to exclude summer programs. Many colleges and high schools have transition programs for students with intellectual disabilities during the summer. These camp programs can be beneficial to students, but are not college programs with the same range of services, so they do not meet the requirements for this study.

Table 3 provides an example of the decision-making process for phase one inclusion and exclusion of college programs in this study. Starting with 272 programs as identified in the Think College (2017) website, the final number of colleges and



universities, not participating in a TPSID grant, providing students with ID a college experience on a college campus was 110. Within Table 3, the schools listed on the left side of the table are examples of programs that meet the criteria for inclusion in the study. The schools on the right side of the table are examples of programs that do not.

Table 3

*Decision Process for First Data Source: ThinkCollege.net (Total Programs N=272)*

Inclusion Criteria 1	
Program serves students with ID N =260 /272 e.g., Jacksonville State University, AL These programs remained in study	Program does not admit students with ID N =12 /272 e.g., Exceptional Minds, CA These programs were eliminated from study
Inclusion Criteria 2	
Program based on a college campus N = 232/260 e.g., Santa Rosa Junior College, CA These programs remained in study	Program not based on a college campus N = 28/261 e.g., Chapel Haven West, AZ These programs were eliminated from study
Inclusion Criteria 3	
Program identified as a non-TPSID program N =197/232 e.g., University of Alaska, Anchorage, AK These programs remained in study	Program identified as a TPSID program N =35/233 e.g., University of Kansas These programs were eliminated from study
Inclusion Criteria 4	
Program identified as not run by an outside agency N =176/197 e.g., Fresno City College, CA These programs remained in study	Program identified as run by an outside agency N =21/197 e.g., Norwalk Community College, CT ( <i>College Steps</i> agency) These programs were eliminated from study
Inclusion Criteria 5	
Program identified as a program not run by a local school district N =112/176 e.g., University of Northern Colorado, CO These programs remained in study	Program identified as a program run by a local school district N = 64/176 e.g., University of Arizona (Pima County S. D.) These programs were eliminated from study
Inclusion Criteria 6	
Program duration is a minimum of one 16-week semester N = 110/112 e.g., University of Arkansas These programs remained in study	Program duration is a less than one 16-week semester N = 2/112 e.g., University of Alabama (Tier 2), AL These programs were eliminated from study

**Phase Two: Reviewing individual program data.** The 110 programs that remained after sorting the first data source (Think College, 2017) were then analyzed using the second source of data, the individual program websites. In Phase 2, the websites were reviewed to identify SD courses and activities associated with the program. These data contribute to, although not completely provide an answer to the first research question: *What courses or activities are offered to promote self-determination in college programs for students with intellectual disabilities?* Each of the 100 remaining colleges and universities were located online with the help of the Think College website and the Google search engine. If the link did not connect to the program, the researcher completed an Internet search for the program. Following this link or searching the Internet for the program website allowed the researcher to find demographic information such as entrance requirements, the number of students in each program, a description of each program, and academic and employment information. The process of classifying the data made use of a second decision point process. This process can be found in Table 4. While the demographic information is useful in describing the programs, the true purpose in accessing program websites was to compile a list of college programs that have SD as a goal and to understand how they promote that goal.

The data were managed by entering the school's identifier information, public or private status, type of school (2-year, 4-year, or technical), and the length of the program in an Excel© workbook. Electronic brochures, pamphlets, information sheets, and websites were examined to determine if courses were offered in SD. Course descriptions were found and analyzed to determine whether components of SD were identified as

being taught in the courses. Specifically, the concept of SD or the specific elements of SD sought were:

1. Self-determination,
2. Person-centered planning (student-centered planning),
3. Decision or choice making,
4. Problem solving,
5. Goal setting,
6. Self-advocacy,
7. Self-management (self-regulation, or personal responsibility),
8. Social skills, or
9. Disability awareness (self-awareness).

In some programs, multiple courses including SD components were found and recorded. Programs that contained any one of these components became part of Phase 3 of the study where the program administrators were sent a survey.

The Think College database was utilized as a starting point for this phase of the study. Each of the 110 programs that had met all the criteria to be included in the study was examined further for SD coursework. Some of the programs listed required coursework in the Think College database. These courses were examined to determine if any of the components of SD were described in the course description. If the Think College database did not identify courses for a program, then the link to the individual program website was attempted. Once in a college program website, the links to courses, program descriptions, and any other information were all attempted. Search engines within the program, and the college websites were utilized to find which courses were

offered to students in the program. Once courses were found, the college catalog was used to find course descriptions. If a program identified one of the SD components, or the words “SD” in either a course title or course description, it continued in the study and the program contact was sent a survey in Phase 3. During this process, notations were made if any mention of the SD components were found in the mission statements, brochures, goals, or activities. Programs found to mention SD or SD components were identified and continued to the next phase of the study.

Table 4 provides an example of the decision process used in Phase 2 to review individual program websites. In some cases, SD within courses was clearly identified by title or course description, as in the program at the University of Alaska. The University of Alaska *Tapestry* program lists in the *DLS A014 TAPESTRY Core Social Skills Seminar*. Social skills were used as one of the SD component skills. In other programs, such as University of South Alabama’s *Passage USA* program, no single SD course existed. However, in the program description, components of SD were clearly identified.

The 2-year certificate program will lead to the *PASSAGE USA* Certificate, a credential which will be recognized by local employers. In the certificate program, person-centered planning will be used to develop an Adult Education Plan (AEP) which will contain academic, social, self-advocacy, SD, independent living, community engagement, and vocational skills.

