Promoting Self-Determination Skills of Individuals with Intellectual Disabilities Participating in the Inclusive Concurrent Enrollment Initiative Programs throughout Massachusetts

Lyndsey Nunes

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_2
Part of the Educational Assessment, Evaluation, and Research Commons, and the Special Education and Teaching Commons

Recommended Citation
https://scholarworks.umass.edu/dissertations_2/942

This Open Access Dissertation is brought to you for free and open access by the Dissertations and Theses at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
2017

Promoting Self-Determination Skills of Individuals with Intellectual Disabilities Participating in the Inclusive Concurrent Enrollment Initiative Programs throughout Massachusetts

Lyndsey Nunes

Follow this and additional works at: http://scholarworks.umass.edu/dissertations_2

Part of the Educational Assessment, Evaluation, and Research Commons, and the Special Education and Teaching Commons
Promoting Self-Determination Skills of Individuals with Intellectual Disabilities
Participating in the Inclusive Concurrent Enrollment Initiative Programs throughout Massachusetts

A Dissertation Presented
by
LYNDSEY MARIE NUNES

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY
May 2017

College of Education
Special Education
Promoting Self-Determination Skills of Individuals with Intellectual Disabilities Participating in the Inclusive Concurrent Enrollment Initiative Programs throughout Massachusetts

A Dissertation Presented

By

LYNDSEY MARIE NUNES

Approved as to style and content by:

Michael Krezmiern, Chair

John C. Carey, Member

Madeline Peters, Member

Joseph B. Berger, Senior Associate Dean College of Education
DEDICATION

I dedicate this research to all of my family and friends who have been nothing short of amazing throughout my entire doctoral experience. You all stood beside me through my highs and my lows and were there to help pick me up and brush me off when I needed it or give me that extra push. I know that I might have always seemed too busy and missed many different life events because of my workload but I was always there in my heart. I had to make many sacrifices over the last 5 years and if it wasn’t for each and every one of you I wouldn’t have felt strong enough to do so.
ACKNOWLEDGEMENTS

Mimi- I would give anything to have you here with me today as I finish this chapter of my life. In celebration we would head to the casino after eating peanut butter toast and catching up on our law shows. You always taught me to follow my heart and to constantly better myself. It is because of you I chose the profession I am where I am today and find so much happiness in what I do. A day doesn’t go by that I don’t think of you and even though you are not here I know that you are everywhere I look.

Sean- where do I even begin? You are my rock, my constant, and most importantly my best friend. I’m sure throughout this process you felt as though you deserved a Ph.D in being my boyfriend and in actuality you are probably right. I know it hasn’t been easy. My emotions and stress levels always all over the place and unfortunately often taking it out on you, but you never flinched, you constantly pushed me to succeed and brought me back to stability whenever I needed it. You make me a better person while pushing me to do everything I want to do.

Mom- thank you for always allowing me to chase my dreams and giving me everything and anything I needed to get there. You inspired me while growing up, raising my brother and me, working full-time and chasing your own academic dreams. From a young age I saw you constantly spending late nights studying and because of that you instilled such important educational values in me. This is as much my achievement as it is yours I love you.
Jackie- my very best friend. You have been by my side through my lowest and darkest moments and my happiest and sunniest times for as long as I can remember. I am so lucky to have a friend who never doubts or judges and is always there no matter what. It’s crazy to think where our lives are now after our summers in the accord and camry. Always remember, I’ll stand by you.

Bob- of everyone you probably suffered the most over the last 5 years. Days with no walks, long days of me being gone, and then late nights where all my attention was focused on everything but you. You always forgave and never ceased to make me smile. You are the best dog a girl could ask for, it’s true that Rottweiler’s, not diamonds, are a girls best friend.

Jen & Jen- I get by with a little help from my friends. I still remember our first class together and being so nervous but instantly finding friends and comfort in the two of you. Looking back over the past 5 years I am 100% positive I would have not made it without the two of you. When nobody understood what I was going through I had the two of you to call and never needed to explain myself. I am forever grateful that UMass brought us together and even more grateful that this is still just the beginning of our beautiful friendships.

Noga- I never thought I would be thankful for Stats but I am, mainly because of you. You have been such an inspiration and source of light for me throughout this process. You showed me your unwavering support through our mornings at Esselon and check-in texts.

Griffin’s Friends- Whoever said getting your Ph.D. and writing your dissertation is similar to a marathon was wrong-totally wrong. It wasn’t quite as fun as all of the
marathons I have run with you all. I have developed lifelong friendships through the group. Ron, Charlie, Amy, Sue-Ann, Paul, Becky, Danielle, Jackie, Pam, Selena, Cheryl, Juanita, Mel, JoeJoe, Kris, Harold, Thomas, and Mike you all were there for me at times you didn’t even know I needed you. Avery, if you can beat neuroblastoma there was no way I couldn’t finish this dissertation. You are a light in my life and my little clone, at just 3 years old you inspire more people than most will in a lifetime, never change- and always wear a tutu.

WSU ICEI- to all my amazing students and colleagues, I am able to do what I love everyday because of all of you. We are part of a Civil Rights Movement and the dedication and perseverance you all show inspires me to continue to push forward. You all remind me daily of why I do what I do. Thank you for your support and understanding.

ICEI- thank you to all of my amazing participants. I am so lucky to work among such a powerful network of people across the Commonwealth. We are lucky in Massachusetts and we have stumbled upon something really special, something that will forever impact the students’ we work with lives and in returns our own lives. Ty- thank you for taking my hand that first lunch in August 2012 and helping me develop my program and polish my own values and beliefs. You are a pioneer and a role model to us all. Glenn I am so grateful for your steadfast support of both my program and my academics. Thank you for leading our initiative to new levels.
My WSU family- Cheryl- to the most phenomenal woman I have met. You are my role model, my boss, my sounding board, my friend, my go to advice giver, and my fellow Gap lover. Thank you for trusting me to do my job and take the time to dedicate to my studies whenever I needed. Your encouragement in every avenue of my life is something that I will never forget. I am so lucky that on that very first day at WSU they moved the program to you. I can’t imagine being where I am today without you. Louann- best thing that happened to me at WSU was becoming your daughter, well pretending to be at the hospital. Thank you for being you, helping my program thrive and always listening to me when I needed someone. Having you in my life is like having hot fudge every day, oh wait we do! Education Department- I’ve never met a more caring, thoughtful, and loving group of colleagues who when they ask how you are genuinely care about the answer. Over the last 4 years each one of you has shown such interest and cheerleading support through every step of this process, I am so glad in 2012 I began squatting in 214 and haven’t left. I inspire to one day be an amazing faculty member like all of you.

Dr. Michael Krezmien- Where do I begin? I can’t thank you enough for all of the opportunities you’ve given me as my professor and advisor. You have a special way of pushing us along and then in the crunch and then you come through like a guardian angel, helping us crush the finish and calming us in the process. Your energy and passion about all of your doc students as a whole and individually has forever bonded us all. You have been there every step of the way and never gave up. Although this is the final page of this book I don’t feel it is the end of our book of work together. Thank you again for everything. Prost!

Dr. Jay Carey, and Dr. Madeline Peters- my cherished dissertation committee. It is because of all of you, your guidance, support, and teaching I am where I am at in my educational
career. You have all provided such thoughtful feedback and answered endless questions and
continued to move me forward. You have guided me through an extremely long and detailed
dissertation that in the end will provide rich and meaningful data to higher education
opportunities for individuals with disabilities. I can’t thank you all enough for agreeing to
serve on my committee-we made it!

*Dr. Jason Travers*- my first advisor at UMass, thank you. Thank you for providing me with
so many opportunities to become the educator, writer, and researcher I am today. You took
me under your wing and shared so many projects with me. While I wish you were
logistically here throughout this process distance didn’t matter and I always felt you were
here. Thank you for always taking time away from your busy schedule in Kansas and still
giving me so much undivided attention and feedback.
ABSTRACT

PROMOTING SELF-DETERMINATION SKILLS OF INDIVIDUALS WITH INTELLECTUAL DISABILITIES PARTICIPATING IN THE INCLUSIVE CONCURRENT ENROLLMENT INITIATIVE PROGRAMS THROUGHOUT MASSACHUSETTS

MAY 2017

LYNDSEY M NUNES, BA, WORCESTER STATE UNIVERSITY

MS ED, SIMMONS COLLEGE

MS ED, SIMMONS COLLEGE

Ph.D., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Michael Krezmien

There are currently 15 Inclusive Concurrent Enrollment Initiative (ICEI) Programs throughout Massachusetts. Each program is different in its day-to-day planning but all adhere to the mission, full inclusion of students with intellectual and developmental disabilities. The purpose of this evaluative research study was to examine and understand the functional components of postsecondary education programs that promote self-determination for students with intellectual and developmental disabilities and to differentiate programs that include or do not include these components. To answer the five research questions data were collected from Students, Educational Coaches, ICEI Program Coordinators, Transition Liaisons, Statewide Coordinator, observations, and record reviews. To answer all the questions, it required integrating what we have learned about the program participants with what we are observing in the program. All of this information provided evidence to understand participant perceptions of the observed programs. All of the information collected was interpreted through qualitative and
quantitative approaches consistent with the CIPP model. In addition to examining the quality and potential efficacy of program components, I also examined the consistency across programs. For instance, it was important to know if certain components were viewed as effective components across programs, while other components were viewed as being less effective across programs. These consistencies helped me to understand how the statewide support of specific programs may be adequately or inadequately supporting implementation of those components. Recommendations for program improvement activities to promote self-determinations skills, knowledge, and beliefs of students and educators are provided based on all of the data collected throughout the evaluation.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xvii</td>
</tr>
<tr>
<td>CHAPETER</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Definitions</td>
<td>2</td>
</tr>
<tr>
<td>Preparing Youth for Post-Secondary Education</td>
<td>7</td>
</tr>
<tr>
<td>Research Questions</td>
<td>12</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>13</td>
</tr>
<tr>
<td>What is Self-Determination?</td>
<td>17</td>
</tr>
<tr>
<td>Models of Self-Determination</td>
<td>19</td>
</tr>
<tr>
<td>Components of Self-Determination</td>
<td>26</td>
</tr>
<tr>
<td>Self-Determination &amp; Intellectual &amp; Developmental Disabilities and Autism</td>
<td>32</td>
</tr>
<tr>
<td>Self-Determination &amp; Secondary Schools</td>
<td>37</td>
</tr>
<tr>
<td>Self-Determination &amp; Teachers</td>
<td>43</td>
</tr>
<tr>
<td>Self-Determination &amp; Paraprofessionans</td>
<td>51</td>
</tr>
<tr>
<td>Self-Determination &amp; Post-Secondary Education (PSE)</td>
<td>57</td>
</tr>
<tr>
<td>Inclusive Post-Secondary Education Programs</td>
<td>65</td>
</tr>
<tr>
<td>Post-Secondary Education Program Evaluation</td>
<td>73</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>78</td>
</tr>
</tbody>
</table>
3. METHODOLOGY

The Inclusive Concurrent Enrollment Initiative (ICEI) ........................................ 83
Stakeholders ........................................................................................................... 87
Program Evaluation Research ............................................................................... 94
Ethical Considerations ......................................................................................... 100
Data Sources .......................................................................................................... 101
Potential Limitations .............................................................................................. 103

4. RESULTS

Student Descriptions ............................................................................................ 120
Triangulation of Themes ....................................................................................... 126
Descriptions of 3 ICEI Sites ................................................................................. 167
Logic Models .......................................................................................................... 171
Grant Reviews ......................................................................................................... 175
Focus Groups .......................................................................................................... 188

5. DISCUSSION

Summary of Findings ............................................................................................ 192
Limitations ............................................................................................................... 212
Recommendations ................................................................................................. 214
Overall Program Recommendations ...................................................................... 214

6. CONCLUSION ................................................................................................. 221

APPENDICES ....................................................................................................... 223

1: INFORMED CONSENT/ INVITATION TO PARTICIPATE IN A STUDY ........ 223
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student mean scores for each individual statement on the SDIS:SR mean scores for each subcategory; and overall mean for entire SDIS:SR survey.</td>
<td>109</td>
</tr>
<tr>
<td>2</td>
<td>Percentages of student responses aligned with strongly agree, agree, neutral, disagree, and strongly disagree per each statement.</td>
<td>111</td>
</tr>
<tr>
<td>3</td>
<td>Percentages of student responses aligned with strongly agree, agree, neutral, disagree, and strongly disagree for each of the subcategories.</td>
<td>113</td>
</tr>
<tr>
<td>4</td>
<td>Total combined percentages strongly agree &amp; agree for each category.</td>
<td>114</td>
</tr>
<tr>
<td>5</td>
<td>Individual student average responses for each of the 5 statement response categories of the SDIS-SR.</td>
<td>116</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of correct student responses for the correct fill in the middle of the scenarios for each middle statement.</td>
<td>117</td>
</tr>
<tr>
<td>7</td>
<td>Individual student responses for picking the correct middle statement for the scenarios including total percentage top 2 responses and wrong percentages.</td>
<td>119</td>
</tr>
<tr>
<td>8</td>
<td>Educational coaches mean agreement with statements regarding their students’ self-determined behaviors.</td>
<td>141</td>
</tr>
<tr>
<td>9</td>
<td>Educational Coaches total agreement and disagreement percentage perceptions of their students’ self-determined abilities for each subcategory.</td>
<td>141</td>
</tr>
<tr>
<td>10</td>
<td>Individual educational coaches responses percentages of agreement and disagreements perceptions regarding their students’ self-determined behaviors.</td>
<td>142</td>
</tr>
<tr>
<td>11</td>
<td>Total strongly agree and agree percentages across all coaches for each category.</td>
<td>143</td>
</tr>
<tr>
<td>12</td>
<td>Total strongly disagree and disagree percentages across all coaches for each category.</td>
<td>143</td>
</tr>
<tr>
<td>13</td>
<td>Perceptions comparisons of total strongly agree and agree percentages between educational coaches and students.</td>
<td>145</td>
</tr>
<tr>
<td>14</td>
<td>Perceptions comparisons of total strongly disagree and disagree percentages between educational coaches and students.</td>
<td>147</td>
</tr>
</tbody>
</table>
15: Percentage of coordinators agreement with SDIS results of the students and educational coaches perceptions regarding students abilities .................................................. 149

16: Mean scores of educational coaches accurate self-determination component definitions........................................................................................................ 154

17: Educational coaches mean agreement scores of how prepared they are to promote self-determination skill areas to their students ......................................................... 159

18: Overall educational coaches total agreement or disagreement percentages of their preparedness to teach self-determination skill areas ......................................................... 159

19: Individual educational coaches total agreement or disagreement percentages of their preparedness to teach self-determination skills ......................................................... 163

20: Comprehensive list of all activities programs referenced in the grants .................. 183

21: Percentages of coordinators agreement perceptions regarding the importance of students demonstrating self-determination skills on campus, importance of programs specifically targeting the skills, and if each coordinators program was specifically teaching or enhancing the skills ...................................................................................... 184
**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Differences between traditional transition model &amp; ICEI Model</td>
<td>86</td>
</tr>
<tr>
<td>2</td>
<td>Colleges &amp; Universities with ICEI Programs</td>
<td>94</td>
</tr>
<tr>
<td>3</td>
<td>CIPP Model aligned with the ICEI Program Evaluation</td>
<td>99</td>
</tr>
<tr>
<td>4</td>
<td>Logic Model ICE Program Campus C- Enchanted Circle</td>
<td>174</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

Federal laws prohibit discrimination against individuals with disabilities and seek to provide them with appropriate educational opportunities and services. Young adult students with disabilities remain one of the most marginalized groups moving towards equal opportunities in education. Up until an individual is 18, educational services are easily provided through elementary and secondary schools. Once a student reaches the age of traditional graduation, between the ages of 18 and 22, many students with disabilities wish to leave their secondary schools. Yet the opportunities for services remain limited. There is a need for further development of programs to effectively transition young adults with disabilities into adult services. One such program involves enrollment in postsecondary education. Providing students with intellectual disabilities an opportunity to engage in postsecondary education is not only ethical but also extremely meaningful to the students and their peers.

To date, there has been a dearth of research on effective programs or practices for supporting adults with intellectual disabilities (ID) or autism spectrum disorder (ASD) in post-secondary educational (PSE) settings. There is a small but rigorous body of research focused on post-secondary transition planning for students with intellectual or developmental disabilities (ID) including ASD. However, there have been few studies examining practices for students with ID and ASD implemented at colleges and universities. Often, the option of attending college is left off of transition planning for students with ASD and ID. Already established programs to support students with disabilities in PSE settings are geared towards high incidence disabilities not this more
severe population. There are however, just over 240 programs currently in the United States serving individuals with ASD and ID in postsecondary placements. These programs vary dramatically from one to another. There is limited detailed information available about what model PSE programs for students with ID need to include in programming. Therefore, different programs include different elements. There is an obvious need for some form of program evaluation to be developed. Ideally, this should include both a rating of the skills taught in the programs and a survey of student perceptions about the programs that would allow determination of what practices are truly effective for students with ASD and ID in PSE.

Definitions

**Disability.** IDEA (2004) defines a child with a disability “as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education or related services” (IDEA, 2004, 300.8).

**Intellectual Disability.** Intellectual Disability means “significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period that adversely affects a child’s educational performance” (US DOE, 2004, IDEA 300.8). IDEA (2004) uses the term mental retardation which is now commonly referred to as intellectual disability. (US DOE, 2004, IDEA 300.8). The Higher Education Opportunity Act of 2008 defines a
student with an intellectual disability as a “student with mental retardation or cognitive impairment, characterized by significant limitation in- (i) intellectual and cognitive functioning; and (ii) adaptive behavior as expressed in conceptual, social, and practical adaptive skills; and who is currently, or was formerly, eligible for free appropriate public education under the Individuals with Disabilities Education Act”.

**Autism.** Autism is defined as a “developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotypical movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences” (US DOE, 2004, IDEA 300.8).

**Prevalence of Students With Intellectual Disabilities.** Between 2011 and 2012, there were 6,401,000 individuals between the ages of 3-21 receiving education services across the United States. Of these 6,401,000 individuals, 435,000 were diagnosed with ID and 455,000 were diagnosed with ASD (https://nces.ed.gov). In Massachusetts, during the 2013-2014 school year, 17% of the student population received special education services. Of these students, 48.8% were classified as high intense special education needs (Mass.gov). During the 2011-2012 school year, 1.18% of individuals between 6 and 21 years in Massachusetts had a diagnosis of ID and 1.28% had a diagnosis of ASD. Both subcategories were above the national average of .96% and .9% respectively (https://nces.ed.gov).
**Legislation and Transitions.** The primary body of research on post-secondary outcomes for students with autism has been focused on transition planning and transition services (Wehman, 2006). Transition services were first recognized with the authorization of the Individuals with Disabilities Education Act (IDEA, 1990). The IDEA of 1990 mandated transition services for children with disabilities as part of required educational programming (Wehman, 2006). The purpose of transition services was to ensure that educators planned for the post-secondary outcomes of students with disabilities in addition to supporting their education at school. These transition services were intended to prepare students with disabilities for work, PSE programs, and independent living (Wehman, 2006).

The reauthorization of IDEA (1997) provided a more detailed definition of transition services:

“The term transition services means a coordinated set of activities for a student with a disability that—(a) is designed within an outcome-oriented process, which promotes movement from school to post-school activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; (b) is based upon the individual student’s needs, taking into account the student’s preferences and interests; (c) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation”.
This reauthorization of IDEA introduced the importance of self-determination and self-advocacy, incorporating family and cultural perspectives, and person-centered planning (Wehman, 2006). In 2004, IDEA was reauthorized again (PL 108-446). This reauthorization stated transition services should include services that prepared students with disabilities for future employment and independent community living. This included life-long learning that is results-oriented and delineated in measurable terms (Grigal, Hart, & Paiewonsky, 2010). IDEA (2004) provided subtle but substantial changes to the definition of transition services:

“a coordinated set of activities for a child with a disability—that (a) is designed to be a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child’s movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation, (b) is based on the individual child’s needs, taking into account the child’s strengths, preferences, and interests; (c) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation”.

The changes of IDEA in regards to transition services were subtle but resulted in important modifications. The definition of transition services in IDEA (1990) was basic, requiring only a rudimentary plan for postsecondary outcomes including postsecondary education, work, and independent living. IDEA of 1997 included a more detailed
prescription of transition services. Transition services were required to be outcome-oriented processes that promoted movement from school to post school living based on students’ interests and strengths. They included instruction, related services, and community based experiences. IDEA (2004) included a definition similar to IDEA (1997) with a clarified delineation of transition services. The outcome-oriented process became a results-oriented process that focused on improving the academic and functional achievement of the child with the disability to influence the move from school to post school. The importance of using individual student’s interests and strengths to make decisions about instruction, related services and community based experiences was necessary. IDEA (2004) identified that the students’ academic and functional achievement goals needed to be included to enhance post school outcomes. Both IDEA (1997) and IDEA (2004) focused on outcome or a results oriented process, which was extremely important for goal setting and monitoring, verses IDEA (1990) that only required a simple plan, with no specified outcomes or results.

The changes in policies required school districts to strengthen their transition outcomes for individuals with disabilities and required results-oriented transition planning that promoted students setting their own goals and working towards goal attainment. Accountability measures for transition and postsecondary outcomes such as Indicator 13 and Indicator 14 require districts to report on student transition outcomes and steered schools towards preparing youth for the 21st century workforce through improved transition programming (Grigal, Hart, & Paiewonsky, 2010).
Preparing Youth for Post-Secondary Education

Despite numerous changes in the IDEA, students with disabilities continued to be underprepared and/or unprepared to go to college. Compared to students without disabilities, students with disabilities are less likely to pursue postsecondary education (Grigal & Hart, 2010). Many students remain in high school during their last 3-4 years of special education entitlement, which widens the age discrepancy between them and peers without disabilities (Grigal, Hart, & Paiewonsky, 2010). The gap between students with disabilities and without disabilities finishing high school is closing even as the attendance of PSE for these two groups continues to widen (Getzel & Thoma, 2008).

The Higher Education Opportunity Act (HEOA) of 2008 (P.L. 110-315) contained a number of important provisions designed to improve access to PSE for students with ID. As a result of HEOA, students across the country attended college through one of the 27 model demonstration programs called Transition Programs for Students with Intellectual Disabilities (TPSIDs). Massachusetts and its Inclusive Concurrent Enrollment Initiative (ICEI) Programs were used as a model for many of these programs. In fact, the National Coordinating Center for TPSIDs is housed at the Institute for Community Inclusion at the University of Massachusetts Boston.

The ICEI Program model is collaboration between school districts and Institutes of Higher Education. Massachusetts Executive Office of Education initially supports the collaboration financially through grants awarded to the Institutes of Higher Education. The partnerships are required to develop a sustainability plan for districts to eventually use IDEA funds to pay for the students to attend inclusive programming. ICEI became a
line item in the Massachusetts state budget in 2005 based on the work of the Massachusetts Advocates for Children (MAC) advocacy for students in with ID or ASD attending PSE followed the work of the Institute for Community Inclusion (Grigal & Hart, 2010). The prioritization was based on three federally funded projects, two-model research and innovation projects and a research project at University of Hawaii (Grigal & Hart, 2010). MAC’s efforts were successful and since January 2007 ICE has been operational. Each ICEI program is unique and responsive to the culture of the campus.

Despite legislation and other model programs, students with disabilities continue to under enroll in PSE programs when compared to their non-disabled peers. The success or failure of a student with disabilities enrolling in PSE is influenced by many different factors. A student’s ability to understand, disclose and discuss their disability is one of the largest factors for student’s maintained enrollment (Getzel & Thoma, 2008). The ability to identify ones needs is critical for success.

During elementary and secondary education, students with disabilities are protected by IDEA. An Individualized Education Plan (IEP) is a legal document stating what is required of both the schools and the student aligning with needed accommodations and modifications to the characteristics of their disabilities. Students in PSE are not required to disclose if they have a disability. It is also not the responsibility of the IHE to locate, evaluate, and identify if they believe a student has a disability. This flip can be extremely difficult for students and their families to understand. If a student required accommodations to be successful in secondary education then it is likely they will also require them in their post-secondary education. However, if they do not know how to disclose or where to go to get assistance, they may struggle in their courses and
unfortunately not remain in PSE. Some students are embarrassed or shy and don’t want to say they have a disability or need help, while some may not know exactly what is needed for them because of the reliance on the entitlement of IDEA. The reasons for whether or not an individual self-discloses that they have a disability or need support in college vary by individual. Disclosure is extremely important because it is the only way students will receive the help they may need to be successful. Access to information to prepare for postsecondary education or access to a college or university is another influencing factor of success (Getzel & Thoma, 2008).

Strong developed self-determination skills are critical to a more positive school, post-school, employment, and overall quality of life for an individual with ID and ASD. The ability to become a self-determined adult is not an easy process, especially for individuals with ID and ASD. Wehman (2006) identified nine components of self-determined behavior: choice-making skills; decision-making skills; problem-solving skills; goal-setting and attainment skills; self-management; self-advocacy and leadership skills; positive attributions of efficacy and outcome expectancy; self-awareness and self-knowledge. These nine components of self-determination are interrelated and require their own unique development course throughout ones life in order to appropriately develop an individual’s self-determination.

Self-determination is vital to independence and educational success in enrollment in post-secondary education and employment settings. PSE is a realistic and necessary option to enhance successful adult outcomes of individuals with ID and ASD. Schools should use the student’s entitlement years (18-22) to implement transition planning that fosters self-determination and independent learning (Shaw & Madaus, 2009).
Unfortunately, many PSE settings are not equipped to support students with ID and ASD especially targeting the promotion of self-determination skills. Students with ID and ASD need direct instruction and repeated opportunities to learn, practice, and generalize self-determination skills. Many PSE staff do not have the knowledge or the time to systematically plan to teach these skills; it is also assumed students in PSE settings with or without disabilities have a certain level of skills.

Another problem facing students with disabilities who do enroll in PSE programs is that they are less likely to maintain enrollment compared to their peers without disabilities (Getzel & Thoma, 2008). Services and supports are essential for individuals with disabilities to succeed in postsecondary education. These services and supports aide in developing self-determination skills, developing self-management skills, promoting use of technology, obtaining internships and other career related experiences (Getzel & Thoma, 2008). Eleven percent of undergraduates in 2007–08 reported having a disability across the United States. In 2007–08, 43% of undergraduates with disabilities were male and 57% were female. This is exactly the same composition as undergraduates without disabilities. Undergraduates under the age of 24 made up a smaller percentage of those reporting disabilities than of those not reporting disabilities, 52 percent vs. 59 percent (NCES, 2014).

There is not a comprehensive body of research examining effective promotion of postsecondary education enrollment and/or completion for students with ID and ASD. Low numbers of both available programs and student enrollment makes this a difficult area to address, but it remains mandatory if we wish to increase the number of PSE programs available in the future. This research includes examining specific skills such as
self-determination of individuals with ID and ASD in postsecondary settings and the staff connected to the students.

To date there are only a handful of studies that have rigorously examined ways to promote post-secondary enrollment and success for students with intellectual disabilities. The research has however, identified two major impediments to successful PSE outcomes for this population. First, secondary schools have not adequately support self-determination of their students with ID (Brackin, 2005). This was related to insufficient interventions and supports as well as to educators who were underprepared or unprepared to promote self-determination. Second, post-secondary educational settings have not adequately supported students with disabilities in post-secondary settings, and fail to promote or enhance students’ self-determination skills. Consequently, students with ID and ASD have completed secondary school unprepared to succeed in post-secondary educational settings. As a result, they miss out on the educational and social experiences that frame the future lives of their peers without disabilities (Grigal & Hart, 2010).