<https://thinkcollege.net/programs/passage-usa>

In both cases SD is part of the program, and both schools would continue into Phase 3 of the study.

Table 4

*Decision Process for Second Data Source*

Option	Offers program specific courses to promote self-determination	
	Yes	No
Number of programs	N = 70/110	N = 40/110
Example	University of Alaska, Anchorage	University of South Alabama
Next step	List SD Components Self-Determination Person-Centered Planning	Review other sources for SD promotion Mission Statement Goals Program Description Activities
Acceptance in Study	Continued to Phase 3: Survey	Continued to Phase 3: Survey

The decision-making process for the data found on program websites was further analyzed in this manner. The first question to be answered with each program website was: Does the program make use of program specific coursework to promote SD? If the researcher found courses whose titles or descriptions included elements of SD, that program continued in the study. Specifically, these words were used to identify SD components: PCP, choice making (decision making), problem solving, goal setting, self-advocacy (self-management, self-awareness), and social skills.

Programs without specific coursework in SD were not eliminated at this point. A secondary analysis was performed to answer the second question: Does the program identify SD components in their program description, mission, statement, goals, or activities? If found within these sources, they also continue to Phase 3 of the study, the survey.

To recap, Phase 1 began with 272 college programs for students with ID. These programs were sorted by the inclusion criteria; that is, serves students with ID, operates on a college campus, is run by the college, and is of a semester or quarter duration. At the end of this process, 110 programs remained.

In Phase 2 individual websites of the continuing programs were used to determine whether SD was promoted through coursework, or some other means. At the end of Phase 2, 81 programs remained, and these programs continued to Phase 3 and were included in the survey. Figure 1 provides a visual representation of the narrowing process from total Think College data base to those programs surveyed in Phase 3.

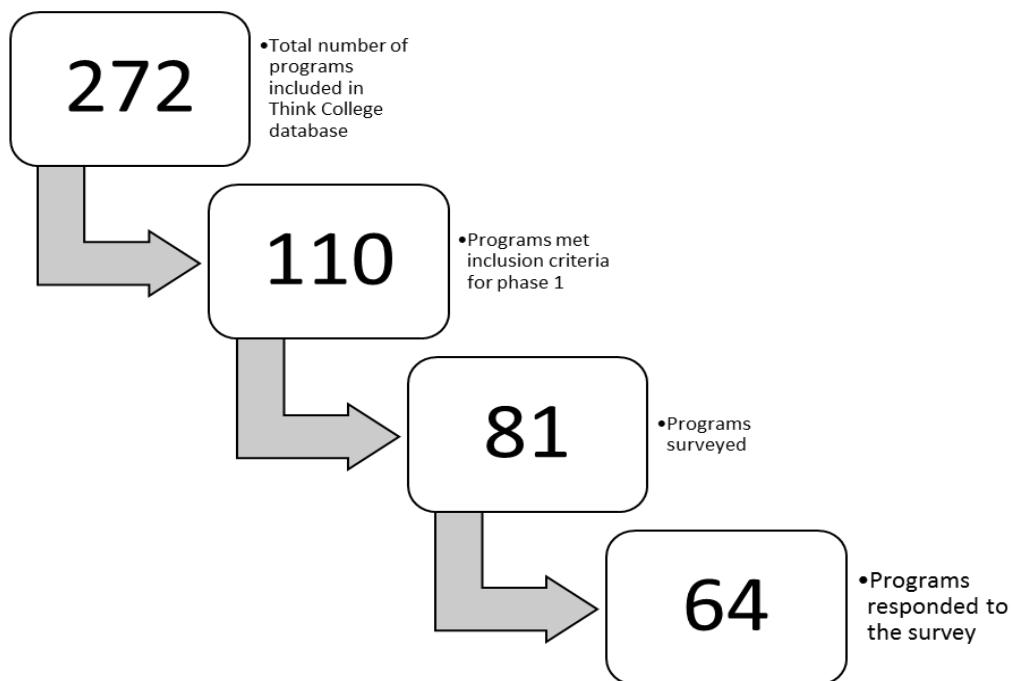


Figure 1: Visual representation of process of elimination to determine survey respondents.

**Phase Three: Survey to verify and expand data.** The third source of data was the survey delivered to the 81 programs remaining in the study. The program contacts

listed on the college websites were asked to complete an online survey. The survey verified demographic and programmatic data and elicited specific SD activities. Using Qualtrics©, the survey was coded into Excel© identifying the following information:

- Demographic (public or private, 2-year, 4-year, or technical program, number of students, and year program began);
- SD instruction information:
  - Is person-centered-planning utilized?
  - Is there instruction in SD, or components of SD?
  - Is a SD published curriculum utilized?
  - Who provides instruction in SD?
  - Is SD assessed?
  - What instruments and when are they used to assess?
  - What changes, if any, are made due to results of assessments?

In a pilot, the survey took less than 10 minutes to complete.

The survey was developed based on a review of the literature and in consultation with five professionals in college programs for students with an ID. The original survey began with 30 questions in which responses would answer the study questions. Through discussions with committee members, questions were reworded to address the information needed for the study and to increase validity. The first version of the survey was reviewed by team members at Florida Atlantic University. Program staff completed the survey and provided feedback. The survey was revised based on their feedback. Questions were revised, and some questions were eliminated. The revised version of the survey was sent out to program contacts at three universities to respond to the questions



with comments. In its final version of 15 items, the survey took less than 15 minutes to complete. The survey did not require an answer to continue (no forced responses), and respondents could skip questions.

After the survey was developed, it was sent out to the included programs using Qualtrics © Survey Software. This software provided an electronic link that was sent via email to the contact persons for the resulting programs. The email contained information that explained the research and asked for consent to participate. Completion of the survey implied consent to participate (see Appendix A). Qualtrics© provided individual links that allowed the researcher to send a follow-up request to complete the survey to those who had not responded. However, the researcher did not know specific identifying information about the individual who responded or the program. In this way anonymity was maintained. The Qualtrics© program linked codes to responses to assist the researcher in follow-up requests to complete the survey. To generate a better response, after three weeks the researcher sent a personal email to the listed contact person requesting participation in the survey. The complete survey can be found in Appendix A.

### **Data Analysis**

Results from Phase 1 of the study provided a description of the program models and setting options used by college programs to promote SD. Each of the 272 programs in the Think College database were entered to an Excel© workbook. The first spreadsheet displayed the name of the school hosting the program, and the state it was located in.

The first iteration of data was to classify programs using demographic elements, such as public or private institution, structure (2-year, 4-year, or technical school), and

the length of the program. The public and private programs were further sorted into categories of whether supports were provided on a 2-year campus, a 4-year campus, or a technical college campus. A technical program is like a 2-year college, but is career-focused and offers classes which focus on specific career certifications (e.g., hospitality, child-care, automotive).

The second iteration described how SD was promoted in the programs. Specifically, identifying programs with SD coursework or SD components in coursework. Schools without SD courses were analyzed to identify SD in mission statements, goals, activities, and so forth, and if found, continued to Phase 3 of the study. The constant review of the data to narrow and refine descriptors is part of the iterative process in research. When the first 2 phases were completed, the remaining programs evidenced a cohort of college programs with more similarities than differences. In all cases, SD was part of, or central to these programs.

Data from Phase 3 of the study, the survey, were coded in Excel©. Each response for each question from each program was sorted and visually evaluated. The raw numbers as well as percentages were obtained from the Excel © spreadsheet. The results from the survey questions in Phase 3 contributed to the answer to Research Question 1. Results from the survey questions verified information from the program website regarding how SD was promoted, either through specialty coursework, or if it was promoted through other means. If SD was promoted through other means, the results identified what other means were used (activities, counseling, peer mentoring, other). Results identified which components of SD were promoted, and which curriculum was used to promote SD. Programs that utilize multiple methods of SD or multiple methods

of curricula were also identified. Taken together, the results from all three data sources answered Research Question 1: What courses or activities are offered to promote SD in college programs for students with intellectual disabilities?

Assessment information related to SD was not available through ThinkCollege.net nor was it found on the individual program websites. However, assessment is necessary to determine whether SD skills improve through the program courses and activities. The final phase of this study, the program survey, examined assessment practices for SD skills.

Results from the survey related to assessment of SD skills were collected and sorted using Excel © and then the data could be visually analyzed. Both frequency counts and percentages were obtained using Excel © formulae. Results provided information to answer Research Question 2: How do college programs for students with intellectual disabilities assess or measure student progress in SD?

To obtain a measure of reliability in phase 1, the researcher and a staff member at Florida Atlantic University sorted 25% of the 272 programs listed in the Think College database (N = 68) independently of each other. Once sorted, there were two discrepancies. The researcher and the staff member looked at the database for those programs, and consensus in scoring was achieved. An interrater reliability agreement of 98% for Phase 1 was attained.

To obtain a measure of interrater reliability in Phase 2, the researcher and a staff member sorted 35% (29 of 81) of the programs meeting criteria for this phase. Independent sorting yielded 100% agreement between researcher and staff member.

## CHAPTER 4: RESULTS

The Think College database identified 264 college and universities as having college programs for individuals with ID. Some schools listed two different programs offered at their schools. By counting individual programs, this study had an overall pool of 272 college programs for review in this study. The first step of the iterative process used in this study was to eliminate programs that did not serve students with intellectual disabilities. There were 10 programs that accepted only students with an autism spectrum disorder diagnosis. These students may or may not have ID as well, but those 10 programs were designed for students with autism. Those programs did not match inclusion criteria for this study and were eliminated. *Options Transition to Independence*, in Carbondale, Illinois did not identify ID as one of the disabilities they accepted in their program, so they were also eliminated. Finally, the University of North Carolina at Chapel Hill identified a program for post-graduate students to work with students with students with ID, but no information on the program itself was available. This too was cause for elimination. A total of 12 programs were eliminated for not meeting the requirement of serving students with ID.

The next criterion in Phase 1 of this study was to eliminate programs that did not serve students on a college campus. Although these programs may or may not promote SD, and the students may have access to classes at the identifying school, they do not meet the definition of an inclusive college program for students with intellectual disabilities. Some were residential-only programs for students with severe disabilities.

There were nine programs identified as residential-only programs that were eliminated from this study. Other programs (a total of 17) were not actually held on the college campus, but are held at a community agency location or at a satellite campus just for students with intellectual disabilities. These 17 programs are considered community-based programs, and therefore were eliminated from the study. Two programs, one at Clemson University and one at The College of Adaptive Arts, were eliminated because their programs were held in locations that only served students with ID. The students were not actually taking part in a traditional college experience. A total of 28 programs were eliminated in this step of the study because they did not serve students with ID on a college campus.

Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSID) are grant-funded programs established through 5-year cooperative agreements between institutions of higher education and local education agencies. Although SD is a required part of the curriculum in TPSID programs, these 34 programs did not meet inclusion criteria and were eliminated from the analysis. TSPID programs serve students who are still being served by school districts, and student status within these programs varies. They may be considered part of the college student body, or they may only be visitors on campus. Because TPSID programs have school district requirements beyond typical college and university status for student participation, 34 programs were excluded from the analysis.