This study was designed to evaluate an innovative post-secondary educational program for students with ID and ASD including examining the variables impacting the student’s developing self-determination. The study design will allow for the examination of impediments to successful post-secondary educational outcomes for this population across the state of Massachusetts. The collaborative partnership between IHE’s and local school district is unique and allows for the examination of the training and support of paraprofessionals/educational coaches from various school districts in regards to self-determination. It also allows the examination of self-determination skills and perceptions of students from different communities throughout Massachusetts. Descriptions of
different ICEI Programs and the roles of program coordinators will be provided. Lastly, the supports and services at various campuses that have ICEI Programs will be considered.

**Research Questions**

Five research questions drove this research study. Questions were designed to examine the functional components of PSE programs that promote self-determination for students with intellectual disabilities or autism spectrum disorder and to differentiate programs that do or do not include these components. The questions were:

Q1: Do students with Intellectual Disabilities (ID) and Autism Spectrum Disorder (ASD) in postsecondary education (PSE) think they are self-determined in their daily lives?

Q2: Do the educators of students with ID and ASD in PSE feel their student’s perceptions about their self-determination skills are accurate?

Q3: How do educators define self-determination?

Q4: Do educators (i.e. transition teachers, coordinators, educational coaches) involved in the PSE program feel adequately prepared to teach self-determination skills?

Q5: Does the ICEI Program model have components that support the development of self-determination among the students?
CHAPTER 2

REVIEW OF THE LITERATURE

Preparing students with intellectual disabilities (ID) and autism spectrum disorder (ASD) to attend and complete post-secondary education (PSE) programs requires substantial training and support for both students and educators at the k-12 and college level. Preparing students for a successful transition to adulthood must begin before their 18th birthday. The discussion should begin at the earliest age possible or at the very least discussed at the meeting when the transition planning form is legally required at 14 years old in Massachusetts and 15 years for other states. The opportunity for individuals to attend post-secondary education should not be ruled out just because a student is unable to pass a statewide assessment test; there are options and those options should be explored. Providing students with intellectual disabilities the opportunity to attend PSE programs isn’t solely for the academic growth, it is to provide students with social and life skill experiences that will greatly enhance their overall development and impact their qualities of life more so than if they stayed in their secondary school.

Although we have limited research on this topic, successful post-secondary education requires collaboration between educators, families, agencies, and most importantly the student (Grigal & Hart, 2010). Effective programs must include the factors associated with successful post-secondary transition programs, for example person-centered planning and self-determination skill development. To date, there has been a dearth of research dedicated to examining post-secondary educational programs serving these youth, and few studies that examine the impact of post-secondary education
on student outcomes and student perceptions. There have been little to none evaluation studies of PSE programs for students with intellectual disabilities that examine the potentially efficacious program components. Subsequently, we know a base of information about post-secondary education programs for students with intellectual disabilities and a base of information about the students with intellectual disabilities participating in post-secondary education programs.

Research on self-determination of individuals with intellectual disabilities (ID), developmental disabilities (DD), or autism (ASD) is difficult to conduct for different reasons. The research is even more difficult when focusing on individuals with intellectual and developmental disabilities in post-secondary education settings. The components of self-determination are constantly evolving for individuals whether or not they have disabilities. The concepts can be difficult to measure and evaluate especially with individuals with ID, DD, or ASD if they have limited communication skills or low cognitive abilities. Comprehensive self-determination studies are time consuming and many researchers do not have the time or resources to perform quality longitudinal studies. Due to the variability of self-determination research, researchers tend to employ all different methodologies, selecting one based on the research questions, settings, or subjects.

In order to fully understand the impact of post-secondary education experiences in regards to promoting self-determination of individuals with ID, DD, and ASD the literature review needed to include broad topics. The participation of individuals with ID, DD, or ASD in post-secondary education is a fairly new concept. The motivation for creating access to PSE for individuals with ID, DD, or ASD has been a national focus
since the early 2000’s (Grigal & Hart, 2010). Federal mandates for transition, transition and post-school outcome accountability, transition-related litigation, and preparation for the 21-st century workforce have greatly influenced the creation of PSE opportunities for this population of students. With that being said, research of experiences and outcomes is still sparse for similar reasons to the self-determination research, lacking time, resources, and tools. Long-term studies are greatly needed to measure the effectiveness of post-secondary education programs for individuals with intellectual and developmental disabilities or autism.

This chapter reviews the literature to identify self-determination and its importance, different models of self-determination, self-determination of individuals with ID, DD, or ASD, how self-determination is promoted in secondary schools, the roles of teachers and paraprofessionals in promotion of self-determination, how self-determination influences students PSE experiences, how PSE experiences enhance or promote self-determination development, inclusive PSE programs and the influence of self-determination, and the base frameworks of PSE program evaluations.

Several steps were employed in the search for applicable literature. Much of the literatures found were a mix of research studies, academic papers, research briefs, and program descriptions. Academic papers were primarily located when searching for studies about inclusive post-secondary education for individuals with disabilities. The literature review will include information from all of these sources. The lack of empirically validated research driven articles about inclusive PSE for individuals with ID, DD, or ASD is a limitation in the field. The narrowest search scope was self-determination of students with ID, DD, or ASD in post-secondary inclusive programs.
Many papers located focused more on high incidence disabilities. In addition, topics directly related to the research questions and the broader issues were included and used in different combinations to yield studies: self-determination, self-determination perceptions, models of self-determination, post-secondary education programs, inclusive post-secondary education programs, autism, paraprofessional’s preparation and perceptions, teacher preparation and perceptions, secondary schools, high schools, transition, and evaluations.

These search terms were used in the following databases: Academic Search Premier, Education Resources Information Center (ERIC), and Psychological Abstracts (PsycINFO). Academic Search Premier is a collection of over 8000 scholarly journals. The Education Resources Information Center (ERIC) includes educational research and resources, and the Psychological Abstracts (PsycINFO) includes information from over 1300 journals, dissertations, and technical reports concerning psychology and related disciplines. I also used Academia.edu, which is an online platform for academics to share research papers. I tracked specific authors on Academia.edu who are regularly cited regarding self-determination, ID/DD, and post-secondary inclusive education: Michael Wehmeyer, Karrie Shogren, Debra Hart, Meg Grigal, Sharon Field, and Paul Wehman. In addition to searching the databases, I reviewed the table of contents and reference lists of journals: Education and Training in Autism and Developmental Disabilities, Career Development and Transition for Exceptional Individuals, Teaching Exceptional Children, Focus on Autism and Other Developmental Disabilities, and Journal of Applied Behavior Analysis.
In order to understand the current literature on post-secondary outcomes for students with intellectual disabilities, it was important to understand the literature on self-determination, self-determination in secondary and post-secondary schools, and self-determination of individuals with disabilities. More specifically the research on (1) self-determination, (2) the models, characteristics, and components of self-determination, (3) self-determination of individuals with ID, DD, or ASD, (4) how secondary school experiences enhance or promotes self-determination, (5) how teachers influence development of self-determination, (6) how paraprofessionals influence development of self-determination, (7) how PSE experiences enhance or promote self-determination development, (8) models and characteristics of PSE programs, and (9) program frameworks and models to evaluate PSE programs.

**What is Self-Determination?**

Self-determination is a multifaceted psychological construct that is applied to an educational context (Wehmeyer et al., 2012, Wehmeyer, 2007). Prior to 1990, the term self-determination was mostly discussed in the disciplines of philosophy, political science, and psychology (Wehmeyer, 1999). The way people define self-determination is based on how they perceive their own self-determination abilities as it relates to their lives. Wehmeyer (1999) categorized self-determination specifically in regards to disability literature, as a basic human right, specific response class, and based on the functional properties of the response class.

Self-determination signifies a primary domain of the quality of life (Carter, Trainor, Sun, & Sweedeen, 2009). The significance of self-determination for individuals
with disabilities has become the focus of special education over the past 30 years. There are limited number of studies examining the link between enhanced self-determination and positive outcomes in lives of people with disabilities (Wehmeyer & Palmer, 2003).

The definition of self-determination is constantly evolving. As a concept, self-determination is difficult for practitioners to learn, understand, and in result can be challenging to promote in their settings. Throughout our lives, we find ourselves in situations that we feel confident to exercise our own self-determination skills while in other situations we find ourselves struggling (Wehmeyer & Field, 2007). The development of self-determination is a lifelong process. Complex stages throughout a life cycle influence an individual’s development of self-determination (Ward, 1991). The difficultness of a decision in relation to the age and cognitive development of the individual impacts their measure of self-determination in that given instance (Ward, 1991). Decisions an individual might have to make at a young age that require self-determination skills may be minuscule in comparison to decisions they might have to make in their teen or adult years.

Self-determination is not one specific, measurable and observable behavior. It is a multifaceted construct that is observable through many different behaviors and non-behaviors. The most widely accepted definition of 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 of 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 in our society.” (Field et al., 1998a, p.2)

There are common and consistent themes throughout all the different definitions of self-determination: knowing oneself, making choices, taking control, believing in oneself, and taking action to reach goals (Field, 2003). The ability to identify and achieve goals is based on a solid foundation of knowing one’s strengths, weaknesses, and abilities (Field, 2003).

Self-determination is identified by four essential characteristics: the person acted autonomously, the behaviors are self-regulated, the person initiated and responded in a psychologically empowered manner, and the person acted in a self-realizing manner (Shogren, 2013; Wehmeyer, 1999). The four characteristics in relation to the function of the behavior establish whether or not the behavior was self-determined. The philosophical doctrine of determinism is grounded in the philosophy and theory of self-determination. Determinism is when human behavior or events are effects of the preceding causes or events; or the universe is lawful and orderly (Wehmeyer, 2007; Cooper, Herron, & Heward, 2007). Self-determination behavior is not random; it is volitional and intentional (Wehmeyer, 2007).

Models of Self-Determination

There are different theoretical models of self-determination. Three of the more commonly referenced and will be explained in this chapter, they are: The Five-Step Model of Self-Determination, the Ecological Model of Self-Determination, and the Functional Model of Self-Determination. The Five-Step Model for promoting self-
determination theorizes that self-determination is either promoted or discouraged by factors within the individual’s control. The Ecological Model theorizes that self-determination is a construct and complex process that the individual must achieve a certain level of personal control over their life and it is influenced by four systems: micro, meso, exo, and macro. The Functional Model theorizes that self-determination is conceptualized as a dispositional characteristic based on the function a behavior serves and the skills and attitudes that are attributed to the nine component elements. All three models are influential in the field of special education but it is the Functional Model defined by Wehmeyer and colleagues (1997, 2001, 2003b, 2005, 2006) that is most applicable and understandable in regards to individuals with ID, DD, or ASD. For this study the theory, components, and characteristics of the Functional Model of Self-Determination will be what guide the discussion about self-determination. The Functional Model has been empirically validated and is the most commonly used in the field of special education.

**Five-Step Model of Self-Determination.** Field and Hoffman (1994) developed a Five-Step Model of Self-Determination by modifying a process developed by Gordon in 1977. The revised model in 2006 emphasized the key elements of self-determination and highlighted three contributing factors: One understands of the environment that they are trying to express self-determination in, the ability to build and maintain positive relationships, and one’s ability to focus on goals.

Factors within an individual’s control and the variables in the environment either promote or discourage self-determination for an individual. There are five major components of the model and they address both internal, affective factors, and skill
components (Wehmeyer & Field, 2007). The two components that describe the internal factors are Know Yourself and Your Environment and Value Yourself. Knowing yourself includes dreaming, knowing options, supports, and expectations, developing morals and knowing strengths, weaknesses, needs, and preferences. Valuing yourself requires an individual to accept and value himself or herself, use their weaknesses to find strengths, recognize rights and responsibilities, and develop and nurture positive relationships (Hoffman & Field, 2006).

The Plan and Act phases require individuals to identify skills needed to evoke the behavior identified from knowing and valuing yourself. Planning requires that an individual set goal, plan small steps to meet the goals, anticipate results, be creative, and visually rehearse. Once through the planning phase the individual should enter the Act phase. The Act phase requires the individual take risks, communicate and negotiate, access resources and support, deal with conflict and criticism, and be focused and persistent. The Plan and Act phases rely on the fact that an individual must have the strength and ability to act on their internal awareness (Wehmeyer & Field, 2006).

Experience Outcomes and Learn is the final component to the Five Step Self-Determination Model. In this phase an individual will compare outcomes to what they actually expected to occur, realize their success or failures, and use the information to make adjustments (Wehmeyer & Field, 2006). All five of the steps of the Five-Step Model of Self-Determination are greatly influenced by the environment. The environmental conditions should be considered when teaching and promoting self-determination for individuals with disabilities.
The Five-Step is not being adopted for this study because it is more prescriptive than and not as comprehensive as the Functional Model of Self-Determination. Each phase is articulated clearly by Hoffman & Field but addresses more of the potential responses and not necessarily always the function of the behaviors.

**Ecological Model.** The Ecological Model of Self-Determination requires the environment change for individuals to become more self-determined. Setting and contextual variables are certainly important but they are relatively flexible in responding to needs of individuals. Self-determination is a complex process in which the ultimate goal is to achieve a level of personal control over the life an individual desires. An individual’s life desires could potentially evolve based on their personal differences and experiences (Abery & Stancliffe, 1996). The Ecological Model of Self-Determination identifies intrinsic motivation as the maintaining variable of self-determination. Intrinsic motivation and/or desire for an outcome will provoke an individual to use their skills, knowledge, and/or beliefs at their disposal to act on the environment and obtain the wanted outcome (Wehmeyer, in press).

Although motivation is important for change, for an individual to be self-determined they must be the causal agent of the change. There are many other factors other than just intrinsic motivation that influence whether or not an individual is self-determined. Stated in the prior paragraph setting and contextual variables are certainly important but are relatively flexible in responding to needs of individuals. The environments greatly controlled by others for individuals with ID, DD, or ASD and due to the characteristics of their disabilities they may not always be able to appropriately respond to the environmental changes.
Although the Ecological Model has been empirically evaluated, operationalized in the development of assessments, and provided a foundation for research it is not adopted for this study. There are issues for individuals with ID, DD, or ASD when the environment changes around them and they aren’t capable of adapting or self-advocating. The main factor for not adopting the Ecological Model is I don’t feel it is fully comprehensive to include all of the necessary skills one-must possess to be self-determined. Someone can be intrinsically motivated but have no skills to act on the motivation; this is where there needs to be a teaching element to the model and break down specific behaviors.

**Functional Model of Self-Determination.** Introduced by Michael Wehmeyer and colleagues (1997, 2001, 2003b, 2005, 2006), the Functional Model of Self-Determination is one of the most cited definitional frameworks of self-determination (Shogren, 2013). The development of the Functional Model of Self-Determination is rooted in the fact that Wehmeyer and colleagues believe that self-determination cannot be defined as a specific set of behaviors because almost any behavior can be used to exert control over one’s life (Shogren, 2013). The Functional Model emphasizes that self-determination must be defined and the behaviors must be identified based on the function they serve for the individual (Wehmeyer et al, 2007). The model is able to address the degree to which people with ID, DD, and ASD are self-determined. As stated prior, the Functional Model of Self-Determination will be the principal model of self-determination for this study. A thorough explanation of the model, the characteristics, and the components follows.
An individual’s enhancement of self-determination is based on their intellectual capacity and the environmental supports that emphasize choice and autonomy (Wehmeyer, 1999). Self-determination should be defined based on the function of a person’s actions or behaviors, not the response class. The definition devised from the Functional Theory of Self-Determination is “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” (Shogren, 2013, p.5). Volitional actions are purposeful actions that have specific intent (Shogren, 2013).

There are four essential characteristics of the Functional Model that are predictive of self-determination levels. They are: the person acted autonomously, the behavior was self-regulated, psychological empowerment, and self-realization (Wehmeyer, 2007). An individual’s behavior must reflect each of these four essential characteristics for the individual to be self-determined. Self-determination may vary over time and across environments. These essential characteristics are necessary but not individually sufficient characteristics of self-determination (Wehmeyer, 1999).

Behavioral autonomy is the outcome of the process of individuation and actions. For a person to demonstrate behavioral autonomy they must act according to their own preferences, abilities, and interests undue from any external influences. Four areas that behavioral autonomy can be demonstrated in practice verse theory is self and family activities such as daily living skills, management such as independently handling financial interactions, recreational and leisure activities being selected based on personal preferences, and social or vocational activities also being selected based on personal preferences (Wehmeyer, 1999).
Critical to self-governance of an individual is the characteristic of self-regulation. This is demonstrated when an individual is able to evaluate a surrounding environment and their ability to examine their own behavioral repertoire of responses for coping within the environment. Other forms of self-regulation are self-management, self-reinforcement, self-evaluation, decision-making, and problem solving (Wehmeyer, 1999).

The third characteristic, psychological empowerment, is when an individual is cognitively aware and feeling capable of their abilities. Personal efficacy, locus of control, and motivation all influence one’s learned hopefulness and the greater the learned hopefulness the greater results in social inclusion and community involvement (Wehmeyer, 1999).

Self-realization is the final of the four essential characteristics of self-determination. The tendency of an individual to shape their life based on their experiences, goals, and self-awareness is self-realization. Self-realization occurs when individuals know what they do well and act accordingly, essentially becoming all one can be. Self-knowledge or self-understanding influences one’s self-realization forms through experiences with the environment and with other individuals, reinforcement, and attributions of behaviors (Wehmeyer, 1999).

Causal agents are people who make things happen in their own lives. Causal means expressing or indicating change; involving causation or a cause-marked by cause and effect (Merriam-Webster, 2004). The word agent means a person or thing that causes something to happen (Merriam- Webster, 2004). Individuals who are self-determined are
causal agents in their own lives; causal agency implies that something was purposeful or performed to achieve an end (Wehmeyer, 1999). Individuals with disabilities are causal agents when they act with intent to cause the things they want to happen in their lives to shape their futures and destiny (Shogren, 2013, Wehmeyer, 2005; Wehmeyer, 1999). Example: Determining a healthier lifestyle is needed and start going to the gym daily and eating healthy.

Quality of Life (QOL) is a complex construct and a human rights principle. QOL are the hopes, dreams, and levels of general happiness people have in their lives (Shogren, 2013). The domains of quality of life include emotional well-being, interpersonal relations, material well-being, personal development, physical well-being, self-determination, social inclusion, and rights (Shogren, 2013, Schalock et al., 2002, Wehmeyer, 1999). Quality of Life is important for everyone regardless of disability and is enhanced by higher levels of self-determination. Environmental factors, basic needs met, integration into society, personal characteristics, and enabling individuals to participate in their own decisions greatly influence one’s quality of life. Purposefully hindering ones quality of life is ethically wrong.

**Components of Self-Determination**

There are nine components of self-determined behavior: choice making skills; decision making skills; problem solving skills; goal-setting and attainment skills; self-management; self-advocacy and leadership skills; positive attributions of efficacy and outcome expectancy; self-awareness and self-knowledge (Wehman, 2006). Each component element follows its own distinctive developmental course or may be acquired
and influenced through specific learning experiences (Wehmeyer, 1999). The essential characteristics of self-determined behavior transpire through the development of the interrelated component elements (Wehman, 2006). A brief description of each of the component elements and why they’re important for individuals with disabilities follows.

**Choice Making.** Choice making is an individual’s ability to express their preference between two or more choices (Wehman, 2006). Choice making is very important for individuals with ID, DD, or ASD. Individuals demonstrate less maladaptive behaviors and more adaptive behaviors when provided opportunities to make choices (Wehman, 2006). Providing choice has been correlated to lower rates of contextually inappropriate behaviors (Miltenberger, 2006). Unfortunately students in special education are not provided with many choices throughout their days, partially due to their Individualized Education Plan (IEP) prescribing their daily activities. Choice making provides individuals with ID, DD, and ASD the ability to exert control over their environment and him or herself.

**Decision Making.** Decision-making is similar to choice making because an individual is selecting an outcome based on provided options. Decision-making is different because it involves an individual to use judgment about what choice or solution is right at a given time. Effective decision making requires individuals to identify possible alternatives for action, identify possible consequences of each action, assess the probability of each consequence occurring, select the best alternative, and implement the alternative decision (Wehman, 2006). Decision-making skills are important for individuals with ID, DD, or ASD because it provides them to an opportunity to be more actively and independently involved as possible in their own lives. Having decision
making skills allow an individual with intellectual disabilities a way to exert control over their lives.

**Problem Solving.** A problem is a question, activity, or task that is difficult to complete or deal with and the solution or answer is unknown (Merriam-Webster, 2004). Problem solving requires an individual identify and define the problem, list possible solutions, identify the pros and cons of each solution, make judgment about the preferred solution, and evaluate the efficacy of the judgment (Wehman, 2006). Problem solving skills are important for individuals with ID, DD, or ASD as they influence one’s capacity to interact with others and deal with problems that might arise. Unfortunately, problem-solving skills are extremely difficult to grasp when individuals have executive functioning issues, functioning delays, or cognitive delays. A higher-level order of thinking is required to solve problems and problem-solving skills aren’t always amendable to being taught. Problem solving skills are needed in many areas of life. For individuals with disabilities problem-solving skills may be the critical factor to not only obtaining but also maintaining employment.

**Goal Setting & Attainment.** The probability of attaining a goal increases if a person is the one who sets the goal based on their wants and needs. Goals identify what a person wants to achieve and how they will act as regulators of human behavior. Goal setting requires identifying and defining a goal, developing a plan to achieve the goal, and identifying the actions necessary to progress towards achievement of the goal. Goal setting is important for individuals with ID, DD, or ASD because it requires they think about their wants and needs, think about the future, brain storm ways in which they might obtain the goal, develop a plan, self-manage their behavior to work towards reaching the
goal or become self-advocates and identify the appropriate sources of help to reach the
goals. Setting realistic goals can be difficult for individuals ID, DD, or ASD who may
have false sense of reality or competencies (i.e. setting the goal to be a NFL football
coach with no coaching or football experience) or ability to think about a lapse in time
and not the present moment. Goal setting does allow individuals to identify things they
do or not do want to do which is very powerful in enhancing self-determination because
often their goals are prescribed for them by practitioners, family, and other team
members.

**Self-Management.** Highly developed self-management skills are linked to
attainment of positive adult outcomes (Wehmeyer, 2007). Self-management is comprised
of self-monitoring, self-evaluation, self-instruction, and self-reinforcement. Self-
monitoring is an extremely effective strategy for modifying behavior (Cooper, Heron, &
Heward, 2004). Self-monitoring involves teaching students to observe the occurrence or
nonoccurrence of their own targeted behaviors. Self-monitoring is important for
individuals with ID, DD, or ASD because it makes them aware of their own behaviors,
possibly increase their motivation, and makes them more responsible for their own
actions (Wehman, 2006). Self-reinforcement interrelates to self-management because it is
teaching individuals to provide consequences to them when they exhibit targeted
behaviors or refrain from exhibiting targeted behaviors (Wehman, 2006). If individuals
with ID, DD, or ASD use self-reinforcement then they are able to provide themselves
with reinforcers immediately, which will increase the likelihood that the behaviors will
occur again in the future under similar conditions.
Self-regulation is a process of setting goals, developing a plan to achieve goals, implementing and following the action plan, evaluating the outcomes of the action plan and adjusting accordingly (Wehman, 2006). Self-regulation is important for individuals with ID, DD, or ASD because it allows them to survey their environments, assess their possible responses, and select a response based on their knowledge of the environment and their behavioral repertoire. Student-directed learning requires teaching students strategies that will allow them to modify and regulate their own behavior; it is a shift from teacher-mediated instruction to student-directed learning. Self-evaluation teaches students to check their performance on predetermined goals. Self-evaluation can be used with student-directed learning as it provides students an individual and independent way to monitor progress (Wehman, 2006).

**Self-Advocacy & Leadership.** A self-advocate is someone who advocates for oneself about his or her preferences, wants, strengths, and needs. Self-advocacy is demonstrated when an individual takes action on one’s behalf. The greater acts of self-advocacy lead to greater self-determination (Field, 1996). Individuals with ID, DD, or ASD need to learn two steps to being a self-advocate: how to appropriately advocate and what they should advocate for. Individuals need to be able to understand themselves, which requires they know about, understand, and can describe their disabilities. Educators should teach students how to be assertive but not overly assertive as to intimidate or inappropriately address situations. They should also promote individuals with ID, DD, or ASD be effective communicators, be able to compromise, and have some abilities to negotiate. Teachers should provide students with social pragmatics, scripts, or
even modeling to teach ways to be effective but appropriate self-advocates (Wehman, 2006).

**Positive Attributions of Efficacy and Outcome Expectancy.** Students with disabilities tend to have lower perceptions of their efficacy and outcome expectations than students without disabilities (Wehman, 2006). The perception of control over one’s life greatly impacts one’s ability to be self-determined. If people trust others to control their lives and outcomes then they have minimal internal locus of control. To have a high level of internal locus of control individuals need to feel in charge of their environments and their lives. Increased levels of locus of control influence efficacy expectations because individuals believe that they are more capable of performing expected behaviors (Wehman, 2006). It is important for individuals with disabilities to have internal locus of control but is often impacted by the over dependency/reliance on others due to past history of reinforcement and punishment.

**Self-Awareness.** Students develop an understanding of their abilities, strengths, limitations, and needed accommodations through their interactions with the world. An unfortunate theme is that students with disabilities and their teachers are often more aware of things they cannot do verse the things that they can do (Wehman, 2006). The awareness of things one cannot do influences the way in which they interact in their environments. Many students are prompted to exhibit certain behaviors, which influences their perceptions on whether or not they can do things independently. Teachers need to provide opportunities for students to be able to not only understand their abilities, strengths, limitations, and needed accommodations but also be able to express them. Self-
awareness is important for someone with disabilities because the individual can hone in on their strengths or how they can improve their weaknesses.

**Self-Knowledge.** Test, Fowler, Wood, et al. (2005) state the foundation of self-advocacy lies in the knowledge of one’s self and their rights. Knowing yourself is not just knowing your strengths and preferences but also knowing the skills and areas of your life that you require support. In order to properly communicate you must know yourself (Shogren, 2013). Assessing preferences and promoting choice making is one way educators can increase student’s self-knowledge. It is important for individuals with ID, DD, or ASD to have a level of self-knowledge to be able to appropriately self-advocate.

**Self-Determination & Intellectual or Developmental Disabilities and Autism**

Self-determination is a developmental process for people whether or not they have intellectual disabilities, developmental disabilities, or autism (Shogren, 2012). Many students with ID, DD, or ASD are not self-determined individuals and few schools support self-determination among its populations of disabled and non-disabled students (Wehmeyer, 2007). People with intellectual disabilities tend to have less prevalent self-determination skills than their typical peers (Wehmeyer, 1999). Despite the prevalence of autism, there is limited research on the transition of youth with ASD ages 16-21 (Hart et al., 2010). Self-determination is important and related to transition outcomes and has been causally linked to more positive adult outcomes for individuals with intellectual disabilities (Wehman, 2006). A reason individuals with disabilities are lacking self-determination skills is because they have had limited opportunities to learn and practice the skills in their educational settings. Promoting self-determination skills of students
may require multiple teaching strategies, opportunities, and supports across a person’s life (Shogren, 2012). Even though the literature base is small there is evidence that students with disabilities can benefit from training the self-determination component elements and characteristics and that students with ID, DD, or ASD can develop well-defined self-determination skills (Wehmeyer, 2007).

The multidimensional construct of self-determination is evidenced in transition age adolescents when they can “identify their interests, strengths, and preferences; communicate their goals for the future to others; evaluate their options; make important life choices; take steps to achieve this vision; advocate for and draw upon needed supports and services; reflect on their progress toward their goals; and adjust their efforts as needed” (Carter et al., 2009, p180).