Not every school district in the United States is designated as a TPSID grant recipient. Many students with ID continue to receive educational benefits from their local school system until the year they turn 22. Currently, 64 college programs which are

not TPSID programs are in partnership with the local school district to provide transitional services in college settings. The programs vary in style, with students from the local high school having access to the local college for services, but the curriculum is determined by the school district. These 64 programs in partnership with a local school district and which are not TPSID programs were eliminated from the study.

Some colleges provide services for students with ID through a partnership with a local agency. The most frequently used agency, *College Steps*, uses a peer-mentor program to provide social support, tutoring, and individual supports on each of the nine colleges with whom they partner. There were eight other agencies, each connected to one program which provided supports for students attending college programs on a college campus. In addition, The Arc has partnered with five programs to support students with ID. These 22 programs supported by outside agencies do not provide services through the college, but provide access to the college with support provided through the agency. These programs were eliminated from the study.

The University of Maryland, Baltimore County had a program for students with ID, but has decided to end the program in 2018. At the time of the study, no new students were being accepted. The University of Alabama (Tier 2 program) provided a structured program for students with ID during the summer to experience, explore, and develop skills for pursuing college education at an institute of choice. This 8-week program did not meet the criteria for this study as it was a summer only program. Both the University of Maryland and the University of Alabama (Tier 2) were eliminated from the study.

The 110 programs that remained after sorting the first data source became the pool of programs included in the second phase of the study. While the demographic information provided on the Think College database was useful in describing the programs, the data needed to answer this study's overarching research question could not be found there. To answer the question of whether or not the program makes use of program specific coursework to promote SD, individual program websites needed to be reviewed.

For Phase 2, data were collected by searching the web and individual program websites for information about program. The school status (public or private) type of school (2-year, 4-year, or technical), and the length of the program were the next program descriptors collected from the program websites.

Next, the websites were reviewed to identify components of SD within the program. School catalogs, online brochures, and program information pages were examined to identify courses offered within each program. There were 71 programs that offered at least one course with a component of SD as part of the course.

Ten schools offered an actual course titled, SD. Seven of these schools listed just the titles of coursework for their program, and three provided both titles and course descriptions. The three with course descriptions included individual components of SD, such as self-advocacy, and goal-setting. There were an additional 14 programs that identified SD in a course description of a class not labeled SD. Therefore, 24 courses contained the actual word "SD" in either a course title or a course description. In some cases, catalog descriptions of courses were reviewed to verify course content information.

PCP, or an individual college plan is a method to encourage and support students in making their own educational and career goals. PCP is one component of SD. Of the 71 schools found to offer specialized coursework in SD, seven schools offered a course titled, PCP. An additional 17 schools identified PCP as part of a goal in a course description. A total of 24 schools identified PCP as part of a course title or as part of a course descriptors. Eleven schools offered both SD and PCP as part of their coursework.

Social skills instruction is the most commonly offered SD component in program coursework. Forty-five programs offered courses that included social skills instruction either in the course title, or a course description. Courses with social skills or social instruction in the course title were available in 26 programs, and an additional 19 courses were found to contain social skill instruction in the course description.

Self-advocacy is an important component of SD, and 35 programs offered a specialized course that addressed self-advocacy within the course description. Of these 35 programs, 19 offered a course with self-advocacy in the title of the course.

Problem-solving and decision making were offered in fewer than 15 of the 71 programs offering specialized coursework in SD components. The University of Iowa offered problem solving in an internship class; the University of Alaska offered problem solving in their employability class, and North Orange County Community College offered it in their critical thinking course. Regardless the name of the course, problem solving was offered in 14 programs, and 5 of those programs offered it as a stand-alone course.

Setting personal and career goals is another component of SD. None of the programs offered a goal-setting course, but 21 programs included it in the course



descriptions of various program courses. Decision making was included in the course descriptions of 11 courses in the various programs. None were stand-alone classes. The SD components of disability awareness and self-management were only offered in a few of the programs. Disability awareness was identified in course descriptions in seven programs and self-management was identified in four programs.

In Phase 1 the entire Think College database of 272 programs were analyzed for demographic and inclusion criteria. At the end of Phase 1, 110 schools were identified as meeting the inclusion criteria of college run programs for students with intellectual disabilities on a college campus.

In Phase 2 the 110 schools were analyzed to determine how SD was promoted. Seventy-one programs offered courses with SD components in the title or course description. An additional ten programs promoted SD through associated literature, like websites, mission statements, or program descriptions. It was not clear how the different components of SD were promoted with the students, so these 10 programs continued to Phase 3 of the study and were sent a survey to verify the website search for information. Table 5 provides a visual of the 10 schools that did not have specific SD coursework, but identified SD or its components within the program descriptions.

Table 5

*Components of SD in Program Descriptions*

Institution	Components in program descriptions						
	PCP	SS	SD	SA	GS	DM	DA
University of South Alabama	X	X	X	X			
South Arkansas Community College			X				
Jacksonville State University	X	X					
University of Colorado at Colorado Springs					X		
Arapahoe Community College	X		X	X	X		
Southeastern Louisiana University		X					
University of Nevada Las Vegas	X		X	X	X	X	X
University of Wyoming			X				
Bergen Community College	X	X	X	X		X	
Western Carolina University	X	X	X				

*Note.* PCP = Person-Centered Planning; SS = Social Skills; SD = Self-Determination; SA = Self-Advocacy; GS = Goal Setting; DM= Decision-Making; DA = Disability Awareness.

These remaining 81 programs were sent an online survey to complete using Qualtrics©. One feature of Qualtrics© was that as responses came in, the program tracked who responded without identifying individual programs. When using Qualtrics© for resending surveys, the program automatically resends only to the ones who had not previously responded. The first request for response yielded 18 responses. The survey was resent to unresponsive programs after 2 weeks to generate a better response. Nineteen more responses were received for a total of 37 responses following the first two

requests. A third request was sent via individual emails requesting participation. At final count, a total of 64 responses received, yielding a 79% response rate.

For evaluation data to be of value, the response rate should be sufficiently high to be representative of the group (Bennett & Nair, 2010). The sample size for this study was 81 programs which offered SD in their college programs for students with ID. The number of responses received from the survey is 64, or 79%. Jones suggested that when looking at the sample of a study, responses of those who return the survey differ only slightly than those who did not, and a 70% return rate is acceptable (Jones, 1995). In the case of this study, it was hypothesized that since the survey respondents were providing information on common descriptors, not controversial aspects of individual programs, this response rate can be assumed to represent the population accurately.

The first part of the survey verified background information some of which was derived from the Think College database. The results of the demographic information collected using the survey can be found in Table 6. Survey responses were received from 46 of the 65 public schools. Survey responses were received from 14 of the 15 private schools that were asked to complete the survey. Although 64 schools responded, four schools did not answer all the demographic questions.

The number of students served in college programs for students with intellectual disabilities ranged from 5 to 450. There are 47 programs that have fewer than 30 students enrolled in the program, and 14 programs have more than 30 students.

The earliest reported program began in 1977, followed by three programs in the 1980s, and another two programs began in the 1990s. The next 10 years (2001-2010)

showed a rapid increase in program start-ups with 17 programs opening. The last six years (2011- present) have seen an increase with 41 new programs.

Table 6

*Survey Results: Demographics*

Number of programs in pool = 81 Surveys Received = 64	
Public	46
Private	14
No answer	4
<hr/>	
Technical schools	2
2-year schools	15
4-year schools	43
No answer	4
<hr/>	
Program size (number of students in individual programs) Range from 5 to 450	
13 programs	Ten or less students
22 programs	11-20 students
12 programs	21-30 students
5 programs	31-40 students
4 programs	41-50 students
5 programs	More than 50 students
3 programs	Did not answer
<hr/>	
Year program began	
1980-2000	6 programs started
2001-2005	3 programs started
2006-2010	14 programs started
2011-2015	28 programs started
2016-2017	13 programs started

In response to the survey question on use of person-centered planning, 55 of 61 programs indicated use of PCP as part of their program. Digging deeper into specific coursework and program elements revealed the data in Table 7. Of the 61 programs surveyed, 46 included goal setting, 43 included self-management and social skills; 38 included choice and decision making; 37 included problem solving; 6 included life and safety skills, and 7 included employability.

The next set of questions on the survey described how SD was taught within the program. Peer mentors were used in 49 of the 64 responding programs. Program staff was used in 48 programs; university faculty in 41 programs; and graduate students were included in 17 programs. The use of a published SD curriculum was indicated in 11 of the 64 programs.

The last set of survey questions focused on providing SD beyond the classroom. The most frequently identified method for promoting SD was inclusion in college activities with 54 of 60 respondents selecting this method. Peer mentor support was chosen by 48 programs, and faculty and staff mentors were selected in 31 programs. Counseling and advising was selected by 17 programs and behavior skills selected by 10 programs. The selection options chosen the least were: seminars (4), vocational improvisations (2), and activities provided by the program assistant director (1).

Table 7

*Promotion of Self-Determination Components*

Promotion of SD through specific coursework	
Use of Person-Centered Planning	43/61
Social Skills	43
Goal Setting	46
Self-Management, Self-Regulation, & Self-Advocacy	43
Choice- or Decision Making	37
Problem Solving	38
Life and Safety Skills	6
Employability and Vocational Skills	5
Person responsible for teaching in coursework	
Peer mentors provide SD support and instruction	49/61
Program Staff working directly with students	48
Courses taught by university faculty	41
Courses taught by graduate students	17
Promotion of SD beyond classroom	
Inclusion in campus activities	54/64
Peer mentor support	48
Faculty and Staff mentors	31
Counseling and advising sessions	17
Behavior skills and in situ training	10
Seminars & team Meetings	4
Vocational Improvisations	2
Program Assistant Director	1

Note: 61 programs responded to the questions on promotion of SD through coursework and 64 programs responded to the questions of promoting SD beyond the classroom.

**Survey Summary**

The findings from the survey indicated that SD is promoted in college programs for students with intellectual disabilities through instruction, activities, mentorship, and counseling. Instructors, faculty, mentors, graduate students, volunteers, and job coaches are responsible for its delivery. Although published curricula are sometimes used, most programs implement individual methods for instruction in SD.

The online survey was again able to provide information to answer Research Question 2: How do college programs for students with intellectual disabilities assess or measure student progress in SD?

Table 8 provides a visual summary of the data from the online survey. Of the 64 programs responding to the question: do you conduct a unique assessment of SD skills? 32 responded yes. When asked when the SD assessments were conducted, 25 indicated before the students began the program, 21 conducted assessments during, and 30 conducted assessments as a SD measure when students completed the program.