Professionals and students have both identified self-determination skills as a critical component for successful post-secondary education experiences (Grigal & Hart, 2010). Every student with disabilities has an individual profile of support needs. These support needs are identified based on the student’s preferences, strengths, weaknesses, goals, and their ability to function in daily life activities. Students with disabilities have a greater need for support than students without disabilities (Shogren, 2013). A comprehensive system of support is a key component associated with positive transition outcomes (Thompson, Wehmeyer, & Hughes, 2010). A comprehensive system requires that the team focus on the four components of self-determination: the person acted autonomously, the behavior was self-regulated, the person started and responded to the occasion in a psychologically empowered manner, and the person acted in a self-realizing manner (Wehmeyer, 2007).
Providing opportunities for individuals to demonstrate preferences and make choices has been linked to more positive transition outcomes and decreases in contextually inappropriate behaviors (Wehmeyer & Field, 2007; Miltenberger, 2006). Decision-making and problem solving skills require higher order level of thinking. Researchers found that when teaching decision making to individuals with cognitive disabilities there were improvements in the student’s acquisition of socially valid skills (Wehmeyer & Field, 2007). Individuals who have limitations in the area of problem solving skills unfortunately have difficulties in employment, independent living skills, and in the community.

The majority of research articles address choice making as the most frequently addressed component of self-determination pertaining to individuals with disabilities (Wehmeyer, 2007). Both Cooper and Browder (1998) and Watanabe and Sturmey (2003) found that when choice making was taught to and promoted for students with disabilities there were improved outcomes in community-based instruction and vocational tasks. Teachers often say they are promoting self-determination skills because they are offering choices occasionally in the classroom and tend to not consider the other 8 components. This is a result of teacher not being familiar with the other components or how to teach them.

Choice making is something that many individuals with intellectual disabilities have limited opportunities to exhibit. Students with intellectual and developmental disabilities are faced with multiple barriers to choosing things based on their preferences. Individuals with ID, DD, or ASD are often presumed to have few and/or intense preferences so opportunities to choose are restricted (Wehmeyer, 2007). Students with
ID, DD, and ASD unfortunately do not always communicate their preferences through conventional means and consequently their choices may not be recognized or acknowledged (Wehmeyer, 2007).

M.L. Wehmeyer & S.B. Palmer (2003) published a follow-up study of individuals with mental retardation or learning disabilities who were surveyed 1- and 3-years after leaving school. The students were divided into two groups based on their self-determination scores, high scores and low scores, during their final year in high school. They found that students who were more self-determined progressed better across different adult life categories.

The sample consisted of 94 students served under the categories of either learning disability or mental retardation through public schools in seven states: Alabama, California, Connecticut, Kansas, North Carolina, Texas, and Virginia. Self-determination scores were collected three times: graduation, 1 year and 3 years out. The students were split into the high and low self-determination groups based on their initial self-determination scores. High self-determined students were students whose self-determination score was 1 standard deviation or more above the mean and the low self-determination group consisted of students whose self-determination score fell 1 standard deviation or more below group mean. All students who held a job at the time of the first-year follow up were grouped to conduct analyses. Lastly, the entire sample was ranked accordingly to scores and then a median split was made to examine changes in job status and access to job benefits.
The survey-type questionnaire was adapted from Wehmeyer and Schwartz (1997) and designed to evaluate outcomes in major life domains. All questions except for where the student lived were yes or no format to create dichotomous variables for analyses. Self-determination was measured using The Arc’s Self-Determination Scale (SDS), a scale that has been normed, tested for construct validity, factorial validity, discriminative validity, and internal consistency. Chi-square analyses were used to compare dichotomous indicators of major adult outcomes.

Results were appropriately articulated in regards to the quality indicators for correlational research. A univariate analysis of variance examining differences between high and low self-determination groups indicated no statistically significant difference between the groups. There were substantial differences in IQ between the two groups so Wehmeyer & Palmer also included a discriminant function analysis for each variable.

Wehmeyer & Palmer’s results replicated findings from Wehmeyer & Schwartz (1997). The results provide more validation that self-determination is important in the lives of students with disabilities. As expected, students in the high self-determination group had more indicators of financial independence, which was most likely a result of differences in employment status and training. Overall, the low self-determination group never responded more positively than the high self-determination group in any areas.
Self-Determination & Secondary Schools

Transition services for individuals with disabilities were originally mandated by the reauthorization of Individuals with Disabilities Educational Act (IDEA, 1990). The reauthorization was the first time IDEA documented and ensured greater student involvement in transition planning. Fourteen years later, the reauthorization of IDEA (2004) strengthened the 1990 initiative by ensuring student involvement in their transition planning and adding the consideration of student’s strengths, preferences, and interests (Morningstar et al., 2010). The requirement of measurable post school goals in the areas of employment, education/training, and independent living were outlined in IDEA (2004). The reauthorization also requires states to report on student transition planning and post school success (Morningstar et al., 2010). The intent of IDEA (2004) transition requirements was to align special education with the general education school reform efforts.

Morningstar et al. (2010) proposed five quality indicators of effective transition programs: interagency collaboration, student-centered transition planning, curriculum and instruction focused on specific post school outcomes, family involvement, and student self-determination. Although self-determination is its own indicator, it is inadvertently enhanced by the strength of the other four indicators. Interagency collaboration relates to self-determination of an individual with ID, DD, and ASD because the relationships between the agencies and the individual and their family require the individual to have a certain level of self-knowledge and self-advocacy. Student-centered transition planning relates to all of the components but specifically self-management, self-advocacy, self-awareness, self-knowledge, and goal setting. The individual needs to be able to express
their own strengths, weaknesses, preferences, and importantly set goals for the transition planning to truly be student-centered. For individuals with very limited communication abilities many different assessments should be administered and a variety of attempts made to gather as much comprehensive data about the student as possible.

Curriculum and instruction focused on post school outcomes relates to the same components as those of student-centered transition planning. Curriculum and instruction also relates to decision-making and problem solving, as these will be skills necessary to guide individuals through the potential curriculum and to push them towards more independence. The last transition indicator is family involvement. Family involvement relates to all of the components in different ways. First, the components all uniquely develop and are often shaped by individual experiences of the student. Parents tend to make the decisions for their students with disabilities beginning at a young age and continue throughout their K-12 years if not longer, especially for students with limited cognitive abilities. The family is critical in shaping skills and providing experiences for the student to promote learning of the components. The emergence of self-determination is based on enhancement of the individual, as well environments and supports that emphasize choice and this is where the family is involved. These transition indicators are interwoven with the components of self-determination.

Promoting self-determination is critical for all students in general and special education. Unfortunately, notwithstanding promise of promoting self-determination as a curriculum expansion, self-determination teaching strategies, such as the Self-Determined Learning Model of Instruction (SDLMI), are rarely implemented in practice (Shogren et al., 2012). Educators should promote self-determination within all of their instructional
times in the general and special education settings. Teaching individuals with disabilities the needed skills to be more self-determined provides them with a valuable skill set to enhance their overall academic performance (Wehmeyer, 2007). Self-determination skill acquisition can be reinforced by creating activities that help students learn to access resources, communicate preferences, communicate needs for accommodations, set goals, manage time, problem solve, and develop greater self-awareness (Clark, Olympia, Jensen, Heathfield, & Jenson, 2004).

Educational policies and practices for all students emphasize the importance of fostering self-determination skills (Carter, Sisco, & Lane, 2011). Schools are legally responsible for accommodations and at times for identifying disabilities. The reliance on the responsibility of schools can be viewed as a disservice because this would be an ample teaching moment for students to learn to self-advocate. Students become accustomed to people knowing to some extent at all times what they need. Implementation of actual instruction needs to coincide with efforts to provide many opportunities for the individual to experience control, make decisions, and make choices (Wehmeyer, 1999).

Eisenman et al. (2014) examined students’ experiences of self-determination in an inclusive high school through a 5-year qualitative case study. The study took place at one single school and was unique in allowing the researchers to examine multiple, embedded units of analysis over 5-years. Eisenman et al.’s major units of analyses were student experiences and development of self-determination. There were many different data sources used by the researchers to gather the necessary information. Focus student groups, teachers, parents/guardians, teaching support team members, general education
teachers, administrators, guidance counselors and a review of academic and discipline records were all sources of data.

The learning support coach based on the students’ eight-grade records identified focus students. The two students with the highest achieving records and two who were lowest achieving with more behavioral problems were selected for the study. The four focus students from each of the first four cohorts for the 5 years of the study were followed. The researchers conducted 146 semi-structured interviews with 73 other participants across the five years. Each year the academic and discipline records of the 16 focus students and the schools public accountability profile published by the state were reviewed. Field notes were collected throughout observations.

The data analyses conducted by the researchers were detailed and descriptive especially with the wealth of their data. Eisenman et al. outlined the coding process used to move beyond basic descriptions and use a grounded self-determination theory as support. Evidence to support that the study demonstrated trustworthiness and credibility were provided. Trustworthiness was achieved by the length of time at the site by a team of researchers who all had different degrees of experience. There was also an insider/outsider status at the school, extensive data from interviews with a variety of informants, and other supplementary data used. Credibility was achieved because Eisenman et al. triangulated across data types, participants, researchers, and theoretical frameworks. The extensive use of participants’ quotes supported the transferability or applicability of the case to other settings.
There were three interacting features of the school’s inclusive supports model that were the most influential to participants’ views of students’ emerging self-determination. These three interacting features were: autonomy, relationships, and competence. School structures that addressed the students’ needs for autonomy, relationships, and competence through explicit expectations for students were attributed to student growth. Based on the findings, it was indicated that the students’ development of self-determination skills were related to the schools model of coaching they received on self-advocacy, organization, and goal monitoring practices.

Shogren, Palmer, Wehmeyer, Williams-Diehm, and Little (2012) reported findings from a randomized trial control group study examining the impact of interventions using the Self-Determined Learning Model of Instruction (SDLMI) on academic and transition goal attainment of high school students’ with intellectual and learning disabilities. The SDLMI is a “model of teaching designed to enable teachers to teach students to set and attain goals in multiple content areas, from academic to functional” (Shogren et al., 2012. p.33). There were 312 high school students recruited from three different states. Of the 312 students, 30% had a label of intellectual disability. The locations the students spent the majority of their days in were almost evenly split amongst general education classrooms, resource-rooms, and self-contained classrooms.

The study lasted over a two-year span. During the first year there was a treatment and a control group, the treatment group being the ones to receive the SDLMI instruction. During year 2, both the control and treatment groups received SDLMI instruction. Teachers received training on the SDLMI and then following baseline implemented it with the treatment group. Students were supported through each phase of the model.
within the context of ongoing academic and transition-related instruction. Once a goal was achieved, students and the teachers would complete the student questions section and set new goals. Students were encouraged to develop other educational supports through the model, for example self-monitoring strategies. The additional supports were targeted for students based on their individual needs.

The results of the study suggest that using the SDLMI with students with intellectual and learning disabilities led to significant changes in the goal attainment and access to the general education curriculum. Students with intellectual disabilities showed higher attainment of transition goals verse academic goals at the end of the intervention year. Shogren et al. suggested that the higher attainment could be that transition-related goals for students with intellectual disabilities were more meaningful and teacher’s perceptions may have influenced outcomes. Previous support or goal-setting experience had no predictor qualities on academic and transition goals. Students with intellectual disabilities showed significant increases in their access scores compared to the students with ID in the control groups. The findings suggested that by using the SDLMI to provide self-determination instruction there is potential for greater access to the general education setting and higher levels of goal attainment for students with ID.

Wehmeyer, Shogren, Palmer, Williams-Diehm, Little, and Boulton (2012) used the data from the Shogren et al. (2012) study to examine if students in the treatment groups had higher levels of self-determination following the SDLMI compared to the control groups and when the control group became a treatment group did the change follow the same pattern as in the initial treatment group. Three times over a year students completed the Arc’s Self-Determination Scale (SDS) and the AIR Self-Determination
Scale. The treatment group had significant increases in self-determination scores on both the AIR and the SDS between baseline and year 2, suggesting that this was a result of the SDLMI.

The design allowed Wehmeyer et al. to compare the impact of the SDLMI in treatment and comparison groups at different times to determine group efficacy. The impact was the same for both groups strengthening the notion that the SDLMI impacts student self-determination outcomes. There were differences between the students with intellectual disabilities and learning disabilities. Students with learning disabilities had higher scores on the AIR, demonstrating greater increase in self-determination scores compared to students with ID. There were no significant differences on the SDS. Data were collected over a two-year span for this study, which strengthens the belief that intervention and efforts should not be time limited.

**Self-Determination & Teachers**

Perceptions held by students with disabilities about their teachers and classrooms contribute to enhanced or diminished self-determination (Wehmeyer, 1999). Targeting self-determination in a school as an educational outcome will not only require a purposeful instructional program, but a program that coordinates learning experiences across the span of a student’s entire educational experience (Wehmeyer, 1999). Teachers play different roles in promoting student’s self-determination skills. Teachers need to provide instruction and opportunities to practice self-determination skills, examine the impact on the environment for the student to experience control and choice, and then design and implement other accommodations that enable students to overcome any
environmental or disability circumstantial barriers (Wehmeyer, 1999). Supports and accommodations are critical to the enhancement of self-determination skills for individuals with disabilities, repeated opportunities must be provided to students them to develop and demonstrate the skills. Educators should carefully ensure they provide age appropriate supports and opportunities to students with disabilities (Shogren, 2013). Special education teachers have an effective tool to teach self-determination to their students, the Individualized Education Plan (IEP) (Madson Ankeny & Lehmann, 2011).

Many schools over the past decade have shifted their school culture and model towards the role of positive behavioral interventions and supports. Teaching self-determination skills can be a part of the Positive Behavioral Intervention Support (PBIS) process (Shogren, 2013). In programs that self-determination skills are directly being taught, educators should be supporting students to develop strategies to use their behaviors in appropriate ways to effectively get their wants and needs.

Professional knowledge is a critical element of building a student’s capacity of self-determination (Shogren, 2013). Teachers promoting self-determination skills is a relatively new concept (Shogren, 2013). Teachers must be able to directly teach self-determination skills and be able to provide numerous opportunities to practice the skills, which can be difficult in a single school day (Thoma et al., 2008). Supportive teacher behavior has been linked to development of self-determination skills when aligned with autonomy support in the classroom. General and special educators should build a classroom culture that allows students opportunities to actively engage in their educational programming, allow them opportunities to express preferences and make choices, and self-regulate their learning (Thoma et al., 2008). On the flip side, excessive
teacher control has been related to lower student academic achievement, lower motivation, and lower self-esteem.

Despite the knowledge and emphasis on promoting self-determination of individuals with disabilities and the availability of empirically based strategies for teachers to use, schools are not actually implementing the methods (Karvonen, M., Test, D., Wood, W., Browder, D., & Algozzini, B., 2004). In 1999, Agran, Snow, and Swaner reported that 75% of middle and secondary school teachers rated self-determination skills as high priority but 55% of the teachers reported that the goals were either in only some or none of their student’s their student’s IEPs (Karvonen et al., 2004). In 2004, Mason, Field, and Sawilowsky found only 8% of teachers and administrators to be satisfied with the teaching approach they were using to promote self-determination skills.

Unfortunately, educators are often unaware of the evidence-based practices for promoting self-determination and tend to perceive their students to lack necessary and important skills. Teachers’ beliefs and perceptions play a role in how teachers manage their classrooms, specifically in regards to enhancing self-determination. The extent to which teachers seek out and support youth involvement in transition efforts remain limited, due to teachers feeling inadequately prepared to address these skills, the overall school climate, and the administrative focus (Wehmeyer, Agran, Hughes, 2000; Thoma et al., 2008). The point to which teachers perceive self-determination instruction as an important part of their limited instructional time is greatly influenced by student and school factors (Shogren et al., 2014).
Teachers and administrators themselves need to demonstrate a level of self-determination to be able to effectively promote self-determination skills of their learners. Wehmeyer (2007) identified five key reasons for why self-determination is important for teachers and administrators: “Self-determination skills are essential to designing and implementing effective instruction; Self-determination skills are critical to effectively participate in the school improvement process; To learn self-determination skills, students need self-determined role models; Student self-determination is enhanced when educators share a strong philosophical foundation about the need to promote self-determination throughout the culture of the school; Self-determined teachers and administrators make a positive difference in the climate, morale, and synergy in a school” (p. 137). The skills that we teach students may be extremely beneficial for educators and administrators. Field and Hoffman (2002) suggested five components needed for teacher self-determination: know themselves and their students; value themselves; put their knowledge and beliefs into a plan; put their plan into action; and evaluate their implementation.

Teachers and administrators should be provided extensive support around self-determination throughout their initial preparation, staff development, evaluations, and mentoring (Wehmeyer, 2007). Emphasizing self-determination of teachers leads to increased internal motivation, which in return leads to increased motivation of teachers towards their own work. The concept of self-determination should be fostered upon acceptance into teacher preparation programs. The importance of self-determination as a core component of teacher education is precisely stated by Noddings (1986) “The object of teacher education is not to produce people who will do their duty as it is prescribed or
faithfully use the means deemed likely to achieve discrete learning goals but, rather, to produce people who will make autonomous decisions for the sake of their own students” (p.504).

Teachers report teaching self-determination skills informally rather than using evidence-based practices (Shogren et al., 2014). The reliance on informal instruction is greatly influenced by teachers being unprepared or unknowledgeable as how to teach self-determination skills. Teachers need to be provided with strategies, materials, methods, and additional supports to teach self-determination (Wehmeyer, 1999). Wehmeyer (2000) reported that teachers only perceived the importance of self-determination based on their perception of their ability to teach self-determination skills. Teachers identified skills such as problem solving, goal setting, self-management, advocacy, self-awareness, and decision-making more important for students with mild disabilities than severe disabilities. This perceived importance greatly influences teacher behavior of promoting self-determination.

Students need opportunities provided to them to practice self-determination skills. Opportunities should be provided in environments that influence the development or enhancement of student’s self-determination skills. Students with ID, DD, and ASD are known to have difficulty with skill generalization. Researchers have provided evidence that when self-determination interventions are systematically introduced in a school setting, students demonstrate greater growth and ability to perform self-determination skills in other settings (Shogren et al., 2014).
Teacher preparation programs are the perfect platform for prospective teachers to learn about instructional and assessment strategies for self-determination. Unfortunately, due to their lack of skills teachers do not often feel adequately prepared to teach self-determination skills. If teachers are provided training from university personnel then changes in teacher perceptions of student opportunities for self-determination occur (Shogren et al., 2014). Shogren et al., (2014) reported that 94% of 57 teachers interviewed, reported they learned about strategies to promote self-determination prior to the start of their study, more than half of the 94% learned about self-determination at conference presentations or during in-service trainings.

Special education teacher preparation programs have evolved over the years. The first special education teachers were prepared to teach in residential settings. Today there is great variation in teacher preparation programs, especially for special education. There have been advances in research on teaching and learning that has raised questions about teacher quality and conceptual frameworks for organizing teacher preparation programs (Brownell et al. 2010). Early teaching programs were designed to teach individuals how to teach students with specific disabilities. However due to the variability of abilities in classrooms today teacher preparation programs need to teach teachers how to work with all types of disabilities (Brownell et al. 2010). In the 1990’s there needed to be reconsideration about special education teacher’s roles and abilities as the focus switched to inclusion.

Carter, Owen, Trainor, Sun, & Sweeden (2009) designed a study to explore parent and teacher perceptions of adolescents with severe intellectual and/or developmental disabilities. They included 4 research questions to guide their design: 1. How do teachers
evaluate the SD capacities of youth with severe ID and DD? 2. What are their perceptions of the opportunities these youth have to demonstrate SD behaviors at school and at home? 3. What extent do teachers and parents share similar or divergent views of these capacities and opportunities? 4. What extent are these capacities and opportunities influenced by students' social skills and challenging behaviors?

Carter et al.’s population was drawn from 29 geographically diverse communities. The sample, which was clearly identified and described, consisted of 135 high school students with severe intellectual and developmental disabilities between the ages of 13.9-21.8 years. To be included in the study, students had to be receiving special education services for autism, cognitive disabilities, or multiple disabilities; be eligible or had participated in alternative state assessments, received parental consent if not own guardian or provide assent. The sample was split almost evenly for gender, 51 males and 49 females. The disability breakdown was: 85.3% cognitive, 10.3% autism, and 4.4% orthopedics.

Packets were sent home in the spring semester containing the AIR, SSRS, transition-planning tool, and a questionnaire addressing students’ experiences at school and in the community. Packets were given to special educators to complete about their students. They did not identify if teachers completed more than one packet based on number of students.

Based on the survey results teachers reported that students demonstrated limited knowledge about self-determined behaviors, the ability to perform behaviors, and lack of confidence regarding their efforts. Across all demographics teachers perceived that their
students almost never to sometimes engaged in these self-determination behaviors, specifically the behaviors related to self-management, self-evaluation, problem solving, and adjustment. These four components are logically explained when the population is individuals with ID, DD, and ASD who have difficulty with comprehension, executive functioning, and generalization. Parents and teachers responded that opportunities to engage in the behaviors were generally available at home and school but teachers reported students lacked the abilities to perform the behaviors.

The limitations discussed by the four authors are generalizable to many studies involving self-determination of students with intellectual and/or developmental disabilities. Individuals with ID/DD are a heterogeneous group of students; individualization isn’t just optimal it is necessary. The correlational analyses run didn’t provide a suggestion to whether or how self-determination prospects of youth might be associated with choices such as employment. The researchers did not directly observe or interact with youth, which might have yielded different results. There is no empirically validated observational tool for self-determination. Perceptions of educators and parents of self-determination skills of individuals with disabilities tend to differ from the actual individuals. This is important to consider when creating a study to measure students self-determination skills and how data will be gathered. It is also difficult because students with limited cognitive and/or communication skills might have difficulty answering questions about themselves, which is often an approach to gain an understanding of levels of self-determination.
Self-Determination & Paraprofessionals

Paraprofessionals play a vital role in reinforcing teachers’ efforts within the school and improving student outcomes. Paraprofessionals were first introduced to schools about 40 years ago. Their duties were originally loosely defined, such as record keeping, monitoring lunch, preparing materials, and monitoring student’s daily interactions (NEA.ORG). Today, paraprofessionals fulfill various capacities of roles and are often underpaid and under trained for the specific duties required of them.

Paraprofessionals were formally identified in the 1997 IDEA Amendments. IDEA (2004) Personnel Qualifications 34 C.F.R. Section 156(b)(2)(iii) 300.156 (iii) states “Allow paraprofessionals and assistants who are appropriately trained and supervised, in accordance with state law, regulation, or written policy, in meeting the requirements of this part to be used to assist in the provision of special education and related services under this part to children with disabilities”.

The key phrases in the definition are appropriately trained and supervised and used to assist. Paraprofessionals should receive training about self-determination. Promoting student self-determination skills as untrained paraprofessionals may hinder the student’s actual development. There is a limited amount of research addressing the roles that paraprofessionals play in nurturing self-determination skills of the students they work with (Lane, Carter, & Sisco, 2012).

During 2007-2008 there were 455,820 special education paraprofessionals working in public and charter schools in the United States (Lane, Carter, & Sisco, 2012). The roles of these paraprofessionals ranged from tutoring students, 1:1 with students,
assisting with classroom management, and providing instructional support services under
the direct supervision of a highly qualified teacher outlined in No Child Left Behind. The U.S. Department of Education suggests that paraprofessionals should not provide planned direct instruction, or introduce new skills, new concepts, or new academic content to students. Paraprofessionals perceptions and knowledge of self-determination could influence whether they provide self-determination skill developing opportunities throughout the day (Lane et al., 2012).

Lane, Carter, and Sisco (2012) developed a study to determine whether paraprofessionals affirmed the importance of promoting self-determination with their students and to what extent their instructional support addressed the self-determination components. The majority of the 225 paraprofessionals were females, who supported students with a range of disabilities in both general and special education classrooms. The paraprofessionals were asked to complete a two-page, 23-question survey that addressed students with disabilities and the core components of self-determination and demographic information about the paraprofessional.

Lane et al. found that paraprofessionals attributed high levels of importance to the components of self-determination. Choice making and decision-making were significantly ranked highest followed by problem solving, self-awareness, and self-knowledge. Choice making and decision-making were significantly highest in importance. Although the paraprofessionals reported that all the components were important, they reported only sometimes teaching any of the skills. Choice making and problem solving were the only two skills that more than half of the paraprofessionals reported often teaching.
Only two paraprofessional characteristics related to self-determination were statistically significant: familiarity with the self-determination construct and professional development opportunities. Overall, paraprofessionals reported they had some familiarity with self-determination. Paraprofessionals who had vaster opportunities to participate in professional development focused on self-determination also reported spending more time teaching self-determined behaviors to their students. This finding supports the fact that paraprofessionals should be provided with more on-going and systematic trainings.

Lane, Carter, & Sisco (2012) reviewed articles that cautioned the use of paraprofessionals as it could unintentionally hinder self-determination of students. At the base of all student interactions, paraprofessionals and the highly qualified teachers need to have an understanding of self-determination. The intersection of personal views and actual practices among paraprofessionals is similar to that of teachers, they must demonstrate and have positive beliefs about self-determination. In many situations, especially with students with severe disabilities, special and general education teachers delegate primary support responsibilities to individually assigned paraprofessionals limiting their direct interaction with the students (Carter, Cisco, & Lane, 2011).

More and more students with autism, intellectual disabilities, and other developmental disabilities are placed in general education classes to be supported fully 1:1 by a paraprofessional. A negative side effect of the constant 1:1 is the development of reciprocal overreliance between the student and the paraprofessional (Giangreco, 2009). Four consequences of overreliance are that it is conceptually questionable, may be unduly restrictive support, associated with a host of inadvertent detrimental effects, and
exacerbated by insufficient approaches for decision-making (Giangreco, 2009). These consequences can greatly affect a student’s self-determination development.

Paraprofessionals are often responsible for providing the instruction to students with the most complex learning needs and there is no strong theoretical basis for this decision (Giangreco, 2009). Paraprofessionals are often the least qualified and lowest paid school staff, which does not coincide with their responsibility to provide the most detailed instruction and detailed behavior management plans. Evidence provides support that many 1:1 paraprofessionals are left to fend for themselves, make important decisions regarding program effectiveness, modify curriculum, and instinctually know how to promote student growth and independence with very minimal training, support, or knowledge how to do so (Giangreco, 2009). IDEA (2004) and NCLB both focus on highly qualified teachers instructing students with and without disabilities. The overreliance of paraprofessionals is a double standard.

The components of self-determination reflect student’s preferences, strengths, and weaknesses and importantly require the student to demonstrate some level of independence and ability to demonstrate these behaviors. The overreliance student’s can have on paraprofessionals may be extremely problematic when students are assigned 1:1’s with no systematic plans to fade support (Giangreco, 2009). The term prompt dependency is used to describe when students wait for a prompt to exhibit a contextually appropriate behavior (Cooper et al., 2004). Based on a history of reinforcement and punishment with paraprofessionals students prompt dependency is heightened.
The unnecessary dependency of students and paraprofessionals can interfere with peer interactions, influence loss of personal control or choices, and in some cases provoke maladaptive behaviors (Giangreco, 2009). The overreliance of paraprofessionals can greatly interfere with the development of self-determination skills of students with ID, DD, and ASD. Paraprofessionals may not have received detailed training specifically about self-determination. They may also be unfamiliar about self-determination promotion for students, might not be provided supervision, and because they fill a helper roll they may never fully let students independently complete work or activities as a fear of them making a mistake or taking a risk and failing, the paraprofessionals may worry that reflects on them. The perceptions of self-determination that paraprofessionals have may impede student’s self-determination. As stated earlier, educators and administrators need to demonstrate self-determination themselves to be able to teach it and promote opportunities to practice, this is true for paraprofessionals.

Carter, Sisco, and Lane (2011) examined the relationship between paraprofessional’s perspectives on promoting self-determined behaviors of individuals with severe intellectual disabilities. They identified four research questions to investigate: How do paraprofessionals evaluate the importance of providing instruction in each of the 7 self-determination skill domains; To what extent do paraprofessionals report actually delivering instruction in each of these domains; Do paraprofessionals share similar or divergent perspectives on promoting self-determination depending on the grade levels and educational settings they work in; How familiar are paraprofessionals with the self-determination construct and to what extent is professional development training available?” (p.2).
Their rationale for the study was well supported by the available literature regarding paraprofessionals and self-determination of students with disabilities. There is little information about whether paraprofessionals focus their instructional efforts on specific skills of self-determination and their perceptions of importance of components of self-determination.

A survey was distributed to 347 paraprofessionals working with students with either autism (80.4%) or Intellectual Disabilities (76.4%) Some paraprofessionals had college education experience. The paraprofessionals were from 21 different school districts, which included 90 elementary schools, 39 middle schools, and 39 high schools in urban, suburban, and rural areas. Carter, Sisco, and Lane found that paraprofessionals who primarily worked with low incidence disabilities generally considered promoting various components of self-determination important to their students. The concerns regarding the prominent role that paraprofessionals take in the education of students with severe disabilities was a clear relationship. A less pronounced relationship was the extent to which paraprofessionals were actually addressing the seven self-determination components with their students. The majority of the paraprofessionals (54.4%) said they were somewhat aware and familiar of the self-determination concept while 20% reported they were not aware of it all, leaving 26% responding they were very familiar.

Carter, Lane, & Sisco (2011) believed the main limitation of their study was that they relied exclusively on self-reported perceptions and actions of the paraprofessionals who participated. Self-report is variable, as people may not always report the accurate truth due to social desirability or lack of knowledge. The researchers focused on reaching a high survey response rate, which in return may have sacrificed the opportunity to gain
more in depth information. Carter et al. discussed that the results may have been more meaningful if they had inquired why paraprofessionals rated certain components of self-determination more or less important. Investigating these perceptions would have opened up the dialogue to explore how perceptions influence teaching or supporting individuals with disabilities.

In general, Carter, Lane, and Sisco (2011) executed a simplistic but well devised study that provided evidence to support the belief that paraprofessionals have the potential to play a critical role in enhancing or impeding the development or maintenance of self-determination components for the students they support.

**Self-Determination & Post-Secondary Education (PSE)**

Over the past 15 years, opportunities to attend PSE programs for students with ASD and ID have vastly expanded although there are still many apprehensions to opening the doors to individuals with ID. Students with ASD and ID present many fundamental challenges to Institutes of Higher Education (IHE) (Hart et al., 2010). An argument that supports individuals with ASD and ID attending PSE programs is the relationship between college attendance and higher rates of self-determination and positive employment outcomes. PSE programs offer opportunities to students with ID and ASD that will greatly influencing their overall quality of life that are correlated with self-determination (Hart et al., 2010).

Students who are successful in post-secondary education are those who have self-knowledge, know what they want, are aware of their strengths and limitations, and know how to set and achieve their goals (Hong, Haefner, & Slekar, 2011). Students who are
successful in post-secondary education are more likely to be self-determined. Promoting self-determination is more actively targeted in K-12 education; the movement hasn’t yet fully made its way to PSE for students with or without disabilities (Hong, Haefner, & Slekar, 2011). Researchers have identified some practices that lead to competitive employment and enhanced quality of life. In no specific order these are: instruction in natural environments, person-centered planning, local, regional, and state-level cross agency collaboration, universal design, mentoring, educational coaching, engaging in competitive employment, social pragmatics and communication skills, evaluation activities, and self-determination/self-advocacy (Hart et al., 2010).

The National Longitudinal Transition Study-2 (NLTS2) was funded by the U.S. Department of Education and documented the experiences of a national sample of students who in 2000 were between 13-16 years of age as they moved from secondary school into their adult roles. The final data collection occurred in 2009 when the sample was then between the ages of 21 to 25 years (NLTS2.org).

NLTS-2 described the characteristics of secondary school youth in special education and their households; experiences of youth in special education (schools, related services, extracurricular); the experiences of youth at once they leave secondary school including adult programs and services; measured secondary school and post school outcomes in the education, employment, social, and residential domains; and identified factors in youth’s secondary school and post school experiences that contribute to more positive outcomes (NLTS2.org). Based on the goals of the NLTS2, it is evident why so many researchers opted to use the data to analyze relationships of self-determination skills and other variables.
Berry, Ward, & Caplan (2012) used NLTS2 data to examine whether students with disabilities who receive SSI benefits demonstrate higher degrees associated with participation in post-secondary education. They hypothesized that higher level of self-determination of transition age youth with disabilities who were receiving SSI would be associated with increased likelihood of participation in post-secondary education. Based on their correlational analysis, their hypothesis was strongly supported.

Participation in both 2- and 4-year colleges was associated with higher levels of empowerment and autonomy. Empowerment and autonomy are critical skills needed for decision-making, especially in making decisions about initial access to education access. Berry et al., (2012) found that students with intellectual disabilities were less likely than any of the other individuals to participate in any of the 3 types of post-secondary education, which will be discussed later in this chapter.

Getzel & Thoma (2008) sought to identify skills that effective self-advocates used to ensure that they would stay in college, obtain needed supports, and identify the essential self-determination skills needed to persist in post-secondary education. Getzel & Thoma included participant descriptions based on the information available to them. Getzel & Thoma used a purposive sampling procedure to select focus group participants. They included students with disabilities who were receiving supports and services related to their disability and who according to the disability service office demonstrated strong self-determination skills. Thirty-four students between the ages of 18-48 were identified for the study, 80% of the 34 were between the ages of 18-23. The gender differences were similar 47% male and 53% female. Participants were Caucasian (61.8%), African American (35.3%), or Asian (2.9%). Disabilities included visual impairments (5.8%),
Orthopedic Impairments (23.5%), Other Health Impairments (38.2%), Deafness (2.9%), Specific Learning Disability (23.5%), or Emotional Disturbance (5.8%).

The method included a semi-structured interview process with a focus group format. Prior to beginning the interviews, participants were provided with a definition of self-determination. The two main interview questions were: “What do you think an effective advocate does to ensure he or she stays in school and gets the supports needed; and What advocacy or self-determination skills do you think are absolutely essential to staying in college and getting the supports you need?” (p.79).

Participants identified problem solving, understanding one’s disability, goal setting, and self-management as critical skills needed for students to be effective advocates. Participants also agreed on the need to understand their disability and how it affects their learning. There were no participants identified with intellectual or developmental disabilities. While this is different from the target population for this study and technically outside the parameters for the literature review, the procedure of the study was relevant; interviews of focus groups with two observers. A limitation often encountered when students with ID, DD, and ASD are interviewed is their cognitive processing and/or communication skills may inhibit the success of the interview. Focus groups allow students more time to process and participate with the group.

In 2012, D.F. Garrison-Wade published a qualitative study designed to offer effective strategies to support students with disabilities in transitioning from secondary to post-secondary educational settings. Garrison-Wade believed that the offered strategies would improve the student’s likelihood of success. Garrison-Wade’s findings aligned
with current literature that discusses the challenges in post-secondary education settings for individuals with disabilities. These challenges were: “architectural/access (Hart et al., 2001), programmatic (Dowrick et al., 2005, and informational (Getzel, 2005)” (p.114). Garrison-Wade’s study was a single case embedded design that was actually part of a larger study, The Exceeding Expectations Model Demonstration Project.

The participants included 59 students and 6 Disability Resource Coordinators. The 59 students were comprised of 29 males and 30 females, 89% white/non-Hispanic, 5.5% Hispanic, and 5% other. All the students were between the ages of 18-56 years. The student’s diagnoses were: 29 learning disabilities, 16 multiple disabilities and 14 various physical disabilities. Five of the six coordinators were female and all had experience ranging from 3-17 years in the field.

The population was a limitation to the study. All students were selected through EEP; a broader sample may have yielded different results. A similarity of Garrison-Wade’s study limitation is that the population for the current study included only students in the Inclusive Concurrent Enrollment Initiative Program.

Garrison-Wade identified three emerging themes from student identification of factors: capitalizing on student self-determination skills, implementing formalized planning processes, and improving post-secondary support. The students also identified that faculty occasionally had negative attitudes towards the students with disabilities and lacked an understanding of the need for accommodations. Working with professors was especially difficult for students if they lacked self-advocacy skills. It is important to consider these themes for the evaluation of the ICEI programs.
Madson Ankeny & Lehman (2011) interviewed three students with intellectual disabilities and one student with a learning disability about their secondary transition program located on a community college campus. The four students, ages 20-21 years, were selected based on both their successful completion of the program and that they were gainfully employed. The researchers used the Five Step Model of Self-Determination (Field & Hoffman, 1994) to guide their data analyses. Three consistent self-determination themes emerged. Personal factors associated with the self-determination construct, environments and experiences fostered self-determination development, and the program meetings were tools for supporting the students to build their self-determination skills.

All four of the students were unable to specify their disability but were able to discuss their weaknesses when interviewed. They all mentioned how prior to the PSE program they were always given help even when they didn’t ask in school. This coincides with the notion that students with disabilities struggle in college because they don’t know how to advocate for the appropriate services. The participants described their experiences more as though they were benefactors rather than causal agents (Madson Ankeny & Lehman, 2011). The college campus provided the students with many opportunities to strengthen their personal control through naturally occurring positive and negative experiences.

A finding that relates to self-determination, PSE, and secondary schooling was the students’ responses in regards to their individualized education plans (IEP). Only one of the students contributed in any significant manner during her last IEP in high school. The students were responsible for preparing and leading their meetings once enrolled in the
transition program, which naturally promoted the development or refinement of the core components of self-determination. This proved that students’ who are actively involved in their IEP process students are provided with many more the meaningful opportunities to practice self-determination skills.

Based on the student responses, Madson Ankeny & Lehman (2011) were able to draw very prevalent conclusions about self-determination skills of individuals with disabilities in PSE programs. The findings supported the belief self-determination is a life-long process of experiences in different environments. The term self-determination didn’t resonate with the students as much as the behaviors or components did. Using the term verse the components is important to do with individuals with disabilities, so they are aware of the terminal goal.

Program staff should employ a service delivery model that encourages students with disabilities to develop independence. Dukes & Shaw (2008) constructed a short list of ways in which program policies and procedures should promote and encourage student self-determination development. Examples from the list are:

- Address the topic of self-determination in staff development
- Train staff to model self-determined behavior
- Provide students ample opportunities to make choices
- Promote self-determination and its importance in other campus departments
- Ensure students are involved in the determination of accommodations
• Gather evaluation data to determine if program is meeting student self-determination goals

Faculty is a group that has been rarely been the sample in studies about post-secondary education, students with disabilities, and self-determination. Hong, Haefner, and Slekar (2011) investigated the practices of faculty members in regards to self-determination with both students with and without disabilities. The setting was a public, four-year, undergraduate institution connected to a larger university system. There were a total of 218 full- and part-time faculties that during the fall semester responded to a survey. The survey promoting Self-Determination in Higher Education was developed by Wehmeyer, Agran, & Hughes (2000). The survey included a section for demographics and a section of questions with menu options and Likert-type responses.

Most faculties reported having at least one at risk student in their classes with a verified disability. More than two-thirds reported that they were unfamiliar with the term self-determination. The one-third that were familiar with self-determination was from their educational texts, graduate training not resources from within the institution. This finding supports a thought that IHE’s could use resources to support faculty and students in self-determination development. For campuses with PSE programs for individuals with ID, DD, or ASD this is very powerful and needed training for faculty, as faculty are often unfamiliar with different pedagogical methods outside their disciplines (Hong, Haefner, & Slekar, 2011).
Inclusive Post-secondary Education Programs

More post-secondary education opportunities are opening up for students with disabilities across the United States. As of 2015, there were over 240 post-secondary education programs in the Think College database (Jones et al., 2015). The programs vary on their actual level of inclusion. The different programs range from segregated non-inclusive programs to fully inclusive. Some programs are actually offering reverse inclusion, when typical students visit or instruct the students with disabilities (Jones et al.).

Inclusion is a human right. Inclusion involves more than just being in the space. An individual belongs to a community, has equal access to opportunities, freedom of choice, and is valued and actively engaged with others when inclusion is appropriately happening. There is a mutual and ongoing benefit of inclusion between all different groups (i.e. gender, race, disabilities, culture, socio-economic, etc.) in higher education when inclusion is happening. Institutions of higher education will celebrate intellectual diversity verse turning away students with intellectual disabilities. There is great value when an institute of higher education promotes inclusion because it results in innovation, which benefits all students, staff, and faculty (Jones et al., 2015).

Secondary students with intellectual disabilities typically receive instruction in segregated classes to learn functional academics and life skills and occasionally engage in community-based instruction for employment and recreation (Neubert & Moon, 2006). Recommended practices for secondary students with ID should be a balance of “strategies for accessing and succeeding in general education courses, instruction in
functional academic and community based skills, and transition services to facilitate post-
school planning with adult agencies” (Neubert & Moon, 2006, p.2). Transition services
for students 18-21 should be outside the typical classroom and really focus on access to
the community and planning for the future. Post-secondary education options for students
with ID, DD, and ASD are a logical response to the transition needs of the students ages
18-21. Although programs do exist, no matter the model, there is little research available
on student outcomes or evidenced based practices (Neubert & Moon, 2006).

Thoma, Lakin, Carlson, Domzal, Austin, and Boyd (2011) conducted a literature
review of articles published between 2000-2010 about post-secondary education
programs for individuals with disabilities. Most of the works they collected were program
descriptions or policy briefs. The methodologies were qualitative, quantitative and mixed
methods methodologies used but there were no true experimental designs. Based on the
available research, there are three different post-secondary education program models:
inclusive, hybrid/mixed, and sub-separate (Thoma et al. 2010, Papay & Bambara 2011).

Substantially separate PSE programs are essentially transition programs or life
skills classrooms on a college campus, but have no integration into the campus
community. These programs might use the same classrooms or space on campus but do
not access all of the campus facilities or activities. Students with disabilities participate in
classes only with other students with disabilities and usually have the same teachers
throughout their entire day, similar to early k-12. Usually, the curriculum for the students
is designed specifically for students with intellectual disabilities. Some of the
substantially separate programs may provide opportunities to the enrolled students to
participate in generic social activities on campus or work-based learning experiences (Papay & Bambara, 2011; Grigal & Hart, 2010).

Substantially separate programs were started and funded by nonprofit adult agencies or by parents and individuals who wanted to include individuals with disabilities in the community in the 1970’s. In the 1980’s and 1990’s school systems began to implement separate models for students with intellectual disabilities based on the concern that they were not being offered age-appropriate community based experiences. The programs were often started without the local/state guidelines or any evaluation measures to leaving lots of room for interpretation.

Hybrid/Mixed PSE programs are inclusive programs with programming specific to the needs of the students most frequently implemented in local school systems. Typically, mixed programs are located on community and 4-year college or university campuses (Neubert & Moon, 2006). Students with intellectual disabilities enrolled in Hybrid/Mixed Model programs enroll in academic classes and engage in all social activities on campus with students with and without disabilities. The students may also participate in classes that are designed for their specific needs; these might be addressed as life skills or transition skills. Students participate in paid and unpaid employment experiences that align with their long-term goals and needed experience. Hybrid/mixed programs often have a base on campus where the program staffs are located and students can meet or check-in for counseling or group counseling (Hart & Grigal, 2010).

Many campuses throughout the United States use Hybrid/Mixed Model programs but it should be noted that there is great variability in the type of services and the true
degree of inclusion in the college community (Papay & Bambara, 2011; Grigal & Hart, 2010). One strength of the hybrid/mixed model program is the linkage with adult agencies especially when the teachers or transition specialist are part of the relationships (Neubert & Moon, 2006). Another strength of the hybrid/mixed model programs is evident in student perceptions. In 2004, Reed examined the perceptions of 13 students with ID and their families regarding participation and satisfaction with a hybrid/mixed program on a community college campus. All of the students expressed that they were much more satisfied on a college campus verse high school because they had more freedom.

Challenges do present themselves when implementing hybrid/mixed programs. Neubert & Moon (2006) referenced a Grigal et al., 2001 study that identified five main challenges:

“The need for more inclusive opportunities on college courses; access to classroom and office space for public school personnel at the college site; the need for flexible teacher schedule to accommodate a different calendar from that of local schools; the need for transportation to and from the post-secondary sites for students; and written procedures to dispense medication, handle disciplinary actions, and conduct IEP meetings”(p.4).

These challenges are relevant to the ICEI programs but developed policies and procedure have been to address them.

Inclusive Individual Program Models provide the highest level of inclusion to students with intellectual and developmental disabilities. Program participants’ entire
69

days are planned around his or her post-school goals and there is no instruction provided in self-contained classrooms. Based on student’s interests and goals they might attend college, a training program, work in the community, or participate in community based recreational activities. Students are provided with individualized services in this model for example educational coaching, tutoring, assistive technology, or natural supports to promote access and success on the college campus. The students participate in the campus community to the fullest extent possible, just as their peers do.

Inclusive Individual Programs initially are thought to be more difficult to implement because of the individualization of the student’s schedules and usually there is no home base on campus for the program. The model is guided by five principles for each individual student: individual student vision and goal controls decision making, all options are inclusive and occur in settings that have students with and without disabilities, no specially designed classes, supports are individualized to the students, and there is interagency collaboration (Hart & Grigal, 2010). Implementation of an inclusive model requires teacher’s roles to be redesigned to: “work with a variety of community professionals; identify natural and extended supports in college, work, and the community; monitor staff, such as educational and job coaches; and work flexible schedules” (Neubert & Moon, 2006, p.5).

In 2004, Zaft et al. compared outcomes of 20 students with ID ages 18-22 who used individualized supports in college to 20 students with ID ages 18-22 who remained in traditional high school programs. The students were surveyed about their participation in PSE and employment. Students in the individualized support model in PSE had a higher rate of employment than the students in HS, 100% verse 42.9%. The students in
PSE earned $6.75/hour or above, while the students in HS were earning $.50 per hour for piecework to $4.10. Zaft et al. (2004) hypothesized that the students who participated in individualized supports and PSE may need fewer supports as adults.

Grigal & Hart (2010) presented three ways that PSE options for students with intellectual and developmental disabilities might be offered through the three different models. The three options are dual-enrollment, sponsored programs and services for adults, and student-and family-initiated experiences are the three options.

Dual-enrollment programs are collaborative efforts between both an Institute of Higher Education (IHE) and k-12 Local Education Agencies, specifically high schools. The model allows students with intellectual disabilities between the ages 18-21 who are receiving special education and transition services under IDEA a college option. Accessing adult learning experiences, participation in employment and community, and improving independent living and social skills are often formulated through the central themes of instruction, support, and experiences (Grigal et al., 2012). Students participate in a full range of college activities, classes, social activities, and work-based learning. The student may be on campus anywhere between 1-5 days a week. Often, when the student is not in class or participating in other campus life activities the student will be targeting other transition goals (e.g. learning to use public transportation) with support of coaches. Dual-enrollment PSE programs for students with ID/DD offer students and families choices that had previously never been offered or even thought about (Grigal & Hart, 2010).
Adult service agencies or organizations that partner with an IHE to create a PSE program for their clients are similar to the dual-enrollment model. The difference being that the client is no longer supported by IDEA and their adult providers are responsible for supporting them. The programs are usually tuition based and require families to contribute financially. Clients who participate in this type of program have identified PSE as one of their goals or as a necessary step to reach another goal. Not all clients of an adult service agency would participate in this model (Grigal & Hart, 2010).

There are many more colleges than programs for students with intellectual disabilities in the United States and while that is troubling due to lack of options an established program is not necessary for a person with ID/DD to engage in a PSE experience. Students and their parents could independently approach an IHE to pursue access. There is little research or information about these types of programs because they are often not documented. Unfortunately, families that create PSE options often do so without knowing about the resources that exist to help them and usually approach the creation in different ways. Some may use the standard admissions process; some may contact a faculty directly and ask for permission for the student to take the class; and some seek a champion on campus to facilitate access (Grigal & Hart, 2010).

Moore & Schelling (2015) found a positive correlation between employment and level of education, specifically; post-secondary experience for individuals with disabilities was more likely to result in competitive employment than sheltered workshops. Individuals were less likely to require supports in the work place if they attended a post-secondary education program and engaged in employment experiences.
To obtain these findings, Moore & Schelling (2015) interviewed program directors, administered surveys to students with intellectual disabilities who had graduated, and used NLTS-2 (2009) data. There were a total of 2 sites that resulted in 2 program directors and 26 graduated students. One of the sites was an integrated program and the other a specialized program. The two programs data were compared to NLTS-2 data when analyzing employment outcome data. Students from both the integrated and the specialized program fared better than the NLTS-2 students on three of the four employment questions. The researchers asked if students they were: employed since high school; employed in past two years; or currently employed. Moore & Schelling were also interested with the type of work the students were doing. The occupation categories for the integrated group were office support (58%), teaching/training/librarian (17%), sales (17%), and food preparation (8%). The occupation areas for the specialized group were food preparation (47%), janitorial/custodial (33%), teaching/training/librarian 14%), and factory production (7%). The identified occupation differences between the two PSE program types lend itself to consideration. The students in the integrated programs had food preparation as it’s lowest, excluding those with 0%, which might mean the integrated program provides the students with more skills needed than entry level food preparation jobs as some often criticize are first places students with intellectual disabilities are placed, along with janitorial jobs.

Overall, Moore & Schelling were able to note steep gains in rates of employment for graduates from both programs. It could be that experience of training with nondisabled people that may be a factor that increases the likelihood of competitive employment. The findings also suggest that the differences in outcomes for students
between the two programs were not as severe as Moore & Schelling (2015) initially hypothesized. The findings were relevant and important to the current study as one of the outcomes of the ICEI Program is furthering the student’s employment skills & options.

**Post-Secondary Education Program Evaluation**

Several post-secondary education programs are still in their beginning stages and others are beginning to refine their current programs, so exploring what it means to be an inclusive college program is fundamental. Each program is extremely unique to its students and campus culture so it is said to be difficult to develop a one size fits all evaluation tool. There are a variety of tools to assess transition practices, but few relate to dual enrollment PSE programs on a college campus. Think College has published standards, benchmarks, and indicators, which can be used as a baseline evaluation. They also released a research brief providing a framework for inclusion in September 2015. Dual enrollment PSE programs are created to meet the needs of individuals with ID in their last few years of special education. The experiences in these PSE programs include participating in employment activities, community activities, improving social skills, improving independent life skills, and accessing adult learning outcomes (Grigal et al., 2012).

Schools and transition teams may have difficulty locating a tool that accurately reflects the activities and outcomes of students in dual enrollment PSE programs to use in assessment. To address the needs of program evaluation of dual enrollment transition programs the Office of Special Education Programs (OSEP) funded the Post-secondary Education Research Center (PERC) Project and TransCen,Inc to creates an online self-

Evaluation activities are required to determine the success of school’s transition program especially to determine if the student outcomes are improving. This type of evaluation is extremely prevalent in college campus based dual enrollment programs for students with ID but share the same similarities that school systems face, lack of personnel, expertise, and funding (Grigal et al. 2012). In 2004, Hart et al. found that majority of dual enrollment programs do not collect evaluation or outcome data on their students. In the same year, Neubert, Moon, & Grigal (2004) found that teachers collected little to none monitoring and evaluation data on student activities and only 15% of those teachers were aware of or involved in any outcome data collection for students.

Personnel serving students with ID in post-secondary settings need to monitor and evaluate their services to demonstrate growth and efficacy. The lack of an evidence base about PSE programs promoting students achieve desired education and transition outcomes makes it extremely difficult to advocate for funding, staff, and general expansion (Grigal et al., 2012). The lack of research can be attributed to lack of funding, staff knowledge, staff time, and/or not able to access students for longitudinal studies.

The PERC Post-secondary Program Evaluation Tool consists of 10 sections and is a concise evaluation instrument for dual enrollment programs. The 10 sections identified in the PERC are: program planning, staffing, administration, student planning, student activities, self-determination, employment, monitoring, evaluation, and interagency collaboration. The users rate their program on a scale of 1-4 and then compile their scores
for each section. The PERC tool essentially provides an overview of the strengths, potential areas of improvement, and provides users with a concise evaluation report (Grigal et al., 2012).

The use of any evaluation tool similar to PERC should include four discrete steps: self-assessment, review the evaluation, action planning, and implementing the action plan & monitoring. All individuals working in the program should complete self-assessment scales. Following the self-assessment stage, the team should review and discuss the results. Low scores and discrepancies’ should be the initial topic of conversation. Through this conversation, most likely the areas of needed change will emerge. The team should then develop an action plan to target the areas of need. Some of the changes might be immediately applicable while others will take systematic planning and resources. Areas of improvement need to be clearly defined and actions need to be measurable, reasonable, and obtainable. The last step of the process is an ongoing and the team should continually revisit the action plan and adjust it accordingly over time. Progress monitoring is the only way the team will know if the changes are having meaningful effects (Grigal et al., 2012).

Jones, Boyle, May, Prohn, Updike, & Wheeler (2015) collaborated on a research brief to address building inclusive campus communities. The created a framework based on the four components of Shanley’s (2011) definition of inclusive post-secondary education and a belief and value system that prioritized differences in abilities as a strength. Jones et al. (2015) used the four-part definition to head the four-section checklist.
The four components of the definition of inclusive higher education are:

- “Inclusion is a human right. It involves belonging to a community, having access to equal opportunities, being free to choose one’s own life path, being actively engaged with and alongside others, and being valued for what one brings to the interaction” (p.3)

- “Inclusion is realized when there is mutual and ongoing benefit among people of varying abilities, gender identity, culture, socio-economic status, race, and other forms of diversity, with shared eagerness to create and sustain those relationships across all aspects of higher education” (p.3).

- “Inclusion is dependent on individual and communal perspectives, moving beyond benevolence, clinical/medical interests, or indifference to an attitude about and perception of ability that demonstrates a value placed upon difference throughout the higher education community” (p.4).

- “Institutions of higher education celebrate intellectual diversity in the same way that racial, gender, cultural, religions, and other forms of diversity are celebrated. They recognize that diverse learners require and inspire pedagogical innovation, and that innovation benefits all students. They place genuine value on experiences and perspectives of others, respect all forms of learning, and provide opportunities for all students to develop to their fullest potential” (p.4).

One of the beliefs they incorporated is that inclusion needs to be more than just being on the campus; it needs to offer dignity and equality to all campus members through attitudes of acceptance, belonging, and values. The entire framework was developed on this belief, that inclusive communities shared a commitment to value all people and
provide authentic opportunities. Jones et al. stated that the core of the framework is that it not charity or a gift for all to be welcomed and valued, but a human right.

The framework developed is a checklist to prompt self-exploration. The checklist is a yes/no design, which allows evaluators to prioritize the ‘no’ areas for further development. The authors strongly believe that a programs environment and ideologies supporting inclusion either demonstrates the value of human differences or they do not. The students with ID who attend these programs must be seen for the competent individuals they are and be expected to contribute in meaningful ways. An important benefit to all working with individuals with disabilities attending PSE programs is the common understanding of what inclusive college community actually is, and what it is not (Jones et al., 2015).

Program evaluation can be done on a variety of levels. The data collected for should not be exhaustive or complicated but it should be done on an ongoing basis and consistently reviewed to always be aware of strengths and improvement areas. While there is no commercially available evaluation tool for PSE initiatives, the goal of all evaluation activities should be to examine the program, innovation and enhancement, or to genuinely improve current services and outcomes. Hart et al. (2010) provided a list of potential data to be included when creating an evaluation plan:

- Documentation of staff time used to support students across environments.
- Documentation of progress toward post-secondary goals.
- Satisfaction of students, families, college personnel, and community personnel with services collected through written or personal interviews.
• Documentation of changes in students’ quality of life (e.g., more independent, more self-determined, more connected to the community).

• Documentation of how logistics are handled (e.g., transportation, dispensing medication, adherence to code of conduct).

• Record of exit data as each student leaves the program (e.g., SSI, employment, referral or acceptance to adult agency, goals for the future.