The survey included questions about which assessments were used. Twenty-two programs indicated they used formal assessments, such as the AIR (11); ARC (8); ChoiceMaker (3); and SDA/SDAi (1). Additionally, 17 programs tracked mastery of instructional objectives as a measure of SD; 11 used portfolio assessments; and 6 indicated other measures were used. These other measures included Transition Assessment and Goal Generator (TAGG), Life Centered Career Education (LCCE), and Career and Community Studies Independent Living and SD Assessment, which is an assessment developed and used at Kent State for the students in their program.

Table 8

*Assessment of Self-Determination*

When SD is Assessed	
Used SD assessment prior to students beginning program	25
Used SD assessment during the program	21
Used SD assessment when students completed the program	30
Method used for Assessment	
Formal Assessments	
Person-Centered Planning Meetings	22
AIR	11
ARC	08
ChoiceMaker	02
SDA or SDAi	01
Informal Assessments	
Mastery of course instructional objectives	17
Portfolio	11
Other informal/formal assessment procedures	06
Use of SD Assessment Data	
Informed choices for individual activities	28
Informed choices for individual goals	26
Prompted changes in program activities	21
Prompted change in program goals	11

Note: 64 programs responded to the questions on SD assessment.

The response to Research Question 2 from the survey indicate that college programs for students with intellectual disabilities assess the students most often through PCP and some formal assessments. Students are often assessed during the program, but almost always before and after the completion of the program. The college program contacts reported that data from the assessment of individual students prompts changes to individual goals and activities. Program goals and activities are also modified or changed based on assessment data, but to a lesser degree than individual goals.



## CHAPTER 5: DISCUSSION

Supporting adults with an intellectual disability to increase their SD skills and to lead self-determined lives has been a strong focus of research for more than 20 years (Wehmeyer & Abery, 2013). The promotion of SD for students with disabilities has become a best practice in special education (Shogren et al., 2013). College programs for students with ID fill a gap in functional education left by accountability legislation and school reform (Ayres et al., 2012). These programs have a unique ability to provide instruction in SD, a need typically not met in many K-12 education systems.

Legislation opened the door to college programs for students with ID and most likely will continue to support the needs of these students. College education has evolved and expanded since the beginning of the 21<sup>st</sup> century with as many as 272 college programs available for students with ID as identified in the Think College database. The number of colleges continues to expand spurred on by the changes in the HEOA (2008).

Supporting adults with an intellectual disability to increase their self-determination skills and to lead self-determined lives has been a strong focus of research for more than 20 years (Wehmeyer & Abery, 2013). The promotion of self-determination for students with disabilities has become a best practice in special education (Shogren et al., 2013). College programs for students with ID fill a gap in functional education left by accountability legislation and school reform (Ayres et al., 2012). These programs have a unique ability to provide instruction in self-determination, a need not met by the K-12 education system.

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These programs come in all shapes and sizes, all with a common goal: to increase employment opportunities and self-determination skills for individuals with ID. Programs in college institutions have been designed to improve the independence skills of individuals with intellectual disabilities. The programs may run anywhere from one year to four years, and course requirements vary from program to program. The programs vary in format, coursework, and supports, but the promotion of self-determination is a part of the foundation of these programs. What is certain is that research indicates improving SD skills has long-term benefits in independent living and employment outcomes for students with ID (Wehmeyer & Abery, 2013).

The link between self-determination and college success becomes apparent when one considers that the capabilities to become self-determined are most effectively learned through real-world experience, which involves taking risks, making mistakes, and reflecting on outcomes. Success in college requires diligence, self-control, self-evaluation, decision making, and goal setting. In short, success requires self-determination. Understanding how SD is promoted is very important to developers and designers of PSE programs. To date, how programs do this has not been studied, but with this study, the understanding of how colleges promote SD begins.

In this study, SD is defined as goal directed, self-regulated thought and actions (Field et al., 1998). Deci and Ryan (1985) identified core psychological needs that are observed in a self-determined individual. These include competence, autonomy, and relatedness. A college program for students with ID that has a goal of increasing independent living and employment options should naturally seek an increase in SD skills. To understand how and where SD is promoted in college programs for individuals with ID, an extensive database review was used in the first phase of this study. The need to focus the study on college programs for students with ID was central. Dual enrollment, summer programs, agency developed support programs do not fit the definition of college programming. Even at the end of this study, the rationale for inclusion or exclusion in the study stands the definition of college programming.

In the second phase of the study where attention was paid to how the programs present or describe themselves, an overwhelming number of programs (81/110) declare that SD is an important aspect of their programming.

By reviewing the websites for SD components like PCP, goal setting, problem solving, and self-advocacy, the researcher could identify many of the SD components identified by Field et al., (1998) and others. Not only in coursework, but in program activities. The core psychological need of autonomy is met by a student's active participation in their PCP throughout the program. Deci and Ryan's (1985) element of relatedness is most likely promoted through mentoring components found in 48 of the 60 programs that responded in Phase 3. Having a clear sense of the change in a student's ability to connect and relate to peers as part of SD is only inferred, not directly stated.

Study data indicate that SD and SD components are central elements of many college programs for students with ID, as demonstrated by survey respondents.

But how do these programs know if students are making progress? The study data indicate most use formal assessment, while some programs use informal measures. Notably, PCP was cited as the most frequent method of measuring SD. How a PCP is conducted, when a PCP is part of the student's program, and how information from the PCP influences student choices in the program is unknown.

Many of the programs used some type of SD assessment. However, in response to when the assessments were conducted, it was surprising that more programs indicated they completed post-program SD assessments than pre-program SD assessments. This could indicate an inappropriate use of assessment tools. Post-test data without pre-test data will not measure student progress.