• Record of follow up activities (e.g., documentation of former student outcomes in key areas such as employment, independent living, participation with adult agency, social activities) (Hart et al., 2010, p. 143).

Hart et al.’s list of potential data, Jones et al.’s framework for inclusion, assessment of student abilities and perceptions, staff abilities and perceptions, and program policies and procedures should be included in an evaluation to continually modify a PSE program so it is as effective as possible.

Summary of Findings

Self-determination is a life-long, evolving multifaceted concept influenced by an individual’s interaction within their environments and their intellectual capacity. An individual must be their own causal agent, of change Students with ID, DD, and ASD are less likely to be self-determined than individuals without disabilities. There is a definite link between enhanced self-determination and positive outcomes, such as employment, in lives of people with disabilities, which is why targeting self-determination for students is so important. Higher levels of self-determination result in an overall higher level of quality of life.
An individual is self-determined when the four characteristics the person acted autonomously, the behaviors are self-regulated, the person initiated and responded in a psychologically empowered manner, and the person acted in a self-realizing manner are interrelated and occurring (Shogren, 2013; Wehmeyer, 1999). The nine components of self-determination choice making skills; decision making skills; problem solving skills; goal-setting and attainment skills; self-management; self-advocacy and leadership skills; positive attributions of efficacy and outcome expectancy; self-awareness and self-knowledge (Wehman, 2006) need to be systematically targeted for students with ID, DD, and ASD and many opportunities to engage in these skills need to be provided.

There is not a large amount of research documenting the outcomes and perceptions of students with intellectual disabilities who attended inclusive post-secondary education programs. Most of the research investigated students while attending the programs and did not collect or analyze follow up data. The settings for the research studies were often substantially separate programs or students attending PSE who were diagnosed with high incidence disabilities and were being serviced through the Disability Services Office. In order for any students to access Disability Services Offices they must self-disclose their disability which means that those students already have a certain level of self-determination skills.

Perceptions of students with ID, DD, and ASD who attended PSE programs are generally positive but are needed to be higher for the student to demonstrate a level of learned hopefulness. Students have reported being happier and liking the college campuses better because of the freedom compared to typical high school and being amongst their same age peers. If students have higher perceptions of their own skills and
abilities then they have a higher likelihood of being self-determined which results in higher quality of life and better adult outcomes. Students with ID, DD, and ASD need opportunities to generalize skills and be allowed to take risks and control of their own lives. We do know that students who engage in some form of PSE are more likely to be self-determined and be competitively employed.

Teachers and paraprofessionals working in secondary and post-secondary settings need to be aware of what self-determination is, the importance of it for the lives of people with and without disabilities, and how to teach it. This requires on-going professional development to provide teachers and paraprofessionals the support and knowledge they need. We know that staff, especially paraprofessionals, are often undertrained and underpaid and assigned to work with the most complex students. Paraprofessionals can be the main facilitators of providing students with opportunities to practice self-determination skills.

Creativity is required by educators, practitioners, and families in seeking and obtaining adequate support to participate in PSE and long-term employment sites for individuals with intellectual disabilities (Neubert & Moon, 2006). There are different types of PSE models available to use as blueprints for replication but due to differences in location (urban, rural, suburban), available funding, and types of universities or colleges each program developed will need to encompass its own individual model to fit the campus partnerships. The three different types of models for PSE programs are substantially separate, mixed/hybrid, and inclusive individualized model. The three model types have their own qualities that are incorporated into high quality programs.
A high quality PSE program for students with ID should be inclusive to the highest extent possible. PSE options for students with ID, DD, and ASD are a logical response to the transition needs of the students ages 18-21. A quality program should incorporate the transition indicators developed by Morningstar et al. (2010), promotion of self-determination, employment opportunities, access to courses attend by non-disabled peers, employ student-centered planning, person-centered planning, interagency collaboration, peer mentors, transition coaches, family involvement, faculty and staff buy-in, universal design for learning, access to all campus activities and services, flexibility to mold to each campus culture and dedication to providing students who may have not had a college opportunity a truly realistic college experience.

PSE programs need to collect data to continually be evaluating the program and determining ways to improve to effective programming. Students with ID/DD, or ASD should be given the opportunity for life-long learning amongst their nondisabled peers, it ethically right.
CHAPTER 3

METHODOLOGY

The purpose of this study was to understand the functional components of a postsecondary education program (specifically the ICEI Programs) that promote self-determination skills for students with intellectual and developmental disabilities and to differentiate programs that include or do not include these components. The questions are:

Question 1: Do students with Intellectual Disabilities (ID) and Autism Spectrum Disorder (ASD) in postsecondary education (PSE) think they are self-determined in their daily lives?

Question 2: Do the educators of students with ID and ASD in PSE feel their student’s perceptions about their self-determination skills are accurate?

Question 3: How do educators define self-determination?

Question 4: Do educators (i.e. transition teachers, coordinators, educational coaches) involved in the PSE program feel adequately prepared to teach self-determination skills?

Question 5: Does the ICE program have components that support the development of self-determination among the students?
An evaluation research model was executed to answer these research questions. Following is a description of the model accompanied by a comprehensive description of the Inclusive Concurrent Enrollment Initiative Program, program evaluation, ethical considerations, potential limitations, and data.

**The Inclusive Concurrent Enrollment Initiative (ICEI)**

The study was designed to examine the Inclusive Concurrent Enrollment Initiative (ICEI). The ICEI Program is funded by the Commonwealth of Massachusetts and supports public high school students ages 18-22 with severe disabilities (including those with intellectual and developmental disabilities and autism) who may or may not have passed the MCAS. Enrollment in the program gives students an opportunity to participate in inclusive college courses to increase their academic and educational success. The term inclusive means the students are included in all the typical college life activities, not just classes or just lunch. The terms concurrent enrollment mean that the participating students are still eligible for special education services from their school districts even if they have finished the typical four years of high school.

The Executive Office of Education (EOE) is the lead agency for the ICEI grant. EOE receives the funds directly from the Governors’ budget and is responsible for the coordination of all Inclusive Concurrent Enrollment (ICEI) grant activities. EOE and Institute for Community Inclusion provide technical assistance to the partnerships. EOE acts in an advisory capacity with partner campuses on matters of academic quality, enrollment, and higher education policies (mass.gov).
The ICEI program model was in its tenth year at the time of the study, while individual campuses were at different years. In the initial years of ICEI, the partnerships were formed solely between local school districts and community colleges. Now two and four-year public colleges and universities are involved in ICEI partnerships. Students continue to avail themselves of opportunities to take credit and non-credit courses alongside their non-disabled peers; to participate in activities designed to improve academic, social, and functional skills; to participate in career planning, vocational skill-building activities, and to be involved in community-based integrated competitive employment opportunities. These activities associated with the ICEI program naturally provide transition-planning support to student participants and their families. In addition, public high school personnel involved in the grant program gain valuable knowledge about promising inclusive practices through technical assistance and trainings (Mass.gov).

The ICEI Program is important for students with intellectual disabilities, developmental disabilities, and/or autism because typically these students stay in their high school to work on postsecondary goals until their 22\textsuperscript{nd} birthday. This remaining in their high school happens while their peers without disabilities typically graduate at 18 and participate in post-school activities like college, training, and jobs. The four years provided to students with disabilities are meant to assist students prepare, reach, and maintain their postsecondary goals. Unfortunately, for many of these students these extra four years mirror the curriculum they were offered in high school their original 4 years. Enrollment in the ICEI Programs provides students a way to learn new skills in age-appropriate skills and to develop self-determination skills in authentic post-secondary
settings. Figure 1. display the differences between traditional school based transition model and the ICEI Model in regards to education, employment, independent living skills, transportation and mobility, and social skills development.
Figure 1. Differences between traditional transition model & ICEI Model.

<table>
<thead>
<tr>
<th></th>
<th>Traditional School-Based Transition Model</th>
<th>ICEI Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td>Students enroll in general education high school classes or life skills classes. Students access modified curriculum</td>
<td>Students enroll in college classes that are based on their postsecondary goals. Students learn to use accommodations to access courses.</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>Students rotate through unpaid internships for work experience</td>
<td>Students participate in person-centered planning and pursue paid employment based on their postsecondary goals</td>
</tr>
<tr>
<td><strong>Independent Living</strong></td>
<td>Students work on functional independent living skills at school or at internships</td>
<td>Students work on independent living skills as they learn to manage their own schedules and responsibilities on campus.</td>
</tr>
<tr>
<td><strong>Transportation &amp; Mobility</strong></td>
<td>Students use school-sponsored transportation to travel to school and to internships</td>
<td>Students learn to use public transportation to travel to college, work and home. Students learn to navigate college campus as independently as possible.</td>
</tr>
<tr>
<td><strong>Social skill development</strong></td>
<td>Students’ social skill development is addressed in the high school and internship settings</td>
<td>Students’ social skill development is aligned with the expectations of typical college students and addressed in college, community and work settings.</td>
</tr>
</tbody>
</table>

(Retrieved from: http://www.mass.gov/edu/docs/eoe/ICE/history-definitions.pdf)
The ICEI Program is important for students because students with severe disabilities because individuals who attend college are better prepared for competitive employment than those who do not attend college, whether or not courses are taken for credit. Participation in postsecondary education provides student’s opportunities to further develop academic skills, critical thinking skills, decision-making skills, and collaboration skills.

**Stakeholders**

There are several stakeholders involved in the ICEI Program, the stakeholder’s roles and perceptions are critical to the understanding of the ICEI program. In education, the term stakeholder usually refers to any person students, including administrators, teachers, staff members, students, parents, families, community members, local business leaders, and elected officials such as school board members, city councilors, and state representatives who is invested in the welfare and success of a school (Hidden Curriculum, S. Abbott, 2014). Stakeholders essentially hold ‘stake’ in the school program and the students whether it is for civic, financial, personal, or professional interest reasons.

Including the views of stakeholders who are typically not included in the evaluation processes is important. Jennifer Greene provides three different reasons for why evaluators should include stakeholder views: pragmatic, emancipatory, and deliberative (Alkin, M. ED, 2013). Pragmatic stresses that if stakeholder’s views are included it increases the likelihood of utilizing the evaluation and organizational learning. The justification of emancipatory is that it emphasizes that if stakeholder’s skills and contributions are focused on then it empowers them to be social change agents. Lastly,
evaluations should be deliberative to ensure that program or policy conversations include all relevant topics based on democratic principles of fairness and equity (Alkin, M. ED, 2013).

The Inclusive Concurrent Enrollment Initiative Program stakeholders included in this study in the were:

• ICEI Students
• ICEI Program Coordinators
• Executive Office of Education
• Educational Coaches
• School districts-Transition Liaison
• Colleges & Universities with ICEI Programs

**ICEI Students.** The ICE Students are students with severe disabilities including those with intellectual and developmental disabilities and autism, ages 18-22, who may or may not have passed the MCAS the opportunity to participate in inclusive college courses to increase their academic and educational success. They are from various towns and cities throughout Massachusetts.

**ICEI Program Coordinators.** The ICEI Program Coordinator is extremely important to the success of an ICEI Program on the College or University campus. The ICEI Program coordinator is responsible for all on campus coordination of student’s activities along with working closely with the Institute of Higher Education administrators, staff and faculty, school districts and families. Each campus utilizes their Program Coordinators slightly different although the majority of their responsibilities are the same.

• Coordinate Inclusive Concurrent Enrollment Initiative (ICEI) Program activities and develop comprehensive academic supports for high school students in
transition, age 18-21, with intellectual disabilities, to promote access to campus life and college coursework in an inclusive setting.

- Assess the learning strengths and areas of development for individual students. Review and update individualized educational accommodation plans detailing testing, classroom, and assistive technology accommodations and appropriate learning strategies needed both inside and outside of the classroom. Consult with educational coaches and high school liaisons regarding instructional needs of students.

- Facilitate Person-Centered Plans (PCPs) for incoming ICE students in collaboration with sending districts. Coordinate new student orientation.

- Facilitate career workshops for students. Monitor student progress on development of career portfolios.

- Provide academic advising to students enrolled in the ICE Program. Assist students with course registration. Advise students on credit vs. audit options.

- Perform administrative tasks associated with the ICE Program. Provide statistical data and narrative for annual reports. Coordinate partnership meetings, trainings and award celebrations. Maintain student files. Monitor FY budget and collaborate with sending districts and WSU business office on the creation of an annual Memorandum of Agreement.

- Develop a network with adult service providers. Invite agencies to partnership meetings.

**Executive Office of Education.** Glenn Gabbard, Ed. D., is the statewide Inclusive Concurrent Enrollment Initiative Coordinator based out of the Executive Office
of Education. Glenn has been serving as the Statewide ICEI Coordinator since January 2014. He has many responsibilities as the ICEI Statewide Coordinator a few are that he is responsible for recruiting new partnerships, providing technical assistance to all partnerships, arranging statewide meetings and professional development opportunities. He holds monthly group meetings with all the Program Coordinators and monthly meetings individually with the coordinators. He is extremely important in regards to this evaluation as he one of the only individuals in consistent contact with all of the partnerships across the state. He is also chair of the ICEI Advisory Committee, which is comprised of various individuals from all different capacities across Massachusetts, ICEI Program Coordinators (funded programs & self-sustaining), State Representatives, Massachusetts Advocates for Children, Federation for Children with Special Needs, Department of Elementary and Secondary Education, Institute for Community Inclusion-Think College, and others.

**Educational Coaches.** The educational coach plays a vital role in the success of a student’s participation in the ICEI Program. Educational Coaches assist students to understand themselves as learners, teach students how to advocate for themselves, and provide natural supports. Each educational coach help enrolled students in making the transition to college life. The educational coach job is a full- or part-time position, funded and appointed by the sending district. The educational coach works on-campus with the participants in the program. The duties may differ depending on the needs of the participating students and may include direct or indirect services. The Educational Coach, High School Liaison, and ICEI Program staffs are key staff members who work together to develop a community conducive to student success by encouraging positive behaviors.
Educational Coaches have many responsibilities and their exact roles may differ based on each campus, their base responsibilities are:

- Support individual students with intellectual disabilities, age 18 -22, in inclusive postsecondary educational settings.

- Attend new student campus tours, orientation, person-centered planning, intake meetings, student activities and professional development trainings.

- Coach students in the typical role of college student including appropriate classroom behavior, study skills, test-taking skills, note taking, time management, and organizational skills.

- Assist students in accessing campus resources including computer labs, student life, library, career center, Wellness Center, and counseling services.

- Provide tutoring, homework support, and classroom support.

- Develop students on campus activity schedule in conjunction with HSL and with input from ICE coordinator on available activities.

- Help students plan and practice personal safety techniques, self-advocacy and assertiveness skills, and social skills, allowing students to be as independent as possible in the college environment.

- Assist students in travel training.

- Support students in community-based employment.

- Complete all logs and paperwork as assigned by high school liaison.

- Review and encourage use of educational accommodations and make appropriate curriculum adaptations to fulfill course requirements for audit status.

- Strategize with the student on how to communicate with faculty regarding
education plans, attendance and fulfillment of credit/audit status.

- Complete Student Educational Coach Agreement.
- Communicate in a positive manner and relate to students, college faculty/staff, high school staff and families.

**Transition Liaison (TL).** Transition Liaisons play a critical role in the success of relationship between a school district, ICEI Program, and most importantly the student and their family. The transition liaison is the main contact between the student, educational coach, district and ICEI staff. Working directly with students and their coaches, the TL serves as the primary support to the students and will consult with their educational coaches and ICEI staff to ensure a successful transition to college. This individual will work with students’ families as well as the adult agencies that support them to fulfill each student’s transition plan.

Responsibilities of the high school liaisons might slightly vary between districts but are likely to be similar to:

- Communicate with the ICEI staff on day-to-day operations of the ICEI program.
- Coordinate students’ and educational coaches’ schedules (on/off campus) and transportation.
- Develop students on campus activity schedule in conjunction with Ed Coach and with input from ICEI coordinator on available activities.
- Attend students’ IEP and transition team meetings and update ICEI staff as needed.
- Provide information on the ICE Program to families of qualified students during the recruitment process and secure funding through district’s special education
director. Facilitate application process.

- Co-facilitate Person-Centered Plans (PCPs), for incoming students, with ICEI staff.
- Collaborate with agencies, families, and the district’s transition team to develop a transition plan addressing employability/independent living/transportation/adult services.
- Review and approve advising forms (wish list and schedule planner) prior to advising appointment.
- Consult with ICEI faculty in designing instruction and modifying assignments.
- Provide professional development to educational coaches.
- Provide coverage for educational coaches to attend one professional development workshop per semester, at the college.
- Coordinate student and coach vacation schedules to match the college academic calendar.
- Attend ICE Partnership meetings and statewide trainings.

**Colleges & Universities with ICE Programs.** Figure 2. includes information about the campuses that have ICE Programs in Massachusetts. The information provided is if the campuses are 2- or 4-year colleges or universities and if they are grant funded or self-sustaining.
Figure 2. Colleges & Universities with ICEI Programs

<table>
<thead>
<tr>
<th>Campus</th>
<th>2- or 4-year</th>
<th>Self-Sustaining or Grant Funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgewater State University</td>
<td>4-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Bunker Hill Community College</td>
<td>2-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Cape Cod Community College</td>
<td>2-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Framingham State University</td>
<td>4-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Holyoke Community College</td>
<td>2-year</td>
<td>Self-Sustaining</td>
</tr>
<tr>
<td>MassBay Community College</td>
<td>2-year</td>
<td>Self-Sustaining</td>
</tr>
<tr>
<td>Massasoit Community College</td>
<td>2-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Middlesex Community College</td>
<td>2-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Northern Essex Community College</td>
<td>2-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Roxbury Community College</td>
<td>2-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Salem State University</td>
<td>4-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>UMASS Amherst</td>
<td>4-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>UMASS Boston</td>
<td>4-year</td>
<td>Grant Funded</td>
</tr>
<tr>
<td>Westfield State University</td>
<td>4-year</td>
<td>Grant Funded</td>
</tr>
</tbody>
</table>

Program Evaluation Research

One of the first steps of designing an evaluative study is identifying what units are selected, what time intervals will be examined, and what are the kinds of comparisons are going to be made. It is important for the researcher to be knowledgeable of the fact that form follows function and design follows the questions. Guba & Lincoln (1989) believe that qualitative studies responsive to stakeholder’s interests that adopt multiple
perspectives are not only the best but the only acceptable evaluations. Facts collected during an evaluation have no meaning unless in the framework of values.

The design is central to the evaluation; it is the backbone to be able to provide evidence that any events or changes that come after the program are truly due to the program. It is vital to be able to separate effects of the program from the rest of life. The evaluation’s main function is to rule out plausible explanations and make it clear that attribution is not an issue (Weiss, 1998).

Evaluation is the systematic process. It requires applying judgmental and descriptive information about an object’s value (Stufflebeam, D.L., Alkin, M.C.ED, 2013). The core purpose of program evaluation is improvement. (Stufflebeam, 2001). Evaluation reports can be used to guide and strengthen programs, develop and issue accountability reports, disseminate effective practices, and make stakeholders and/or decision makers aware of program contingencies that were disreputable for future use. To produce a defensible and summative evaluation report evaluators need to effectively conduct, document, and report formative evaluations. The most important use the evaluator foresees is the ability to increase understanding of how the program achieves its effects (Weiss, 1998).

There are eight steps to conducting an effective evaluation: identify key questions, decide if the data collection and analysis will be quantitative or qualitative, develop measures and techniques to answer questions, figure out how to collect necessary data to operationalize the measures, plan the appropriate research design, collect and analyze data, write and disseminate results, and promote use (Weiss, 1998). Evaluations are
constantly evolving, the evaluator may go back and forth between these different phases adjusting and adapting to the flow of the study so that the pieces fit together concisely.

An evaluation is the process of determining the merit, worth, or value of something when defined at the most basic level. The individual approach to evaluation is based on the goals of the evaluation (Stufflebeam & Shinkfield, 2007). Alkin and Christie (2004) defined three branches of evaluation: Methods, Valuing, and Use. The theorists on the Methods branch emphasize research methodology.

The Methods branch promotes that rigor trumps all other considerations. The branch focuses on knowledge construction and the research methodology used (Alkin & Christie, 2004). Evaluations conducted by theorists in the Methods branch are usually using social research methods to investigate the effectiveness of social intervention programs (Rossi, Lipsey, & Freeman, 2004).

Theorists on the Valuing branch argue that the essential element to the process of evaluation is the value that is placed on the evaluand. The evaluation work of Scriven and Stake developed the Valuing branch. The Valuing branch focuses on the process of determining the merit, worth, or value of something and the final product of the process (Scriven, 1991, Stufflebeam & Shinkfield, 2007).

**The CIPP (Context, Inputs, Processes, and Products) Model for Evaluation.** Stufflebeam’s work has guided the development of the Use branch. Use-focused theories are also referred to as the improvement/accountability-oriented models (Stufflebeam & Shinkfield, 2007). Those associated with the Use branch focus on the ways in which the evaluation information will be used, and focus specifically on those who will use the
information. Stufflebeam’s CIPP Model in which the primary function of evaluation is improvement is an example of the Use branch (Stufflebeam & Shinkfield, 2007). The CIPP Model along with other Use models are a systematic collection of information about activities, characteristics and outcomes of programs to improve program effectiveness, inform future program decisions, and develop judgments about the program.

The CIPP Model accentuates that evaluation’s purposefulness is not only to prove but to also improve. The acronym CIPP stands for evaluations of context, inputs, processes, and products (Stufflebeam, D.L. Alkin.M, ED, 2013). A recommendation when using the CIPP Model to evaluate the program is to apply it flexibly to the program being evaluated. The CIPP Model provides timely and valid information in regards to appropriate areas of improvement while taking into account the relevant contextual conditions and dynamics (Weiss, 1998).

The four categories of the CIPP Model address different areas within a programs evaluation. Context helps define goals and priorities by assessing needs, problems, and assets. Input identifies and assesses alternative approaches for program planning. Financial considerations are taken into place such as budgets, cost-effectiveness of needs, staffing plans, and competing action plans. Process is focused on staff’s ability to carry out activities, judge program implementation, and interpret outcomes. Product, the last P of the CIPP model is identifying and assessing costs of intended and unintended outcomes. Product allows staff to focus on achieving important outcomes at a reasonable cost and gauging cost-effectiveness in achieving defined goals and targeted needs (Stufflebeam, 2003).
There are three key strengths to the CIPP Model. It is applicable to a variety of evaluation situations; it is comprehensive and can be utilized at any time from program planning through program outcomes; and it “is well established and has a long history of applicability” (Guerra-Lopez, 2008, p. 113). Questions to ask when implementing the CIPP Model are what needs to be done, how should it be done, is it being done, or is it succeeding. Once CIPP is implemented evaluation questions that might be addressed are: was the program connected to the clear goals based on assessed needs? Was the effort guided by a defensible design, staffing plan, and budget? Was the service design efficiently modified and executed competently (Guerra-Lopez, 2008).

The Second Edition CIPP Model Checklist was a guiding tool for this evaluation. The checklist is patterned after the CIPP Model and focuses on those aimed at long-term, sustainable improvements (Stufflebeam, 2007). The checklist addresses the four main components- context, input, process, and product. Product evaluation is divided into impact (were the right beneficiaries reached), effectiveness (were the beneficiaries needs met), sustainability (gains sustained), and transportability (was the process proved transportable and adaptable to other settings) evaluations (Stufflebeam, 2007). Figure 3 provides examples of questions or activities that assisted in guiding the evaluation aligned with the Second Edition CIPP Model Checklist.
Figure 3. CIPP Model aligned with the ICEI Program Evaluation (Continued onto next page).

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>QUESTION</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual</td>
<td>• Secure agreements needed to collect data (IRB, Consent, Assent)</td>
<td>• Develop &amp; submit IRB • Develop consent forms • Develop assent forms</td>
</tr>
<tr>
<td>Agreements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Context</td>
<td>• What is the overall context of the ICEI Program-funding, EOE priorities, RFP guides, program goals, staffing levels, needs of participants?</td>
<td>• Compile basic background information • Interview ICE coordinators • Survey/interview students • Survey/interview ed coaches • Assess statewide program goals • Assess campus based program goals</td>
</tr>
<tr>
<td></td>
<td>• What is the context of the ICE Program in regards to self-determination- EOE priorities, RFP guides, program goals, staffing levels, needs of participants?</td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>• Was the ICE current program responsive to the participant needs to promote SD?</td>
<td>• Identify and investigate all existing activities • Identify and investigate activities connected to SD development • Assess program (statewide and campus based) strategy’s for development against literature • Assess the merit of the strategies in relation to promotion of SD</td>
</tr>
<tr>
<td></td>
<td>• Was the ICE’s program strategy appropriately aligned with SD &amp; inclusive PSE literature?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Were there differences in the strategies to promote SD amongst different campuses?</td>
<td></td>
</tr>
<tr>
<td>Process</td>
<td>• Were the Think College and EOE collected data &amp; reports used to strengthen programs?</td>
<td>• Maintain a record of programmatic strengths programmatic barriers for campuses • Review 2016-2017 RFPs</td>
</tr>
<tr>
<td></td>
<td>• Were the Think College and EOE collected data &amp; reports identifying specific information in regards to self-determination?</td>
<td></td>
</tr>
</tbody>
</table>
| **Product**<br>(Impact, Effectiveness, Sustainability, Transportability) | **•** To what extent are the students in the ICEI being delivered effective SD teaching?  
**•** To what extent are the staffs in the ICEI being offered effective training on how to teach SD?  
**•** What was the full range of the ICEI programs?  
**•** What are the differences amongst campuses? | **•** Interview stakeholders  
**•** Determine effectiveness of activities evaluation- what are the characteristics of the activities that work/don’t work?  
**•** Interview program coordinators to identify what activities should be sustained  
**•** Interview program staff about what activities should be sustained |

**Ethical Considerations**

It is imperative to focus on possible ethical limitations during the evaluation-planning phase. There are five ethical consideration areas that must be considered for the ICEI Program evaluation plan. The first ethical consideration is honesty. Human’s lie and as evaluators we must present as much information as possible to potential participants so they can decide whether or not to participate. The goal of this evaluation dissertation was to improve and not necessarily prove. Participation was globally approached because of including at different campuses that have ICEI Programs and individual response information was extra data not the sole source of data.

Informed consent, confidentiality, and anonymity are all intertwined. Choice was given to potential participants as to whether or not they wanted to participate. If they chose to participate their information was held in high confidence and no identifying information was exposed. Informed consent will be provided to the ICE Program Coordinators, students, educational coaches, and any other parties involved in the data
collection. Anonymity was somewhat difficult since the evaluation was based on the Inclusive Concurrent Enrollment Initiative Programs in Massachusetts.

The last two ethical areas to consider are high competence and reciprocity. The researcher carried out the evaluation with the highest competency possible. Reciprocity addresses the feedback of the study results to all stakeholders. Due to the evaluator being an ICE Program coordinator, she will easily disseminate all the results to the statewide coordinator along with all the other stakeholders.

**Data Sources**

**Existing Data.** The ICE initiative has been in existence since 2007. Throughout the years each program receiving funds has had to submit some version of an end of the year report. The reports varied based on directors and questions but were most often student specific- what classes, what activities, any employment opportunities, etc. Data that had been collected over the year at a statewide level were the RFPs and financial budgets. Data specific to campuses outlining this similar data varied based on the Program Coordinators. The RFPs included self-determination, student enrollment, coursework selection, peer involvement, educational coaches, employment, student educational coach agreements, data collection, partner leadership teams, and activities.

**New Data Sources.** Interviews of Program Coordinators, students and staff, focus groups, and surveys were used to gather data. Three campuses were selected for in-depth exploration. Logic Models were developed for these campuses. The campuses were identified based on type (2- or 4-year campus and self-sustaining or grant funded), existence for at least a year, and willingness to participate. Below is a description of tools
already used in the process of collecting data in the evaluation.

**Self-Determination Inventory System.** The Self-Determination Inventory System (SDIS) is used to assess the self-determination of adolescents and young adults with and without disabilities in secondary and postsecondary education. Wehmeyer and colleagues base the SDIS upon the Functional Model of Self-Determination, which was validated in 2003. The SDIS was designed to be for use of both practitioners to make decisions and researchers to evaluate the efficacy of interventions and examine factors related to and contributing to self-determination. Portions of the SDS were used as the survey for students and educational coaches.

**Focus Groups.** Focus groups are a method of data collection in which respondents joined together to discuss and provide data on particular issues (Weiss, 1998). Focus groups were conducted as conference calls to promote participation and decrease interference of geographic locations and scheduling. Groups alike organized the focus groups, meaning students, program coordinators, and educational coaches. The focus group questions were developed based on the results of the initial surveys.

**Interviews.** Interviews and meetings were scheduled with the selected ICEI Program Coordinators, EOE ICE Director, and students and coaches. The interviews with the Program Coordinators were used to develop an understanding of what programmatic procedures were already in place, barriers, strengths, demographics, etc. Following the interviews and observations logic models were created.

**Logic Models Guiding the Evaluation.** A logic model is a systematic and visual way to present and share understanding of the relationships among the resources that
operate a program, the activities, and the changes and/or results hoped for (Kellogg, 2004). A logic model serves as a planning tool to develop program strategy, helps organize program planning and management, and evaluation functions. Logic models are an effective way to ensure program success. There are three different types of logic models: Theory Approach, Outcomes Approach, and Activities Approach. Theory Approach logic models links theoretical ideas to explain underlying program assumptions. Outcomes approach logic model displays the interrelationships between specific program activities and their outcomes. The Activities Approach logic model connects program resources and activities to desired results in great detail (Kellogg, 2004).

The following logic models created for the ICEI Programs were a combination of all three. The theory of self-determination was integrated throughout the model, the interrelationships between the different activities and observable outcomes were outlined, and the activities and outcomes were described in great detail. The logic models were created based on activities directly provided through the ICEI Program or naturally occurring on campus.

**Potential Limitations**

This study was designed as a first foray into evaluating the Inclusive Concurrent Enrollment Initiative Program specifically examining self-determination of the students, staff, and program qualities. To date, no previous research has been identified that has considered what the ICEI Programs are doing across the state that is naturally promoting self-determination or how the programs are systematically promoting self-determination.
Also to date, no previous research has been identified examining the perceptions of the students and staff and the specific skills and qualities of the staff in the ICEI Programs. This study was limited as it focused on the ICEI Programs in Massachusetts, which is unique in its dual-enrollment model. A significant limitation of this study was that no individual student outcome data was collected or examined as part of this study; however, a follow up study with a more longitudinal scope (2-3 years) could be designed to collect and analyze data about short- and long-term participation in inclusive college-based program and how the influence of the programs promote self-determination in the student’s resulting in paid competitive employment; social inclusion; friendships; independent living; and, overall quality of life. This longitudinal study would involve collecting quantitative data about the lives of students who participate in Inclusive Concurrent Enrollment Initiative programs in throughout their experience.

Another limitation of this study was that all of the students had extremely variable K-12 experiences and those experiences were not be deeply investigated. During the interviews and focus groups it was possible information emerged but there were no specific plans to do a comprehensive history investigation of all of the students. Since we know self-determination is a life-long process there could be experiences from when the students were younger that have greatly influenced their skills and perceptions that were not measured.
CHAPTER 4

RESULTS

There were three broad goals of the evaluation study: (1) to examine the self-determination of students in the ICEI Programs, (2) to examine and evaluate the current programing and staff preparedness to teach and enhance self-determination skills, and (3) to determine recommendations to promote self-determination skills of the students in the ICEI Programs. Five research questions were developed to meet the overarching goals of the evaluation. These questions were designed to help provide evidence to understand the functional components of a postsecondary education program that promote self-determination for students with intellectual and developmental disabilities and to differentiate programs that do or do not include these components.

Several sources of data were used to answer the research questions; surveys given to students and educational coaches, surveys given to ICEI Coordinators, focus group results, student interviews, student and program observations, and records reviews. The program evaluation included both qualitative and quantitative research. Initially, students and educational coaches completed surveys aligned with the SDIS-SR (Wehmeyer, in press). Following the surveys, three sites were selected for observations: Campus A, Campus B, and Campus C. Throughout the observation educational coaches and students were interviewed. The interview questions used during the observations were developed based on the survey results. Next the ICEI coordinators completed a survey that included questions based on the survey results and data collected during the observations and interviews. A focus group guide (Appendix 4) was developed based on all data previously collected especially the coordinator survey. Program coordinators and
technical assistance staff participated in the focus groups. Lastly, all of the 2017-2018 Massachusetts ICEI grants were reviewed. The grants were reviewed to assess all components of current programming and if any campus specifically included the discussion of activities targeting self-determination development.

The results of the data collection efforts are described below according to each research question, some data sources provided evidence for more than one question. Each question will identify the different sources and the results. Data will be triangulated and discussed when possible to provide themes and consistencies throughout the sources.

**Question 1: Do students with Intellectual Disabilities (ID) and Autism Spectrum Disorder (ASD) in postsecondary education (PSE) think they are self-determined in their daily lives?**

To answer question 1, data were collected through student surveys, interviews & observations. Based on the data, the answer to question 1 is that students with Intellectual Disabilities and Autism Spectrum Disorder in postsecondary education programs do feel they are self-determined in their daily lives. This section will provide evidence for answering yes to question 1 by providing results from the adapted version of the Self-Determination Inventory Scale (SDIS-SR) survey and information collected through observations and interviews of students. Triangulation of all the data collected will be provided throughout the section.

Thirty students with intellectual disabilities participating in the ICEI program at various campuses from across the state completed the Self-Determination Inventory Scale (SDIS-SR) survey. Students had the option to provide demographic data, 4 chose not to. For the other 26, 18 were male and 8 were female. There were 14 students who
responded that they were 20 years old, 2 students were 18 years old, 5 were 19 years old, and 6 were 21 years old. There was no information collected that would allow identification of students and/or their campuses. Seven students from 3 different campuses were interviewed and observed.

The survey statements were broken down into 7 subsections: autonomy, self-initiation, self-direction, pathways thinking, psychological empowerment, self-realization, and control-expectancy. Numerical values were assigned to the five possible answers to the statements; 1 = strongly disagree, 2 = disagree, 3 = not sure, 4 = agree, and 5 = strongly agree. Converting responses to numerical values permitted analyses be performed. The overall mean of the entire survey, each subsection mean, and individual statement means were calculated. Overall, students agree they are self-determined individuals with a mean of 3.97, almost equal to the numerical value of agree, 4. The mean scores subsections are as follows: autonomy 4.00; self-initiation 3.87; self-direction 3.97; pathways thinking 3.94; psychological empowerment 4.09; self-realization 3.99; and control-expectancy 3.94. Psychological empowerment (4.09) was the highest mean of the groups and self-initiation (3.87) was the lowest, overall the means suggest students rated themselves high on all areas. Below Table 1 includes statements mean scores along with the subcategory means.

All of the means if rounded to the closest score category would be ‘agree’. This means that of the 28 students who completed this portion of the SDIS they generally feel they are self-determined individuals. As with any likert-scale there is always the concern that individuals will select the middle response or generally one response throughout. To examine the distribution of responses from strongly agree to strongly disagree percentage
tables (Table 2, Table 3, Table 4, Table 5) for individual responses across the 5 categories, group responses across the 5 categories for each individual question, and group responses across the 5 score categories for the clusters were created.
Table 1. Student mean scores for each individual statement on the SDIS:SR mean scores for each subcategory; and overall mean for entire SDIS:SR survey.

<table>
<thead>
<tr>
<th>STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
</tr>
<tr>
<td>I plan weekend activities I like to do.</td>
</tr>
<tr>
<td>I choose activities I want to do.</td>
</tr>
<tr>
<td>I text, email, or talk on the phone to friends or family when I choose.</td>
</tr>
<tr>
<td>I go to restaurants I like.</td>
</tr>
<tr>
<td>I choose what my room looks like.</td>
</tr>
<tr>
<td>Autonomy Mean</td>
</tr>
<tr>
<td><strong>Self-Initiation</strong></td>
</tr>
<tr>
<td>I choose when to act or do something.</td>
</tr>
<tr>
<td>I start new activities on my own.</td>
</tr>
<tr>
<td>I consider many possibilities when I make plans for my future.</td>
</tr>
<tr>
<td>My past experiences help me plan what I will do next.</td>
</tr>
<tr>
<td>I change what I do when it has not worked in the past.</td>
</tr>
<tr>
<td>I look for new experiences I think I will like.</td>
</tr>
<tr>
<td>I do things I liked in the past.</td>
</tr>
<tr>
<td>Self-Initiation Mean</td>
</tr>
<tr>
<td><strong>Self-Direction</strong></td>
</tr>
<tr>
<td>I set my own goals.</td>
</tr>
<tr>
<td>I make my own decisions.</td>
</tr>
<tr>
<td>I act on decisions I make.</td>
</tr>
<tr>
<td>I do what is best for me when I face a challenge.</td>
</tr>
<tr>
<td>I take action when new opportunities come my way.</td>
</tr>
<tr>
<td>I think about each of my goals.</td>
</tr>
<tr>
<td>Self-Direction Mean</td>
</tr>
<tr>
<td><strong>Pathways Thinking</strong></td>
</tr>
<tr>
<td>I think of more than one way to solve a problem.</td>
</tr>
<tr>
<td>I find another way to get something done.</td>
</tr>
<tr>
<td>I come up with ways to reach my goals.</td>
</tr>
<tr>
<td>Pathways Thinking Mean</td>
</tr>
<tr>
<td><strong>Psychological Empowerment</strong></td>
</tr>
<tr>
<td>I tell people when I think I can do something.</td>
</tr>
<tr>
<td>I think trying hard helps me get what I want.</td>
</tr>
<tr>
<td>I keep trying even after I get something wrong.</td>
</tr>
<tr>
<td>I know how to get what I want.</td>
</tr>
<tr>
<td>I can make good choices.</td>
</tr>
<tr>
<td>I make friends in new situations.</td>
</tr>
<tr>
<td>Psychological Empowerment Mean</td>
</tr>
<tr>
<td>Self-Realization</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>It is better to be yourself than to be popular.</td>
</tr>
<tr>
<td>I know what I do best.</td>
</tr>
<tr>
<td>I make up for my limitations.</td>
</tr>
<tr>
<td>Others like me.</td>
</tr>
<tr>
<td>I am confident in my abilities.</td>
</tr>
<tr>
<td>I know my strengths.</td>
</tr>
<tr>
<td><strong>Self-Realization Mean</strong></td>
</tr>
<tr>
<td><strong>Control Expectancy</strong></td>
</tr>
<tr>
<td>I have the skills to carry out my plans.</td>
</tr>
<tr>
<td>I have what it takes to reach my goals.</td>
</tr>
<tr>
<td>I work hard to reach my goals.</td>
</tr>
<tr>
<td>I pay attention to get what I want.</td>
</tr>
<tr>
<td>I get help from my friends to carry out my plans.</td>
</tr>
<tr>
<td>I use my teachers to help me reach my goals.</td>
</tr>
<tr>
<td>I use my parents to help me get what I want.</td>
</tr>
<tr>
<td><strong>Control Expectancy Mean</strong></td>
</tr>
<tr>
<td><strong>OVERALL MEAN</strong></td>
</tr>
</tbody>
</table>
Table 2. Percentages of student responses aligned with strongly agree, agree, neutral, disagree, and strongly disagree per each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>DA</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I plan weekend activities I like to do.</td>
<td>46%</td>
<td>29%</td>
<td>18%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>I choose activities I want to do.</td>
<td>36%</td>
<td>43%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>I text, email, or talk on the phone to friends or family when I choose.</td>
<td>46%</td>
<td>43%</td>
<td>7%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I go to restaurants I like.</td>
<td>29%</td>
<td>46%</td>
<td>11%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>I choose what my room looks like.</td>
<td>29%</td>
<td>39%</td>
<td>21%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Self-Initiation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I choose when to act or do something.</td>
<td>25%</td>
<td>50%</td>
<td>14%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>I start new activities on my own.</td>
<td>21%</td>
<td>46%</td>
<td>21%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>I consider many possibilities when I make plans for my future.</td>
<td>29%</td>
<td>46%</td>
<td>18%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>My past experiences help me plan what I will do next.</td>
<td>25%</td>
<td>43%</td>
<td>14%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>I change what I do when it has not worked in the past.</td>
<td>32%</td>
<td>43%</td>
<td>11%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>I look for new experiences I think I will like.</td>
<td>46%</td>
<td>29%</td>
<td>18%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>I do things I liked in the past.</td>
<td>43%</td>
<td>29%</td>
<td>14%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Self-Direction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I set my own goals.</td>
<td>21%</td>
<td>64%</td>
<td>7%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>I make my own decisions.</td>
<td>18%</td>
<td>50%</td>
<td>29%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I act on decisions I make.</td>
<td>25%</td>
<td>57%</td>
<td>14%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>I do what is best for me when I face a challenge.</td>
<td>26%</td>
<td>59%</td>
<td>7%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>I take action when new opportunities come my way.</td>
<td>22%</td>
<td>52%</td>
<td>22%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I think about each of my goals.</td>
<td>36%</td>
<td>50%</td>
<td>4%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Pathways Thinking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think of more than one way to solve a problem.</td>
<td>29%</td>
<td>54%</td>
<td>4%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>I find another way to get something done.</td>
<td>21%</td>
<td>57%</td>
<td>11%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>I come up with ways to reach my goals.</td>
<td>36%</td>
<td>43%</td>
<td>11%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Psychological Empowerment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I tell people when I think I can do something.</td>
<td>29%</td>
<td>46%</td>
<td>14%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>I think trying hard helps me get what I want.</td>
<td>29%</td>
<td>57%</td>
<td>7%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>I keep trying even after I get something wrong.</td>
<td>32%</td>
<td>39%</td>
<td>25%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>I know how to get what I want.</td>
<td>18%</td>
<td>61%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I can make good choices.</td>
<td>50%</td>
<td>39%</td>
<td>7%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I make friends in new situations.</td>
<td>32%</td>
<td>64%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Table 2 Continued

<table>
<thead>
<tr>
<th><strong>Self-Realization</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>It is better to be yourself than to be popular.</td>
<td>39%</td>
<td>25%</td>
<td>18%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>I know what I do best.</td>
<td>33%</td>
<td>56%</td>
<td>7%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I make up for my limitations.</td>
<td>25%</td>
<td>50%</td>
<td>14%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Others like me.</td>
<td>33%</td>
<td>41%</td>
<td>26%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I am confident in my abilities.</td>
<td>29%</td>
<td>57%</td>
<td>7%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>I know my strengths.</td>
<td>37%</td>
<td>41%</td>
<td>15%</td>
<td>7%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Control-Expectancy</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the skills to carry out my plans.</td>
<td>18%</td>
<td>50%</td>
<td>25%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>I have what it takes to reach my goals.</td>
<td>25%</td>
<td>57%</td>
<td>11%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>I work hard to reach my goals.</td>
<td>32%</td>
<td>57%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I pay attention to get what I want.</td>
<td>29%</td>
<td>46%</td>
<td>7%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>I get help from my friends to carry out my plans.</td>
<td>25%</td>
<td>54%</td>
<td>7%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>I use my teachers to help me reach my goals.</td>
<td>39%</td>
<td>43%</td>
<td>14%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>I use my parents to help me get what I want.</td>
<td>21%</td>
<td>50%</td>
<td>14%</td>
<td>4%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 2 displays the percentages associated with the 5 possible rating scores for each individual statement. The highest ranked statements, totaling strongly agree and agree from each category are topics that were addressed in the student interviews. The statement “I text, email, or talk on the phone to friends or family when I choose” had a combined strongly agree and agree score of 89%. Self-initiation had four statements equally scored at 75%, “I choose when to act or do something”, “I consider many possibilities when I make plans for my future”, “I change what I do when it has not worked in the past” and “I look for new experiences I think I will like”. I look for new experiences I think I will like had the highest strongly agree percentage, 46%, of the four statements. 83% of students strongly agreed and agreed with “I think of more than one way to solve a problem” in the pathways thinking category. Psychological empowerments statement “I make friends in new situations” was agreed upon by 89% of the students. The highest agreed upon statement and the highest of the self-realization category was “I know what I do best” at 96%. Lastly, 89% of students agreed with the
statement “I work hard to reach my goals” which is part of the control expectancy category.

Table 3. Percentages of student responses aligned with strongly agree, agree, neutral, disagree, and strongly disagree for each of the subcategories.

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>37%</td>
<td>40%</td>
<td>13%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Self-Initiation</td>
<td>32%</td>
<td>41%</td>
<td>16%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>25%</td>
<td>55%</td>
<td>14%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Pathways Thinking</td>
<td>29%</td>
<td>51%</td>
<td>14%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>32%</td>
<td>52%</td>
<td>12%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Self-Realization</td>
<td>33%</td>
<td>45%</td>
<td>15%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>27%</td>
<td>51%</td>
<td>13%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30%</strong></td>
<td><strong>48%</strong></td>
<td><strong>13%</strong></td>
<td><strong>5%</strong></td>
<td><strong>3%</strong></td>
</tr>
</tbody>
</table>

The breakdown of the total averages percentages of students responses aligned with the 5 agreement categories is displayed in table 3. The table provides evidence that the majority of students responses were aligned with strongly agrees and agrees and there was minimal disagreement with the statements. The agree percentages were the highest of all five score agreement categories for every subcategory; autonomy 40%, self-initiation 41%, self-direction 55%, pathways thinking 51%, psychological empowerment 52%, self-realization 45%, and control expectancy 51%. The categories in descending percentages order following the agree category was strongly agree with 30% average, neutral with 13% average, disagree with 5% average, and strongly disagree with 3% average.

Table 4 displays the total agree and strongly agrees percentages. The totals agree and strongly agree percentages for all 7 categories combined were 78% while the total
disagree and strongly disagree was 8%. Each categories total of agree and strongly agree was: autonomy 78%, self-initiation 72%, self-direction 79%, pathways thinking 80%, psychological empowerment 83%, self-realization 78%, and control expectancy 78%.

Each categories total of disagree and strongly disagree was autonomy 10%, self-initiation 12%, self-direction 6%, pathways thinking 12%, psychological empowerment 4%, self-realization 4%, and control expectancy 9%. The total percentages of disagree and strongly disagree being so low in comparison to strongly agree and agree totals provides more supporting evidence that students do feel they are self-determined.

Table 4. Total combined percentages strongly agree & agree for each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total %Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>77%</td>
</tr>
<tr>
<td>Self-Initiation</td>
<td>72%</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>79%</td>
</tr>
<tr>
<td>Pathways Thinking</td>
<td>80%</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>83%</td>
</tr>
<tr>
<td>Self-Realization</td>
<td>78%</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>78%</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td><strong>78%</strong></td>
</tr>
</tbody>
</table>

The individual response percentage table for the students across the five scores categories in Table 5 displays that the spread of responses were variable for each student. The students reported very low in regards to disagreeing and strongly disagreeing with the statements. One student strongly agreed (100%) with every statement while 15 students didn’t strongly disagree with any statements. The spread of the majority of responses for all of the students was between strongly agree and neutral. One student rated themselves between 15- 28% for each of the 5 categories, this was the only evenly spread distribution of all students. Aside from this student only 14 other students selected
strongly disagree for any statements and only two of those students were in double digits (10%, 25%).

A similar distribution was also seen in the low selection of agreement responses was the disagree category. Only 13 students disagreed with at least one of the 40 statements. Six of these students were in double digits ranging from 15% to 24%. Two of these six students were of the three who also scored in the double digits for the strongly disagree categories. The spread of the individual responses for both strongly disagree and disagree provides evidence that students with intellectual disabilities in a postsecondary education program think they are self-determined in their daily lives.
Table 5. Individual student average responses for each of the 5 statement response categories of the SDIS-SR.

<table>
<thead>
<tr>
<th>Student</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35%</td>
<td>53%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>60%</td>
<td>35%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0%</td>
<td>75%</td>
<td>18%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>73%</td>
<td>15%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>43%</td>
<td>38%</td>
<td>18%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>6</td>
<td>0%</td>
<td>90%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>65%</td>
<td>33%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>20%</td>
<td>20%</td>
<td>15%</td>
<td>18%</td>
<td>28%</td>
</tr>
<tr>
<td>9</td>
<td>23%</td>
<td>63%</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>10</td>
<td>43%</td>
<td>40%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>3%</td>
<td>80%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>35%</td>
<td>33%</td>
<td>23%</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>13</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>14</td>
<td>0%</td>
<td>43%</td>
<td>30%</td>
<td>24%</td>
<td>3%</td>
</tr>
<tr>
<td>15</td>
<td>18%</td>
<td>78%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>16</td>
<td>3%</td>
<td>73%</td>
<td>23%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>17</td>
<td>43%</td>
<td>55%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>18</td>
<td>53%</td>
<td>35%</td>
<td>0%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>19</td>
<td>15%</td>
<td>25%</td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>20</td>
<td>58%</td>
<td>35%</td>
<td>3%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>21</td>
<td>0%</td>
<td>92%</td>
<td>0%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>22</td>
<td>33%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>23</td>
<td>28%</td>
<td>50%</td>
<td>18%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>24</td>
<td>13%</td>
<td>35%</td>
<td>33%</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>25</td>
<td>8%</td>
<td>65%</td>
<td>3%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>26</td>
<td>45%</td>
<td>35%</td>
<td>18%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>27</td>
<td>10%</td>
<td>38%</td>
<td>30%</td>
<td>20%</td>
<td>3%</td>
</tr>
<tr>
<td>28</td>
<td>33%</td>
<td>35%</td>
<td>30%</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Table 6. Percentage of correct student responses for the correct fill in the middle of the scenarios for each middle statement.

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning:</strong> You want to take a class in Hotel Management. An academic advisor wants you to take a Family and Child Care class. You can only take one of the classes.</td>
<td>57%</td>
</tr>
<tr>
<td><strong>BEST:</strong> &quot;I tell my advisor my reasons to take hotel management and I sign up for it.&quot;</td>
<td>13%</td>
</tr>
<tr>
<td><strong>2nd Answer:</strong> &quot;I decide not to listen to my advisor and take the class I want.&quot;</td>
<td>30%</td>
</tr>
<tr>
<td><strong>3rd Answer:</strong> &quot;I want to take a class where I can learn to work in hotel management.&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>Ending:</strong> You are taking a class in hotel management.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 2</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning:</strong> You decide you want to work at the bookstore.</td>
<td>61%</td>
</tr>
<tr>
<td><strong>BEST:</strong> &quot;I go to the bookstore and fill out an application.”</td>
<td>26%</td>
</tr>
<tr>
<td><strong>2nd Answer:</strong> &quot;I put in an application and the manager hires me.”</td>
<td>13%</td>
</tr>
<tr>
<td><strong>3rd Answer:</strong> “I love to read books and write stories.”</td>
<td></td>
</tr>
<tr>
<td><strong>Ending:</strong> You are working at a bookstore.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 3</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning:</strong> Your friends are acting like they are mad at you.</td>
<td>78%</td>
</tr>
<tr>
<td><strong>BEST:</strong> &quot;I ask my friends what’s wrong and we figure things out.”</td>
<td>13%</td>
</tr>
<tr>
<td><strong>2nd Answer:</strong> &quot;I would not talk to my friends until they talk to me.”</td>
<td>9%</td>
</tr>
<tr>
<td><strong>3rd Answer:</strong> “I think my friends might be mad at me!”</td>
<td></td>
</tr>
<tr>
<td><strong>Ending:</strong> You and your friends get along just fine.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 4</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning:</strong> A book you need to complete your homework is missing.</td>
<td>35%</td>
</tr>
<tr>
<td><strong>BEST:</strong> &quot;My friend lets me borrow his book to use.”</td>
<td>26%</td>
</tr>
<tr>
<td><strong>2nd Answer:</strong> &quot;I listen carefully in class and take notes.”</td>
<td>39%</td>
</tr>
<tr>
<td><strong>3rd Answer:</strong> “I look for the book everywhere.”</td>
<td></td>
</tr>
<tr>
<td><strong>Ending:</strong> You turn in your completed homework.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 5</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning:</strong> You want to be elected as president of a club.</td>
<td>39%</td>
</tr>
<tr>
<td><strong>BEST:</strong> &quot;I ask people to vote for me and they do.”</td>
<td>48%</td>
</tr>
<tr>
<td><strong>2nd Answer:</strong> &quot;I make posters to run for president.”</td>
<td>13%</td>
</tr>
<tr>
<td><strong>3rd Answer:</strong> “I want to be president.”</td>
<td></td>
</tr>
<tr>
<td><strong>Ending:</strong> You are elected president.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 6</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning:</strong> You want to have friends.</td>
<td>83%</td>
</tr>
<tr>
<td><strong>BEST:</strong> &quot;I start talking to people in my class and hang out with them.”</td>
<td>9%</td>
</tr>
<tr>
<td><strong>2nd Answer:</strong> &quot;I will go around to a table at lunch and tell everyone my name.”</td>
<td>9%</td>
</tr>
<tr>
<td><strong>3rd Answer:</strong> “I moved to a new state and do not know anybody.”</td>
<td></td>
</tr>
<tr>
<td><strong>Ending:</strong> You have friends.</td>
<td></td>
</tr>
</tbody>
</table>
Table 6 and Table 7 are student responses for 6 scenarios that required students to select the best middle statement for each short story. One response was the wrong response while one answer was considered the best statement and the second one an acceptable statement. In Table 6, the percentages of each of the answers are listed. Overall 82% of students selected the top 2 answers and 18% selected the third answer. The majority of students selected the best answer for 5 out of 6 stories. The story about wanting to run for president identified the best answer as “I ask people to vote for me and they do” (39%) and the second answer was I make posters to run for president” (48%). In this situation, the second answer was a logical choice for students because a step of campaigning is making posters but what was missing was the part about people voting. This shows that the students are able to sequence steps attributed to self-determination skills and scenarios but could potentially be focused on certain aspects of a situation and not the whole picture.

The students scored the wrong answer the second highest in the story about a missing book. The wrong answer was “I look for the book everywhere” and then the homework is completed. Again, the follow through of the statement was missing because it didn’t say if the book was found. Logically, the students who have most likely been taught base level problem-solving skills selected an answer that would most likely have been greatly reinforced in a different type of teaching, for example you lose something you look for it. The interaction of problem-solving skills and self-determination will be discussed in the student interview section and in chapter 5.
Table 7. Individual student responses for picking the correct middle statement for the scenarios including total percentage top 2 responses and wrong percentages.

<table>
<thead>
<tr>
<th></th>
<th>Best</th>
<th>2nd</th>
<th>3rd</th>
<th>Top 2</th>
<th>Wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>83%</td>
<td>0%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>2</td>
<td>83%</td>
<td>17%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>17%</td>
<td>50%</td>
<td>33%</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>4</td>
<td>50%</td>
<td>17%</td>
<td>33%</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>5</td>
<td>50%</td>
<td>17%</td>
<td>33%</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>6</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>7</td>
<td>67%</td>
<td>17%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>8</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>9</td>
<td>50%</td>
<td>17%</td>
<td>17%</td>
<td>67%</td>
<td>17%</td>
</tr>
<tr>
<td>10</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>11</td>
<td>83%</td>
<td>17%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>67%</td>
<td>17%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>13</td>
<td>33%</td>
<td>17%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>14</td>
<td>50%</td>
<td>17%</td>
<td>33%</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>15</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>16</td>
<td>83%</td>
<td>17%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>17</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>18</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>19</td>
<td>67%</td>
<td>33%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>20</td>
<td>33%</td>
<td>50%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>21</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
<td>83%</td>
<td>17%</td>
</tr>
<tr>
<td>22</td>
<td>67%</td>
<td>0%</td>
<td>33%</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>23</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>58%</strong></td>
<td><strong>32%</strong></td>
<td><strong>18%</strong></td>
<td><strong>82%</strong></td>
<td><strong>18%</strong></td>
</tr>
</tbody>
</table>

Interviews and observations were conducted on the three prioritized campuses of the ICEI Programs. The campus descriptions are included later in this chapter. The unstructured interview questions were interweaved throughout the observations; the students were observed for about 10-30 minutes and the interviewer asked questions regarding what was observed, the students experiences in the ICEI Programs, or specific questions about self-determination that were created based on results from the student survey. Each interview and observation was significantly different and this was planned for to gain a deeper understanding of the differences in campuses, programs, and
students. All students’ identities are concealed. For site 1 there was a second observer, a Westfield State University Education Intern.