### **Limitations of This Study**

This research was limited based on the use of a single database for demographic and program information. Only programs listed in the Think College database were used; other programs may exist but are not part of the Think College database and may add different methods for promoting SD. The database provided some information on length of programs. Program length was not considered in the inclusion, exclusion criteria, other than excluding summer only programs. The amount of time a student attends a program could greatly affect the amount of SD growth. It is possible that longer programs promote more SD components and offer more opportunities for practice of autonomy, self-regulation, decision making, and problem solving. However, not knowing program lengths makes that statement difficult to confirm.

It was assumed that respondents understood the questions in the instrument and responded in ways that accurately reflected their perceptions. For example, one question was about the number of students currently in the program for students with ID, but the respondent may have understood the question to be seeking information on the total number of students receiving disability services at the school. In that case, the opportunity to ask follow-up questions would have increased the certainty of those assumptions.

### **Future Research**

As programs develop and evolve, future research is necessary. Although this study answered questions about how SD is promoted and assessed in current programs, it also initiates other questions:

- Since few programs use a standard curriculum, how is SD being taught?
- How is person-centered planning being used in the programs? What do person-centered planning activities include (i.e., meetings, counseling, videotaping)? How often is a PCP meeting conducted?
- Does it make a difference in desired SD outcomes if the program utilizes actual courses in SD, or if they infuse SD throughout the curriculum?
- What are the long-term outcomes for students in these programs?
- Does the program model (separate, mixed, or inclusion) make a difference in how SD is promoted in college programs?
- How does an individual's connection to others (home, school, work) change when SD components are reinforced or learned?

Supporting adults with intellectual disabilities to increase SD skills can improve the lives and long-term outcomes for those individuals. As postsecondary education becomes a reality for many who never thought it possible, the promotion of SD needs to be included in college programs for students with ID. Only by understanding what is being done and how SD instruction is helping students with ID can we begin to develop appropriate curricula for these programs.

This study begins the journey into understanding how SD is taught and measured in college programs for students with ID. This researcher acknowledges the lack of symmetry in the programs and recognizes the need for individualized components to meet the diverse needs of the learners. Programs promote SD instruction; however, the teaching methods vary from program to program. Programs measure SD in their students, however, the tools used vary from program to program. The examination of those elements is central to further program development. The outcome data from this study set the stage for understanding what works to increase students' progress in acquiring SD skills. This is a first step in understanding what is being done, and the next step is how to do it better.

## APPENDICES

**Appendix A-** Request to complete survey sample email.

Dear program director(s),

Thank you for your interest in participating in our research study. The purpose of the study is to analyze how self-determination is promoted and evaluated in college programs for students with intellectual disabilities. If you choose to participate, please follow the attached link to Qualtrics, an online survey software tool that will direct you to the survey. It should take you no more than 10 minutes to complete this survey. Your participation in this study is your choice. You may skip any questions that make you feel uncomfortable and you are free to withdraw from the study at any time without penalty. The risks involved with participating in this study are no more than if you completed a survey in a newspaper or magazine. Potential benefits that you may receive from participation include information from study results which may lead to a better understanding of how self-determination is promoted in college programs for students with intellectual disabilities. If you are the contact person for more than one program in the study, you may be asked to complete one survey for each program.

If you experience problems or have questions regarding your rights as a research subject, contact the Florida Atlantic University Division of Research at (561) 297-1383. For other questions about the study, you should call the principal investigator: Dr. Mary Lou Duffy at (561) 799-8715 and Melody Wright at (561) 799-8365. By completing and returning the attached survey, you give consent to participate in this study. If you choose, you can print a copy of the consent statement for personal records. Investigator(s): Dr. Mary Lou Duffy, Melody Wright

Thank you for your time.

Melody Wright, M.Ed.



Self Determination  
Demographics

Is this a public or private institution?

*Check all that apply.*

- Public
- Private

Describe the type of institution where the program is housed.

*Check all that apply.*

- 2-year
- 4-year
- Technical school

How many students are currently enrolled in the program?

In what year did your program begin?

Self-Determination Instruction

Do your students participate in Person-Centered Planning (PCP)?

*Mark only one oval.*

- Yes
- No

Do you offer any coursework or direct instruction in self-determination?

*Mark only one oval.*

- Yes
- No

If yes, for which individual components does your program provide instruction?

*Check all that apply.*

- Choice or Decision Making
- Problem Solving
- Goal Setting
- Self-management (Self-regulation, Self-advocacy)
- Social Skills
- Other:

Is there any other method used in your program to promote the development of Self-Determination skills?

*Check all that apply.*

- Activities
- counseling

- peer mentorship
- Other:

Which individual components does your program promote through methods other than instruction?

*Check all that apply.*

- Choice or Decision Making
- Problem Solving
- Goal Setting
- Self-management (Self-regulation, Self-advocacy)
- Social Skills
- Other:

Does the program use a published curriculum for self-determination?

*Mark only one oval.*

- Yes
- No

If yes, which curricula does your program use?

Who is responsible for promoting self-determination skills or components of self-determination? (e.g., teach classes, activities, counseling sessions, peer mentoring, etc.)

*Check all that apply.*

- University Faculty
- Program Staff (works solely with the program for students with ID)
- Peer mentors
- Graduate students
- Other:

#### Self-Determination Assessment

If the answer to question 10 is "no" please skip to the end and submit the survey

Do you conduct a unique assessment of the students' self-determination skills?

*Mark only one oval.*

- Yes
- No

When do you assess the students' self-determination skills?

*Check all that apply.*

- Before student begins the program?
- During the program?
- At the end of the program?

Which instruments and/or assessment protocols are used in your program to evaluate the students' self-determination skills?