**Student Descriptions**

**Alan** was observed during an advising meeting with his educational coach and the ICEI Program Coordinator (PC). He was interviewed following the advising meeting. His educational coach has known him for 6 years and was a 25 plus year school-based volunteer and paraprofessional. Alan was a 20-year-old male who began attending the ICEI Program in September 2015. He decided to attend college because all of his family went to college, it is naturally the next step after high school, and he figured it would be fun.

Alan was audited Introduction to Acting during the fall semester and audited both Play Production and Introduction to Public Speaking during the spring semester. These courses aligned with his long-term goal employment area of films or theater. In all three classes, he and his educational coach would rotate who took notes each class and then would review and edit any work outside of classes. In the future he would like to either run a theater or work in the marketing department of a theater. During the time of the interview he held a paid job in his hometown as a ticket taker and occasionally cleaned when needed. His job required him to engage with moviegoers throughout his entire shift and often answering questions regarding theater specifics such as directing people to the correct theater. Alan attended the University five days a week and was transported to and from by his mother. He preferred his mother drives him because the public transportation a large distance away from his home. Alan’s day begins around 8:30am and spends his
first 30-60 minutes relaxing, socializing, while charting the plan of his day with his educational coach. This was typically followed by one of his two classes. After class he completes any homework or meets with the Employment Specialist and/or Program Coordinator. After his meetings or homework are finished he typically heads to lunch and then leaves campus around 1:30pm. Consistent with his career path, he had been exploring the option of joining the Filmmakers Club at night and in the fall of 2016 was hopeful that he would obtain an on campus internship in the Events Planning Department. His favorite things about being on campus are having fun, hanging out with friends, and the overall atmosphere of college life.

Patrick was a 20-year-old male who was in the process of completing his second of three full years in the ICEI Program. The interviewer, Patrick and second observer were at the table during his interview. The first portion of Patrick’s interview was questions about his experiences in the program and specifically about self-determination. Patrick’s educational coach also supports another student from his district so he has opportunities to be more independent. The first question that Patrick was asked was how would describe this year so far? He said, “Phenomenal. I’m doing phenomenal, even though some of my classes I audited all my classes would be A’s easy, and I take one for credit”. During the semester of the interview Patrick was enrolled in a Computer Science class that met twice a week. When not in class, he enjoys eating lunch in the dining hall on campus that makes the ‘best quesadilla’, spending time with his peer mentor, and volunteering at the campus radio station. His radio station internship named “Monday Funday” allows him to play an eclectic mix of music based on his interests and special requests. He initially started his show with the support of his Educational Coach or
Employment Specialist but they quickly faded and he now runs the show independently for 2 hours. Other time on campus is spent meeting with the Program Coordinator to talk for a progress update. Before coming to the University two years ago, Patrick said he was nervous about everything, especially about how he would do in the classes. Now he is nervous at all. He said his favorite thing about the University was “how diverse campus is overall. Especially with the ICEI Program now there are students from all different walks of life”. Patrick also referenced his social time with peer mentors and how he was able to use his cell phone to communicate with people and check the Facebook page. This assists him in making plans with people when he has free time.

**Ellie** was a 19-year-old female who stated, “College is my biggest achievement”. She had been enrolled in the ICEI Program since fall 2015. An educational coach who was also a student at the University accompanied Ellie on campus three days a week. Ellie’s long-term goal is performing arts, musical theater and set and costume design. Ellie was enrolled in American Musical Theater for audit. In the fall 2016 she hoped to audit either American Pop Music or Theater Appreciation. She spends her time on campus following a similar schedule each day. Upon arriving she gets coffee with a peer mentor or her educational coach and converses. After her coffee she heads to class where both Ellie and her educational coach take notes. After class she and her coach review the notes and prepare for any tests or quizzes, she said that the thought of tests does not make her nervous. On Mondays and Wednesdays usually before lunch she meets with either the Program Coordinator or the Employment Specialist. She enjoys using her ID card for to purchase lunch, a quesadilla. She has an on-campus internship two days a week with the costume department preparing costumes. She said that her favorite thing about being at
the University is getting to explore campus and try new things and “it feels good to be a college student.”

**Rose**, a 21-year-old female finishing her first and last year in the ICEI program. Rose and her educational coach were only able to talk for about 5 minutes. Rose was initially apprehensive to start answering questions but after her coach answered a few questions about their time on campus Rose started interjecting. Rose said that she had audited Introduction to Acting and was currently auditing Theater Appreciation. These courses were picked because of her hobby interests and not her employment interests. Her goal was to become a nurse’s aide in a nursing home or a hospital with elderly patients. She decided on this goal after her grandfather was treated in rehab facility. Rose explained the activities she participated in on campus. During the day she likes to hang out with her friends and eat. She is also a member of the Irish Step Club that meets on Thursdays. She and the club performed at the Relay for Life Walk. She also participated in making blankets for a blanket drive for Mass General Hospital.

In her current class she needed to watch school plays and write reviews aligned with the book. Rose said her coach helps her a lot with connecting the information. She also stated that she liked one of her professors more than another because of their teaching style, she preferred the professor who was outgoing and entertaining. Following this she looked at her coach and said, “what, I’m just being honest, you know I’m honest.” Her coach replied to her and the interviewers that Rose was known to be extremely honest. Rose also shared that even though she is honest she solicits other people’s opinions before making a decision. Rose was asked how do you feel about being in college? Rose replied, “It feels really, really good. I can tell my friends I’m in college
now. If I weren’t in the ICEI Program I would be staying home doing nothing. It’s normal here.”

Joe was a 20-year-old male who had been a student in the ICEI Program for 1.5 years. He spends four days on campus Monday-Thursday and works in an office setting on Fridays. He only buys lunch at his job on Fridays and always picks pizza but will only bring lunch to campus. His educational coach was present during his interview. Joe was very direct with his answers and after every other question would ask “is that it?” The interview began by asking Joe to describe a day on campus. He said that he was independent and spends the majority of his time in the library, student lounge, fitness center, or class. He enjoyed stopping by the Program Coordinators office. He has taken Music Technology, Piano, and Drama/Acting courses but of the three his favorite was the Drama/Acting course because it let him laugh. He doesn’t have a dream job but he likes his current office job. He spends his shift on the computers checking patient information. Although he didn’t state it as an official goal he did say that he was beginning to explore how to join the Transition Scholars Program, a program for students with various needs, at the college to take more classes towards a degree.

Sean was a 19 year-old male who had been attending the ICEI Program since September 2015. The first class he took was a math class because he really enjoys math and wanted to start with something that interested him. During the spring semester he audited a computer course that taught him about Microsoft PowerPoint, Word, and Excel. Sean likes to go on the computer in the library, look at comic books, and play Ping-Pong and basketball in the nicer weather when not in class. The days that Sean was on campus, he brought his own lunch and will use cash to independently buy more items. Sean was
very interested in talking about the ways he engages in self-determined behaviors with
the support of his educational coaches. He stated he is pretty independent but likes having
his coaches to check in with.

Colin was observed during his Dungeons & Dragons club. He was not aware that
he was being observed, and this was based on the very clear expectations he had set with
his educational coaches. He did not want others to know he had a ‘helper’ on campus.
The educational coach provided background information on how the Colin joined the
club. Colin told his educational coach that he had a goal to meet friends and was
extremely interested in the Dungeons and Dragons. The educational coach noticed that
when the club was meeting in the campus center lobby the student would watch but not
initiate contact. The coach asked him if he was interested in joining, Colin said yes but he
didn’t want the coach to go with him. The coach made a connection with one of the
students in the group who was also part of the Transition Scholars Program. He connected
the student and Colin and the student invited Colin to come play, this was the about
two weeks into the semester. After two more weeks, Colin was going to the group
independently and would text message the coach to let him know he was there and didn’t
need any support. The educational coach commented that Colin was making progress
socially and that the other club members were asking him for advice and help on the
game. Colin was observed he was creating a Dungeons and Dragons character on the
computer. He was in control of the computer and could be heard saying he was selecting
music. He exhibited choice-making and decision making skills based on what he was
choosing his characters to look like and making a decision on which music fit the
character. Colin was completely independent and managing his own behavior.
**Triangulation of Themes**

The following section will include information gathered from the student interviews aligned with the areas of the SDIS survey (autonomy, self-initiation, self-direction, pathways thinking, psychological empowerment, self-realization, and control expectancy) to allow for discussions of themes and comparisons from both sources and for triangulation of data.

**Defining Self-Determination.** Joe, Ellie, and Patrick were asked directly to define self-determination. Joe and Ellie were both unable to fully define self-determination, Joe stated that it is “making things happen” and Ellie said “I don’t know”. After giving both of the students a broad definition using examples of choice-making and decision-making, Joe said “oh yes, I do all of those things, I know what it is” and Ellie said “yes, I get it” and provided a quick example for a choice or decision she had made in life. Patrick defined self-determination as “A significant part of lives. People take on different challenges throughout the year and get what they want”. He then said, “I like to keep things modest and not brag but yes I am very self-determined”.

All three of the students who attempted the definition were aware of choices and/or decisions they had made when given a broad definition including all components of self-determination. This was different then rating themselves on the direct statements that they may or may not have experienced. The inability to define or identify could be related to past teaching of not being taught the direct correlations of behaviors to definitions.
**Autonomy.** Autonomy statements on the SDIS included planning activities, choosing what one wanted to do, independently contacting people, and choosing restaurants to visit. Four of the students provided specific quotes about their autonomy.

All of the students mentioned where they like to eat on campus and how they choose which dining area to eat in. Alan said, “Quesadillas are my favorite and I choose where and with whom I want to eat with”. Sean said “I make choices when I am in the food court and where I want to hang out on campus.” One of the campuses only has one dining option and the students referenced eating in there or outside of it if they brought their food. The independence in both the choice of food and eating location provided by all students provided supporting evidence to the 75% of the students agreeing and strongly agreeing with the statement. None of the students specifically referenced choosing restaurants or dining options off campus.

Independently contacting people was a topic that all six of the students mentioned, whether it is friends, educational coaches, or family, it aligned with the 89% of students agreeing with the statement. This supports the data collected from the modified SDIS and the statement that students do feel they are self-determined. Ellie said, “I call my grandma to ask her about all my decisions, last night I called and asked what color nail polish to use. I like to go shopping but ask what other people think, especially my mom before buying anything.” This statement supports that Ellie is demonstrating self-determination skills and using individuals in her life for decision making which is common for individuals without disabilities.
Planning activities is something that people do once they are familiar with what activity options are available. Many of the students in the ICEI Programs are not always aware of everything the Universities and Colleges have to offer and rely on their program staff and friends for that information. At each of the three campus interview sites, educational coaches referenced helping the students build their knowledge of what activities were available. On one campus, an educational coach said that they use the Student-Ed Coach Agreement (SECA) to help develop the plan to identify activities and plan the transition for the student becoming more independent and selecting the activities independently. Joe’s coach said that increasing his independence in life drives Joe. Joe confirmed, “they’re right, I manage my own time, doing what I want to do because I am independent.” Alan also said how he manages his own time, “When I arrive on campus, I head to the library to do home work. I love doing homework. I text my coach to tell her that I am there and where to meet me”. His coach said that occasionally they need to encourage him to do things other than homework for many hours but he said “It is my choice”.

**Self-Initiation.** Self-initiation is focused on students choosing what and when to do things, thinking about the future and using the past to help plan activities, and choosing activities and experiences based on what an individual might like. Throughout the interviews, self-initiation was highlighted when the students were talking about their course selections. There is a strong level of self-advocacy needed for students to demonstrate self-initiation skills. Ellie said “both the Program Coordinator and my educational coach had an idea of what direction of courses they thought I wanted to take but I told them they were wrong, I really wanted to take American Pop Music, because I
think I’d like it.” Ellie’s coach referenced that Ellie was interested in performing arts and that Ellie mentioned this class would open up future activities for her. The Program Coordinator and educational coach thought she would want a theater class.

Sean said, “If I wasn’t in the ICEI Program I would just be home listening to my iPod or on the computer. I made the decision to come here because it was a good opportunity for my future.” This statement fully demonstrates the self-initiation skills leading into self-direction skills. Precisely thinking about future opportunities, current experiences, and things he would potentially like and making decisions because of that. Based on his experiences in the ICEI Program it was clear that he was enjoying his experience and Sean continued to say, “Now that I am here, I tell my educational coaches and coordinator what I want to take for classes and what I want to do in the future.” Another student, Alan decided to attend campus 5 days a week to instead of going between the high school and campus because there would be a better outcome on his future and more time to enjoy college. This again strongly supports the fact that the students are self-initiating and demonstrating overall self-determination behaviors.

**Self-Direction.** Self-direction is setting goals, making decisions and acting on them, progressing through a challenge, taking new opportunities, and thinking about goals. The students agree (79%) that they were self-directed individuals. One observation made on all three campuses was the role that the educational coaches and other staff played in increasing the student’s beliefs and skills around self-direction. Two students, Ellie and Alan both referenced goals they had for themselves but the influence of the staffs’ involvement was very clear. Alan seemed to weigh more heavily on what the
The data collected from Alan’s advising meeting and interview demonstrated that although the students will make their own decisions there is still a barrier on actually attaining the goal due to staff involvement. Prior to his advising session, Alan said to the interviewer, “I decide what classes to take based on what would be the better for me for the spring and I wanted to check Rate My Professor to help him pick which Psychology course”. The Program Coordinator suggested that Alan take 2 classes instead of 1 based on his successful first year. Alan decided to take 2 classes again and said, “Figured I’d be busier and fill my time slots here”. The Program Coordinator suggested that he take 1 class for audit and 1 for credit, which he agreed to. Once the two courses were decided on, the next part of the advising meeting discussion was determining which course, psychology or video editing, he would take for credit. The Program Coordinator explained the process at the University that if a student takes a class for credit the Disability Services Office doesn’t allow an educational coach to attend the class because the DSO feels it would be a greater advantage for the ICEI student that other enrolled students wouldn’t have. Therefor the educational coach would wait in a lounge or outside the class and support the student academically based on the notes the student took or handouts from the professor. The following was a discussion between Alan, his educational coach, and the Program Coordinator:

PC: “Alan, which one do you think you want to take for credit or for audit?”

Alan (turns to educational coach): “Do you care?”

EDC: “No! I do not care whatever class you think you’ll be more successful in
take for credit and whatever one you would want the extra support in the class
take for audit, but either way I will support you with both.”

Alan: “Then I want to take psychology for credit and video editing for audit. I
think I will like the challenge of psychology”.

The hesitation that Alan exhibited in regards to which class he wanted to take for
credit was deeply rooted in not wanting to upset his educational coach. This type of
behavior is unfortunately a general occurrence with many of the students and their
coaches. The students rely very heavily on the coaches but at the same time don’t
necessarily demonstrate their true levels of self-determination due to the support. The
relationship between the coach and the student is one that will be discussed in greater
detail throughout this chapter and in chapter 5. In direct regards to self-direction, Alan’s
reaction showed that even though he wanted to try to do what was best in a challenging
situation he was still hesitant to make a mistake, which was upsetting his educational
coach.

Ellie similarly relied on her coach when reminding her of a goal she set in the
classroom. Ellie’s educational coach told Ellie to think about the goal she set with her
professor. Ellie then said

“I set a participation goal with my professor to participate at least twice
throughout the week. Only a few times has my professor or coach reminded me to
participate.”
When asked about the goal Ellie said “my coach helped me think of it.” The goal attainment could potentially be lower since Ellie wasn’t originally motivated to independently set the goal. She did say, “I decided to set a goal about interning in the costume department. After working with the Employment Specialist and telling him what I was interested in he suggested different opportunities and I chose the costume department.” The difference in these two goals is Ellie demonstrated motivated choice making and decision making for her internship goal while another individual essentially set the classroom behavior goal of what the educational coach expected appropriate classroom behavior to be. Both Ellie and Alan provided examples of demonstrating self-direction but also through their examples highlighted how the relationship between students and their staff influence goals and/or ability to actually be self-directed individuals on the campus.

Pathways Thinking. Pathways thinking included 3 statements for students to agree or disagree with and 80% of the students agree they demonstrate pathways thinking skills. The 3 pathways thinking statements were problem-solving, ways to reach goals and following through on goals and activities. The first step of problem solving is identifying a problem and across all three campuses the majority of students were not initially able to state a problem they had encountered on campus, below are examples from Sean, Alan, Joe, and Ellie. The coaches who were present during the interviews made faces of disagreement in regards to the students answering they hadn’t had any problems.

Alan was unable to identify any problems that he had encountered on campus. To investigate his problem solving skills Alan was asked, “what would you do if you forgot
your phone”, he replied, “I would try to use someone else’s phone”. This response was correct and provided support that Alan would potentially be able to think through this problem if it was to occur. Similarly, when initially asked if she has ever encountered a problem on campus Ellie said “No” and looked at her educational coach for about 3 seconds and then said “I don’t know”. Her educational coach provided her with prompts to elicit Ellie to tell a story about a time she forgot gym clothes. Ellie eventually responded and said, “One time I forgot gym clothes so I called my mom to bring me some, but I don’t know if that is a problem.” Based on the interaction and dialogue between Ellie and her coach it was evident that the decision to call mom was a result of them working through the problem-solving steps together.

Interviewer: “Have you ever had a big problem on campus?”

Joe: (didn’t initially respond to this question for about 30 seconds) “I don’t think so”.

Ed Coach: “Well, we did have one problem recently, do you remember a day you came to campus and couldn’t find something?”

Joe: “Oh yes, my wallet”.

Interviewer: “What did you do when you couldn’t find your wallet?”

Joe: “First, I went to security and checked lost and found. It wasn’t there. Next I went to Stan who helped map out where we should look. We went to the library, classrooms, everywhere. We didn’t find it that day. Stan called MBTA for me, still nothing. A few days later, Stan went to the security kiosk again and it was
there. When I had went the first time it hadn’t been turned in.”

Interviewer: “Were you worried?”

Joe: “Yes and no, I knew Stan would help. I just didn’t know how I was going to get all new things.”

Losing a wallet that holds identification and money is a significant problem. The fact that Joe didn’t initially identify this situation as a problem could be based on his past teaching history or due to the amount of effort that his educational coach put forth in solving the problem. His coach was instrumental in getting his wallet returned and this impacted the level of lasting effect it may have had on Joe. Joe said he was worried about replacing his items not necessarily finding it because he had Stan’s help. This showcases the dependency that the students have on their coaches and how the dependency could potentially interfere with student’s ability to actually solving problems. The combined agreement for thinking of ways to solve problems on the survey was 83%. Joe’s solution to the problem was go to security and then Stan, which are two possible solutions, but the steps that followed after going to Stan, Stan initiated.

Sean could only think of when his basketball gets stuck near the basket when asked about problems he has encountered on campus. He said that he just throws his backpack at the hoop till he hits it out and learned that from watching other students do that. Sean referring to watching his peers also solidifies how inclusion settings provide opportunities for students to learn from their peers. Since Sean couldn’t think of a problem, the interviewer asked what would you do if you had a problem on campus, Sean, similarly to Joe, said he would ask Sean’ educational coach. At this point in the interview, Sean’s educational coach began speaking.
Ed Coach: “Remember the time that you left on the wrong shuttle because you didn’t have to go back to your school that day? What happened? Where did we find you?”

Sean: “Lost and found?”

Ed Coach: “Well, we didn’t find you at the lost and found on campus, but what happened? What did you do?”

Sean: “I asked the person on the bus, where is Nancy? The bus driver brought me to my house instead of the school so I called Nancy.”

Ed Coach: “Yes exactly. That was the plan we had set up during travel training, if something goes wrong to call, if things are fine you can text.”

Sean: “Right, I have forgotten both my phone and travel card. When I forgot my phone I used one of the other students to help me connect to my coach and we called my family. When I forgot my travel card I just paid cash.”

Sean’s immediate response of educational coaches looking for him in the lost & found is the step one would take if something were missing or lost. While this is an appropriate response if he lost something on campus, the problem was that he was on the wrong bus. The relation between taught/trained behaviors and words could potentially be correlated to early teaching; for example, you lose something you look in the lost and found. Sean demonstrated the ability to think of ways to solve the wrong bus problem by talking to the bus driver and calling Nancy. Calling Nancy was a predetermined solution taught during travel training and this skill generalized. Similar to when he said he had
forgotten his phone and card before so he used someone else’s phone and cash. These were solutions all taught during travel training. Sean’s responses once determining what the problems were clearly aligned with the high combined agreements for pathways thinking. The difficulty for all students interviewed was the perceptions of what were or were not problems.

**Psychological Empowerment.** Psychological Empowerment was the highest combined agreement percentages of the 7 categories. This category included statements regarding making good choices, making new friends, trying hard to get things especially after getting them wrong and letting people know what I think I can do. This area, like self-initiation includes a strong self-advocacy component. The individuals need to tell people what they want and continue following through with appropriate behaviors to completion. Patrick and Colin both provided information supporting the fact that students believe they are psychologically empowered.

Patrick: “I decided I wanted to get a part time paid job at Shaw’s Supermarket. I asked Kayla to speak about her experiences and how to prepare for a job interview. Me wanting a job was mostly my decision. I decided to apply to Shaw’s, my teacher came with me, it was a phenomenal interview and I got the job. Now in my first few months of working in the produce section chopping fruits and veggies, I’ve already gotten employee of the month”.
Patrick told people what he thought he could do, continued to try hard to get there and asked for help, and based on his appointment of employee of the month has made good choices in regards to his work ethics. Patrick asking for help from his teacher for the interview demonstrates control expectancy, especially using teachers to reach goals.

Colin was observed during his club meeting. His educational coach provided information about how his club membership began and was included in his student description. The interaction between Colin and his educational coach aligns with the areas identified in psychological empowerment, especially with making new friends, telling people what he can do and trying hard to get there. Colin was very clear in what his goal was but his educational coach also knew that Colin would need assistance in progressing towards that goal. The educational coach in this situation limited his involvement in the process but was provided the available support when needed. For example, making the connection to the other student. Once Colin met the group he made new friends with similar interests, which increased his levels of psychological empowerment. Colin texting his educational coach and telling him what and when he was doing things and contacting friends independently also connected to autonomy, self-initiation, pathways thinking, and self-direction.

**Self-Realization.** Self-realization is largely focused on understanding one’s strengths and limitations and confidence in one’s abilities to do things. Throughout the interviews and observations, all of the students were very confident at some point, some more than others. Patrick was very confident in all of his abilities while Rose seemed much more apprehensive about responding and looked to her educational coach before saying anything except about liking a professor more than another. Rose said “even
though I am honest I like other people’s opinions before making a decision.” Ellie stated during her interview “she wouldn’t make a decision without talking to her mom and grandmother because she doesn’t feel she makes the right decision.” Ellie has the skills and strength to ask for help and assistance but is not confident in her own ability to make the right decision.

Sean was very confident in his abilities, specifically math abilities. He said, “I am really good at math and I enjoy doing math work.” His educational coach said that Sean often needs reminders to do his other work because he will solely focus only on math. Sean’s intensified focus on math is in response to his awareness that he struggles with other subjects. Alan was very aware of his academic and employment capabilities but relied on his educational coach when talking about the future classes. Alan didn’t identify any limitations or weaknesses but was aware of his strengths. Alan’s educational coach said she almost has to force him to either ask for help or accept help. Alan not accepting help was due to his high levels confidence in his abilities, while the educational coach perceived his actual competency of these skills that required help in differently.

Control Expectancy. Control Expectancy relates to students having a sense of control of what they want, an expectation of it they will get it, and how they can work towards their goals. The control expectancy were statements about students having what it takes to reach goals, getting help from family, friends, and teachers, and paying attention to what they want. Patrick set a goal to get a job and he did. He stated in his interview
“I am not sure what my next big goal is, maybe living on campus but I have so many questions, and for the answers I would need to go to my teachers, friends, and parents…I advocated that I wanted to take a class for credit, I knew I was up for the challenge. I don’t need to rely on others; I know what I can do. I’ve made great progress in my time at the University. In my classes for audit, I was itching to take the test. I needed perseverance and commitment to take a class for credit. In the class I manage all of my work and I do it well.”

Patrick’s comment about his course work aligns with control expectancy because he was paying attention to what he wanted, getting help where needed, and knew what it would take to reach his goals. It also aligned with the other 6 component areas because of choice-making (autonomy), future possibilities (self-initiation), set goals and working to overcome challenges (self-direction), thinking of ways to reach goals (pathways thinking), telling people what I think I can do (psychological empowerment), and being confident in his abilities (self-realization).

Alan was very aware of his capabilities but relied on his educational coach even at times it might not be needed. His educational coach also said

“while he is extremely independent I am always needing to push him to be more independent verse dependent on me since I have known him for so long. I feel that he doesn't always trust his abilities he is more apt to let me make the first move”.

This codependency between the educational coach and student is challenging because even though Alan doesn’t need help he waits for his educational coach to act because she
is there and they have a history of reinforcement together. This provides support that the educational coach and other staff are crucial in the true development of independence skills, this can be troubling since students in special education programs have a tendency to become accustomed to a denser amount of support.

*Question 2: Do educators of students with ID and ASD in PSE feel their student’s perceptions about their self-determination skills are accurate?*

I found that educators of students with ID and ASD had inconsistent reports about the extent to which they felt that their students were self-determined. However, I found substantial numbers of educators who did report that their students possessed high levels of self-determination. Despite the variability in the educator’s views, 45% of educational coaches believed that their students possessed all the self-determination skills and when broken down by category statements 54% agreed that their students were self-determined and 27% agreed their students were not.

Table 8 provides the overall means of the 9 statements educational coaches agree with their students regarding self-determined associated behaviors. The overall mean score was 3.21 which correlates with ‘neutral’. This overall mean was lower than the question directly asking if their students are self-determined individuals (m=3.43). Similar to educational coaches preparedness to teach their students to be autonomous individuals, the perception of students being autonomous individuals was the lowest ranking mean 2.88. Self-initiating and self-directing both had means under 3.0, 2.92 and 2.96 respectively. The highest mean excluding students overall being self-determined individuals was students demonstrating control expectancy (m=3.41). The areas of students being self-regulated individuals (m=3.39), independently setting their own goals
(m=3.39), independently problem solving (m=3.32), demonstrating psychological empowerment (m=3.23), all had means within the neutral category.