*Check all that apply.*

- AIR
- ARC
- SDA or SDAi
- ChoiceMaker
- Portfolio
- PCP Meetings
- Assessment of instructional objectives
- Other:

As a result of self-determination assessments, do you make changes to any of the following?

*Check all that apply.*

- Program goals?
- Program activities?
- Individual student goals?
- Individual student activities?

#### Self-Determination in College Programs for Students with ID

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Thank you for taking time to provide your thoughts on this survey. If you are interested in the results from this survey, please contact me via my email ([mwrigh40@fau.edu](mailto:mwrigh40@fau.edu)). When complete, I would gladly share survey results.

## Appendix B- FAU Institutional Review Board correspondence



FLORIDA  
ATLANTIC  
UNIVERSITY

**Institutional Review Board**  
Division of Research  
777 Glades Rd.  
Boca Raton, FL 33431  
Tel: 561.297.1383  
[fau.edu/research/researchint](http://fau.edu/research/researchint)

Charles Dukes, Ed.D., Chair

DATE: July 20, 2017  
TO: Mary Louise Duffy, Ph.D.  
FROM: Florida Atlantic University Social, Behavioral and Educational Research IRB  
IRBNET ID #: 1036350-1  
PROTOCOL TITLE: [1036350-1] Self-Determination in College Programs for Students with Intellectual Disabilities  
SUBMISSION TYPE: New Project  
ACTION: DETERMINATION OF NOT HUMAN SUBJECTS RESEARCH  
EFFECTIVE DATE: July 20, 2017

Thank you for your submission of New Project materials for this research study. The Florida Atlantic University Social, Behavioral and Educational Research IRB has determined this project does not meet the definition of human subjects research according to federal regulations. Therefore, it is not under the purview of the IRB.

We will keep a copy of this correspondence on file in our office.

If you have any questions or comments about this correspondence, please contact Ximena Levy at:

Institutional Review Board  
Research Integrity/Division of Research  
Florida Atlantic University  
Boca Raton, FL 33431 Phone:  
561.297.1383  
[researchintegrity@fau.edu](mailto:researchintegrity@fau.edu)

\* Please include your protocol number and title in all correspondence with this office.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within our records.

**Appendix C-** Data for this study can be accessed three ways

Data for this study can be accessed three ways:

First, on a university associated URL that leads to a Google site.

<https://sites.google.com/a/fau.edu/sd-in-college/>

Second, a personal Google drive.

<https://drive.google.com/file/d/0B8qO69utXNF-cHMwY0RZZEItMTg/view?usp=sharing>

Third, a personal request via email.

[mwrigh40@fau.edu](mailto:mwrigh40@fau.edu)

By accessing the Excel spreadsheet, you will be able to see all 272 programs investigated in this study. Click on the first tab labelled “All.”

The following is the group of 81 programs contacted to respond to the survey. Of the 81, 64 responded, however, Qualtrics provides anonymity to the responders, so only a list of the total group of 81 programs can be shared. Responders were not identified to the researcher.

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The University of Alaska, Anchorage	Mercyhurst University
Jacksonville State University	Lehigh Carbon Community College
University of South Alabama	Temple University
South Arkansas Community College	East Stroudsburg University of PA
Foothill College	Saint Vincent College
Santa Rosa Junior College	Rhode Island College
San Diego Community College District	Winthrop University
North Orange County Community College	University of South Carolina
Shasta College	Coastal Carolina University
Taft College	Clemson University Clemson Life

University of Northern Colorado	College of Charleston
University of Colorado@ Colorado Springs	Augustana University
Arapahoe Community College	Cape Cod Community College
Gateway Community College New Haven Tier 2	Calvin College
University of Delaware	Ridgewater College
Florida Atlantic University	Bethel University
Kennesaw State University	University of Missouri Kansas City
Georgia Institute of Technology	University of Missouri St. Louis
University of Iowa	University of Central Missouri
Lewis and Clark Community College	Mississippi State University
College of DuPage	Wake Technical Community College
Elmhurst College	Western Carolina University
Lewis and Clark Community College	South Piedmont Community College
Heartland Community College	Central Piedmont Community College
Huntington University	Mercer County Community College
Indiana University Purdue University Fort Wayne	Bergen Community College
Johnson County Community College	College of New Jersey
Bossier Parish Community College Emp2	Camden County College
Bossier Parish Community College PSE	University of Nevada Reno
Nicholls State University	University of Nevada Las Vegas
Southeastern Louisiana University	Finger Lakes Community College
University of Louisiana at Lafayette	Roberts Wesleyan College
Middlesex Community College	New York Institute of Technology
Lesley University	State University of New York at Geneseo
Judson University	University of Toledo
Union University	Kent State University
Texas A&M University	University of Cincinnati
Edmonds Community College	Marietta College
Shepherds College	Portland Community College
Edgewood College	University of Wyoming

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## Appendix D- Pilot Study Participant Letter

Dear

I am piloting a survey on self-determination in college programs for students with intellectual disabilities. I could really use your help. I chose your programs from the Think College database because you serve students with autism, and my study will be focused on students with intellectual disabilities. Could you please take the attached survey and provide feedback on how I could better phrase the questions? The goal of the survey is to determine how self-determination is promoted and assessed or measured in college programs for students with ID.

The research questions of this study were:

1. What courses or activities are offered to promote self-determination in college programs for students with intellectual disabilities?
2. How do college programs for students with intellectual disabilities assess or measure student progress in self-determination?

Melody M. Wright, M.Ed.  
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[mwrigh40@fau.edu](mailto:mwrigh40@fau.edu)

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