Table 8. Educational coaches mean agreement with statements regarding their students’ self-determined behaviors.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, my students are self-determined individuals.</td>
<td>3.43</td>
</tr>
<tr>
<td>In general, my students are autonomous individuals.</td>
<td>2.88</td>
</tr>
<tr>
<td>In general, my students are self-initiating individuals.</td>
<td>2.92</td>
</tr>
<tr>
<td>In general, my students are self-directed individuals.</td>
<td>2.96</td>
</tr>
<tr>
<td>In general, my students independently problem solve in their daily lives.</td>
<td>3.32</td>
</tr>
<tr>
<td>In general, my students independently set their own goals.</td>
<td>3.39</td>
</tr>
<tr>
<td>In general, my students are self-regulated individuals.</td>
<td>3.39</td>
</tr>
<tr>
<td>In general, my students demonstrate psychological empowerment.</td>
<td>3.23</td>
</tr>
<tr>
<td>In general, my students demonstrate control expectancy.</td>
<td>3.41</td>
</tr>
<tr>
<td><strong>Overall Mean</strong></td>
<td>3.21</td>
</tr>
</tbody>
</table>

Table 9. Educational Coaches total agreement and disagreement percentage perceptions of their students’ self-determined abilities for each subcategory.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Determination</td>
<td>4%</td>
<td>50%</td>
<td>32%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0%</td>
<td>32%</td>
<td>28%</td>
<td>36%</td>
<td>4%</td>
</tr>
<tr>
<td>Self-Initiation</td>
<td>0%</td>
<td>40%</td>
<td>16%</td>
<td>46%</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>4%</td>
<td>33%</td>
<td>17%</td>
<td>46%</td>
<td>0%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>4%</td>
<td>44%</td>
<td>32%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>17%</td>
<td>35%</td>
<td>17%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>9%</td>
<td>39%</td>
<td>35%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>5%</td>
<td>41%</td>
<td>32%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>5%</td>
<td>45%</td>
<td>36%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5%</td>
<td>40%</td>
<td>27%</td>
<td>26%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Table 10. Individual educational coaches responses percentages of agreement and disagreements perceptions regarding their students’ self-determined behaviors.

<table>
<thead>
<tr>
<th>Student</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0%</td>
<td>33%</td>
<td>67%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0%</td>
<td>0%</td>
<td>78%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0%</td>
<td>11%</td>
<td>11%</td>
<td>56%</td>
<td>11%</td>
</tr>
<tr>
<td>4</td>
<td>0%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>11%</td>
<td>89%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>6</td>
<td>0%</td>
<td>56%</td>
<td>11%</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>22%</td>
<td>44%</td>
<td>11%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>22%</td>
<td>78%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>9</td>
<td>11%</td>
<td>11%</td>
<td>22%</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>10</td>
<td>11%</td>
<td>44%</td>
<td>44%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>0%</td>
<td>78%</td>
<td>22%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>11%</td>
<td>56%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>13</td>
<td>0%</td>
<td>33%</td>
<td>44%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>14</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>15</td>
<td>0%</td>
<td>56%</td>
<td>22%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>16</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>17</td>
<td>0%</td>
<td>0%</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>18</td>
<td>0%</td>
<td>67%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>19</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>20</td>
<td>0%</td>
<td>22%</td>
<td>44%</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>21</td>
<td>0%</td>
<td>44%</td>
<td>22%</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>22</td>
<td>0%</td>
<td>33%</td>
<td>22%</td>
<td>44%</td>
<td>0%</td>
</tr>
<tr>
<td>23</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>24</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>25</td>
<td>0%</td>
<td>22%</td>
<td>33%</td>
<td>33%</td>
<td>11%</td>
</tr>
<tr>
<td>26</td>
<td>0%</td>
<td>11%</td>
<td>44%</td>
<td>44%</td>
<td>0%</td>
</tr>
<tr>
<td>27</td>
<td>0%</td>
<td>22%</td>
<td>33%</td>
<td>44%</td>
<td>0%</td>
</tr>
<tr>
<td>28</td>
<td>0%</td>
<td>44%</td>
<td>0%</td>
<td>56%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Table 11. Total strongly agree and agree percentages across all coaches for each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total % Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Determination</td>
<td>54%</td>
</tr>
<tr>
<td>Autonomy</td>
<td>32%</td>
</tr>
<tr>
<td>Self-Initiation</td>
<td>40%</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>38%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>48%</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>52%</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>48%</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>45%</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>50%</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td><strong>45%</strong></td>
</tr>
</tbody>
</table>

Table 12. Total strongly disagree and disagree percentages across all coaches for each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total % Disagreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Determination</td>
<td>14%</td>
</tr>
<tr>
<td>Autonomy</td>
<td>40%</td>
</tr>
<tr>
<td>Self-Initiation</td>
<td>46%</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>46%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>20%</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>30%</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>17%</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>23%</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>40%</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td><strong>27%</strong></td>
</tr>
</tbody>
</table>

Tables 9, 10, 11, and 12 present the educational coaches total agreement about the students’ self-determination skills in various formats. There was a total agreement average of 45% (Table 9, Table 11) across all categories, with the highest agreement being 54% associated with self-determination and the lowest category autonomy at 32%. The categories from highest to lowest are as follows: self-determination 54%, goal setting 52%, control expectancy 50%, self-regulation 48%, problem solving 48%, psychological empowerment 45%, self-initiation 40%, self-direction 38%, and autonomy 32%. The
total agreement of self-determination being higher than the average percentage of all the categories is similar to the data of the mean scores.

Table 10 presents the individual educational coaches responses percentages of agreements and disagreements perceptions regarding the students’ self-determined behaviors. Only 3 coaches strongly disagreed with any statement and 7 with strongly agreed leaving 21 coaches who didn’t strongly agree or strongly disagree with any statement. Three coaches agreed 100% with all statements, eleven coaches didn’t select disagree or strongly disagree for any statements. Four coaches didn’t select neutral, strongly disagree or disagree for any statements. These 11 were the 3 who agreed 100% with statements.

Table 12 displays the coaches’ total combined disagreements about the student’s skills. The total disagreement with students demonstrating self-determination skills was 27%. The lowest category was self-determination at 14% while the two equally highest were self-direction and self-initiation at 46%. The other categories in decreasing chronological order are: control expectancy 40%, autonomy 40%, goal setting 30%, psychological empowerment 23%, problem solving 20%, and self-regulation 17%. Self-determination (54%-14%) and self-regulation (48%-17%) are the two categories with the largest gaps between total agreements v. disagreement. Three other categories have over 20% differences problem solving (48-20%), psychological empowerment (45-23%), and goal setting (52-30%). This provides evidence that coaches do feel their students agree with perceptions that their students are self-determined individuals.
Table 13. Perceptions comparisons of total strongly agree and agree percentages between educational coaches and students.

<table>
<thead>
<tr>
<th>Coach</th>
<th>Percent Agree &amp; Strongly Agree</th>
<th>Student</th>
<th>Percent Agree &amp; Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0%</td>
<td>1</td>
<td>40%</td>
</tr>
<tr>
<td>2</td>
<td>0%</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>3</td>
<td>43%</td>
</tr>
<tr>
<td>4</td>
<td>11%</td>
<td>4</td>
<td>48%</td>
</tr>
<tr>
<td>5</td>
<td>20%</td>
<td>5</td>
<td>48%</td>
</tr>
<tr>
<td>6</td>
<td>22%</td>
<td>6</td>
<td>68%</td>
</tr>
<tr>
<td>7</td>
<td>22%</td>
<td>7</td>
<td>68%</td>
</tr>
<tr>
<td>8</td>
<td>22%</td>
<td>8</td>
<td>73%</td>
</tr>
<tr>
<td>9</td>
<td>22%</td>
<td>9</td>
<td>75%</td>
</tr>
<tr>
<td>10</td>
<td>33%</td>
<td>10</td>
<td>75%</td>
</tr>
<tr>
<td>11</td>
<td>33%</td>
<td>11</td>
<td>78%</td>
</tr>
<tr>
<td>12</td>
<td>33%</td>
<td>12</td>
<td>80%</td>
</tr>
<tr>
<td>13</td>
<td>33%</td>
<td>13</td>
<td>80%</td>
</tr>
<tr>
<td>14</td>
<td>44%</td>
<td>14</td>
<td>83%</td>
</tr>
<tr>
<td>15</td>
<td>44%</td>
<td>15</td>
<td>83%</td>
</tr>
<tr>
<td>16</td>
<td>56%</td>
<td>16</td>
<td>85%</td>
</tr>
<tr>
<td>17</td>
<td>56%</td>
<td>17</td>
<td>88%</td>
</tr>
<tr>
<td>18</td>
<td>56%</td>
<td>18</td>
<td>88%</td>
</tr>
<tr>
<td>19</td>
<td>67%</td>
<td>19</td>
<td>88%</td>
</tr>
<tr>
<td>20</td>
<td>67%</td>
<td>20</td>
<td>90%</td>
</tr>
<tr>
<td>21</td>
<td>67%</td>
<td>21</td>
<td>92%</td>
</tr>
<tr>
<td>22</td>
<td>67%</td>
<td>22</td>
<td>93%</td>
</tr>
<tr>
<td>23</td>
<td>78%</td>
<td>23</td>
<td>95%</td>
</tr>
<tr>
<td>24</td>
<td>100%</td>
<td>24</td>
<td>95%</td>
</tr>
<tr>
<td>25</td>
<td>100%</td>
<td>25</td>
<td>95%</td>
</tr>
<tr>
<td>26</td>
<td>100%</td>
<td>26</td>
<td>98%</td>
</tr>
<tr>
<td>27</td>
<td>100%</td>
<td>27</td>
<td>98%</td>
</tr>
<tr>
<td>28</td>
<td>100%</td>
<td>28</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 13 provides the agreement-combined percentages comparison of the educational coaches and students. Although there are equal number of educational coaches and students it is not directly related, meaning coach 1 was not the coach of student 1, and this was not planned for. The online surveys did not ask for identifying information to be able to match students to coaches. Five educational coaches 100% agreed with their student’s perceptions that they are self-determined while only 1 student
agreed 100%. The range of agreement percentages for educational coaches was 0%-100% and students 40%-100%. Based on these results, 13 coaches agree more than 50% with the student’s perceptions. Two coaches did not agree that their students are self-determined individuals.

There were more equal responses when comparing the educational coaches and students combined disagreement percentages (Table 14). Eleven coaches and twelve students did not disagree or strongly disagree with any of the statements. The range for educational coaches responses was 0%-67% and for students 0%-45%. Besides the 11 educational coaches responding 0% the other 17 responded within 22%-67%, while only 4 students responded above 22%.
Table 14. Perceptions comparisons of total strongly disagree and disagree percentages between educational coaches and students.

<table>
<thead>
<tr>
<th>Coach</th>
<th>Percent disagree &amp; Strongly disagree</th>
<th>Student</th>
<th>Percent disagree &amp; Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0%</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0%</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0%</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>0%</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>0%</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>6</td>
<td>0%</td>
<td>6</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>0%</td>
<td>7</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>0%</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>9</td>
<td>0%</td>
<td>9</td>
<td>0%</td>
</tr>
<tr>
<td>10</td>
<td>0%</td>
<td>10</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>0%</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>22%</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>13</td>
<td>22%</td>
<td>13</td>
<td>3%</td>
</tr>
<tr>
<td>14</td>
<td>22%</td>
<td>14</td>
<td>3%</td>
</tr>
<tr>
<td>15</td>
<td>22%</td>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>16</td>
<td>33%</td>
<td>16</td>
<td>3%</td>
</tr>
<tr>
<td>17</td>
<td>33%</td>
<td>17</td>
<td>5%</td>
</tr>
<tr>
<td>18</td>
<td>33%</td>
<td>18</td>
<td>5%</td>
</tr>
<tr>
<td>19</td>
<td>33%</td>
<td>19</td>
<td>8%</td>
</tr>
<tr>
<td>20</td>
<td>33%</td>
<td>20</td>
<td>8%</td>
</tr>
<tr>
<td>21</td>
<td>40%</td>
<td>21</td>
<td>10%</td>
</tr>
<tr>
<td>22</td>
<td>44%</td>
<td>22</td>
<td>13%</td>
</tr>
<tr>
<td>23</td>
<td>44%</td>
<td>23</td>
<td>15%</td>
</tr>
<tr>
<td>24</td>
<td>44%</td>
<td>24</td>
<td>20%</td>
</tr>
<tr>
<td>25</td>
<td>44%</td>
<td>25</td>
<td>23%</td>
</tr>
<tr>
<td>26</td>
<td>56%</td>
<td>26</td>
<td>25%</td>
</tr>
<tr>
<td>27</td>
<td>60%</td>
<td>27</td>
<td>27%</td>
</tr>
<tr>
<td>28</td>
<td>67%</td>
<td>28</td>
<td>45%</td>
</tr>
</tbody>
</table>

An Educational Coach, Stan, who has worked on two campuses was interviewed during one of the campus visits. He described his own professional goals, as “I am extremely motivated to excel as an educational coach and promote the utmost independence of my students while having a positive relaxed approach”. Stan defined self-determination as “it as it having many facets that individuals make things happen in their lives based on their feelings and knowledge”. The findings from the educational
coaches surveys suggested that most coaches agreed that their students are self-determined; this was shared with Stan and asked for his thoughts on the high ratings. He said,

“I think that because people might not really know what it is or how it should look for every student could influence responses. Since our role is to promote independence and teach students some might have ranked their students higher because of observer drift and not always being aware that they might be interfering”.

Stan said that one of the first difficulties that he, the students, and other coaches encountered on campus was that nobody really knew what to do since they were all new to the experience. This inhibited students from initially demonstrating high rates of self-initiation and goal setting. Goals were originally set based on Individualized Education Plans (IEP) objectives but unfortunately did not apply to experiences the students were having on campus. Now that more campus options are known, the educational coaches use the Student-Ed Coach Agreement (SECA) to set goals. Students pick their own goal to include in the SECA and the educational coach and student outline who will be responsible for what. The goal that Colin set about getting friends came out during the SECA meeting; this is when he and Stan outlined who would do what to help Colin achieve his goal.

For self-initiation and self-direction Stan said he and the other educational coaches use a phrase consistently “it’s your college experience”. He said,
“The phrase not only helps the students make decisions and initiate what they want to do but also serves as a reminder for the educational coaches to not over prompt the students or make decisions for them. Some of our students will self-initiate but in general they all need help with it. One of the students always responds, “My mom said” when asked questions about what he wants to eat or do on campus. This is very interfering for getting the student to do what he wants because he doesn’t want his mom to be mad”.

Table 15. Percentage of coordinators agreement with SDIS results of the students and educational coaches perceptions regarding students abilities.

<table>
<thead>
<tr>
<th>Agreement with Coaches</th>
<th>Agreement with Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Determination</strong></td>
<td></td>
</tr>
<tr>
<td>54% of the educational coaches feel that their students are self-determined individuals.</td>
<td>78% of our students feel they are self-determined.</td>
</tr>
<tr>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td><strong>Problem-Solving</strong></td>
<td></td>
</tr>
<tr>
<td>48% of education coaches feel that their students independently solve problems in their daily lives</td>
<td>80% of students feel that they are able to solve their own problems.</td>
</tr>
<tr>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Goal Setting</strong></td>
<td></td>
</tr>
<tr>
<td>52% of education coaches feel that their students independently set goals in their daily lives.</td>
<td>79% of students feel they set and independently work towards their own goals.</td>
</tr>
<tr>
<td>50%</td>
<td>33%</td>
</tr>
</tbody>
</table>

The coordinators were provided an on-line survey as a way to collect information regarding their reactions to both student and educational coaches perceptions to the student skill levels. The survey specifically identified self-determination, goal setting, and problem solving as focus areas. Questions regarding the three focus areas and programmatic activities on the campuses were asked. The coordinators were provided
with a statistic from either students or educational coaches results (Table 15). The coordinators were asked if they agreed with the assessment and could opt to provide their reasoning. Of the 6 coordinators who completed that portion of the survey, 57% agreed with the fact that 54% of educational coaches would think their students are self-determined. One response as to why they agreed was

“I think some students demonstrate much more self-determination than others. If every educational coach has 2 students then I feel that it is safe to say that about 50% of those students would demonstrate the behaviors and therefore most coaches are likely to respond positively”.

Forty-three percent of the coordinators felt that 78% of students feel they are self-determined individuals was accurate. This is 8% less than the coaches’ agreement but could be due to a lesser number of coordinators responding. One coordinator accounted for the high percentage of perceptions of the students “I don't think students fully understand self-determination and when asked questions regarding their lives they either over emphasize/inflate their abilities or don't understand the questions fully and respond with what we as educators might want them to say.”

There was a vast difference between what educational coaches believed their students did for problem solving and what students believed they did. Forty-eight percent of educational coaches believed students were independent problem solvers and 43% of coordinators agreed with them. Two explanations from coordinators demonstrate the difference in perceptions of student’s problem solving abilities. One coordinator who agreed with coaches feeling their students solve problems said “Yes, because all of the
education coaches encourage students to naturally make decisions on their own over time and they are able to troubleshoot problems with education coaches at first.” While another coordinator said “students’ have very different abilities, strengths, problems and needs and it is so different between each student and also what an Educational Coach may feel is ‘independently’ solving problems.” The differences in the two quotes regarding the educational coaches’ skills and perceptions of problems is also connected to the students not identifying what problems they experienced in their interviews and the coaches thinking certain experiences were bigger issues than the students thought.

Only 29% of the coordinators agreed with the 80% of students feeling they independently solve-problems in their daily lives. The coordinators referred to observing simple problems being difficult for students, “This number seems quite high. Over half of my students struggle to solve basic problems that occur during their days”. Another coordinator referred to the teaching that students have received, “I think to students, they rate themselves higher because of specific problems we've taught them about. I think if asked about specific unknown problems different responses might be yielded.” Teaching students what to do during specific problems would often provide students the confidence to follow through during that, the test to determine student’s actual problem solving skills would be unknown problems arising. This coordinator identified the same information yielded from the interviews that students don’t know what problems actually are.

The last of the components coordinators were asked about was goal setting. Half of the coordinators agreed with the fact that 52% of education coaches feel that their students independently set goals in their daily lives. One coordinator hypothesized that a reason for coaches not agreeing that their students set goals could be: “educational
Coaches are rating students lower because students might not independently say what their goals are and therefore only set goals when with the coaches or coordinators ask them.” A follow up question would be related to how the students act upon the goals and the motivation of the goals, the difference between IEP verse personal goals.

Coordinators reactions to the student’s beliefs focused more on if students follow through and works to attain their goals, 2 coordinators (33%) agreed that students set their own goals in their daily lives. One coordinator who agreed said “this population of students has been programmed to set goals throughout the years in their IEP meetings.” One who disagreed said,

“I think students set a lot of goals some unrealistic and others realistic. Like anyone, the motivation is what will guide students towards those goals. I think having students identify what they actually have to do to achieve goals would yield different numbers.”

The interesting difference is the type of goals the two coordinators referenced and motivation to act upon them. Students might display different goal setting and attainment skills with goals they’re motivated by verse IEP goals.

Three focus groups were conducted with coordinators and technical assistance staff. Themes that emerged from the groups that align with the results throughout section question 2 are: The relationship between the student and coach is an ponderous dynamic in how it results in self-determination development; confidence verse competence; staff need to learn to honor choices to solve problems, even if wrong choices so students are
allowed dignity of risk (failing, skipping, etc.); and sometimes students aren’t been given choices or know what is a problem or isn’t a problem.

**Question 3: How do educators define self-determination?**

To answer question 3, educational coaches and program coordinators were asked to define terms either through surveys or focus groups. Educational coaches were asked to define the 9 terms aligned with the surveys before answering about perceptions of student’s abilities and preparedness to teach self-determination skills. The survey asked coordinators to only define self-determination. In the focus groups, participants were asked about their definitions and how the definition relates to the students in the ICEI Program and within their own lives. Based on all of the data, educators could broadly but not precisely define self-determination and certain terms and the definitions changed based on the targeted population they were referring to.

Twenty-eight educational coaches completed the open-response definition portion of the survey. They were asked to define each word followed by asking how prepared they were to teach the skill and what they perceived their students levels to be on that skill. The correlations between ability to define the terms and preparedness to teach them will be discussed in chapter 5. Table 16 displays the educational coaches mean scores for definitions. The definitions were scored and coded by two individuals using a 5-point scale aligned with 1-2 definitions as accurate examples found in chapter 2. The following scores were used to code: 5=exact/correct, 4= mostly correct missing minor components, 3= definition had prevalence to self-determination or the term broadly but didn’t provide the actual definition; 2=the definition was more wrong than right, no connection to the term; 1=wrong; 0=blank. The overall mean for all terms was 3.22 and each term had at
least 5 blank definitions. Autonomy had the highest mean of 3.89 followed by self-direction at 3.61. The third highest mean was self-determination, which were 3.43. Control expectancy was the lowest at 2.15 and psychological empowerment was the second lowest at 2.6.

Common themes that were prevalent across correct educational coach definitions were: independence, desire and motivation to make things happen, being in control of oneself, making choices, being as self-sufficient as possible, solving problems, the ability to act to attain desired results, understanding strengths and abilities. The most agreed upon themes were from the definitions of self-determination, autonomy, self-direction, self-initiation, goal setting and problem solving.

Table 16. Mean scores of educational coaches accurate self-determination component definitions.

<table>
<thead>
<tr>
<th>TOPIC DEFINITION</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Determination</td>
<td>3.43</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.89</td>
</tr>
<tr>
<td>Self-Initiation</td>
<td>3.29</td>
</tr>
<tr>
<td>Self-Direction</td>
<td>3.61</td>
</tr>
<tr>
<td>Problem-Solving</td>
<td>3.54</td>
</tr>
<tr>
<td>Goal-Setting</td>
<td>3.32</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>3.11</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>2.6</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>2.15</td>
</tr>
<tr>
<td><strong>OVERALL MEAN</strong></td>
<td>3.22</td>
</tr>
</tbody>
</table>

Eight ICEI Program Coordinators defined self-determination when they completed their reflection survey. The same score coding for the coaches was used for the coordinators (5=exact/correct, 4= mostly correct missing minor components, 3= definition had prevalence to self-determination or the term broadly but didn’t provide the
actual definition; 2 = the definition was more wrong than right, no connection to the term; 
1 = wrong; 0 = blank). The mean score for the definition of self-determination was 4.4, 
which aligns with mostly correct missing minor components. Two coordinators provided 
definitions that had prevalence to self-determination but were broad, one coordinator 
provided a mostly correct definition, and 5 coordinators provided correct definitions. An 
example of a 5 definition is:

“I believe that self-determination is having the freedom to make your own choices 
and decisions and deciding what is best for yourself. Part of it is teaching skills to 
young people, with or without a disability/disabilities, on how to set goals for 
themselves, make decisions, and problem solve. Young people can then create a 
plan or process to reach those goals, whether it be completing a program, getting a 
degree, finding a job, or figuring out your career and vocational goals. Because an 
individual for themselves, creating a plan, sets these goals and progressing 
towards their goals is in their hands, they are responsible for their own lives and 
reaching their own goals. Helping young people become self-determined can help 
them to become more responsible and successful adults.”

Program Coordinators and Technical Assistance Providers participated in focus 
groups. The focus group guide was developed based on data collected from surveys, 
interviews, and observations. The first two-part question was “What is your definition of 
self-determination for a typical college student and do you use the same definition when 
thinking about the students in the ICEI Program?” In general, the participants all agreed 
that they would like to think that they use the same definition but all felt that the
definition and how it is applied to students with ID and ASD was strongly based on the perceptions of what those students were capable of and their perceived potential barriers.

One participant said,

“Well I would like to think it’s the same definitions but I don’t necessarily think it’s the always the same. I also don’t think other people think it's the same. For college students without disabilities, a lot of people think they just have the skills whereas for our students we don’t necessarily assume they do. I’m thinking about things we ourselves take for granted, we all take for granted that we know how to plan things or solve problems. But our students might not know how. Since we take that for granted we might forget other people even our students with disabilities don’t know how to do that. That’s what makes this whole SD thing a little bit challenging for a lot of people because there are just so many things we know how to do so we just assume we know others how to do it. I think that happens with other college student’s without disabilities too.”

A potential barrier was identified by a coordinator in regards to the support staff of our students, a coordinator said:

“I think I’ve always felt is how I address it with the students is how I would with any college student but often times the real barrier is the coach. So having to remind them that the student needs the ability and opportunity to make own choices and decisions and have control over that and with their support when needed. Often times this comes up with the Student-Ed Coach Agreements. Even just seeing how the document is submitted, who submitted it, is it typed,
handwritten, who wrote it, was it in the student’s voice, etc. I always feel like it was a constant needing to remind students that it’s the student’s right to have the opportunity to contribute and participate in the college community and not what the coaches always felt”.

The level of support the students need was also thought to influence the definition of self-determination used for particular students and that the definition might be modified or focus stronger on certain components of the definition based on more so how the student presents. As one of the previous quotes referenced the individualization of the application of the definition makes it difficult for all parties involved to define and understand the meanings and depths of the definitions. Since the application of the definition to the various students in the ICE Program is complex many people mostly defaulting to only referencing or focusing on choice making or self-advocacy. There are risks associated with this default process. For example, the first step of promoting choice making on campus knows what choices the student could make. This results in the coach identifying the choices based on their perceptions of what the students want or need. The same notion happens for self-advocacy, if the student has communication difficulties then the coach might prompt them to advocate for themselves based on what the coach thinks the student should be advocating for, not necessarily what the student wants to advocate for. The ‘helper’ role of the coaches and not wanting to let the students fail can convolute this area. One coordinator referenced their own self-determination and how they promote it for their own children,

“I feel that I am looking at it the same way as I would any other student I’m advising. As well as I do with my own children. Anyone could benefit from
taking charge of their life and making their own decisions disability or not. I meet the student where they are along with their coach. What are the areas they can start taking control of, making decisions in, self-guiding, and where they’re at just like I would with any person. This is how I even rate it for myself.”

Question 4: Do educators involved in the PSE program feel adequately prepared to teach self-determination skills?

Educators involved in the PSE program do feel adequately prepared to teach self-determination skills. The answer to question 4 was strongly based on survey results where coaches were directly asked to rate their agreement with statements about their preparedness to teach self-determination skills and information from the interviews and focus groups. Educational coaches were asked about how prepared they felt to teach self-determination, autonomy, self-initiating, self-direction, problem solving, goal setting, self-regulation, psychological empowerment, and control expectancy.

The overall mean of all 9 statements (M=4.08) is in Table 17. Educational coaches agree that they are well prepared to help their students become self-determined individuals. This overall mean (4.08) was lower than the question directly asking if they are prepared to help their students become self-determined individuals (M=4.15). The lower scores of preparing students to become autonomous individuals, demonstrate psychological empowerment, and demonstrate control expectancy influenced the overall mean. The highest mean (4.29) was aligned with educational coaches feeling prepared to help their students independently problem solve in their daily lives; followed by
becoming self-directed individuals (4.21), helping students set their own goals (4.17), and becoming self-initiating individuals (4.16).

Table 17. Educational coaches mean agreement scores of how prepared they are to promote self-determination skill areas to their students.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am well prepared to help my students become self-determined individuals.</td>
<td>4.15</td>
</tr>
<tr>
<td>I am well prepared to help my students become autonomous individuals.</td>
<td>3.8</td>
</tr>
<tr>
<td>I am well prepared to help my students become self-initiating individuals.</td>
<td>4.16</td>
</tr>
<tr>
<td>I am well prepared to help my students become self-directed individuals.</td>
<td>4.21</td>
</tr>
<tr>
<td>I am well prepared to help my students independently problem solve in their daily lives.</td>
<td>4.29</td>
</tr>
<tr>
<td>I am well prepared to help my students independently set their own goals.</td>
<td>4.17</td>
</tr>
<tr>
<td>I am well prepared to help my students become self-regulated.</td>
<td>4.09</td>
</tr>
<tr>
<td>I am well prepared to help my students demonstrate psychological empowerment.</td>
<td>3.91</td>
</tr>
<tr>
<td>I am well prepared to help my students demonstrate control expectancy.</td>
<td>3.95</td>
</tr>
</tbody>
</table>

**OVERALL MEAN** 4.08

Table 18. Overall educational coaches total agreement or disagreement percentages of their preparedness to teach self-determination skill areas.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Determination</td>
<td>22%</td>
<td>67%</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Autonomy</td>
<td>12%</td>
<td>64%</td>
<td>24%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Initiating</td>
<td>32%</td>
<td>52%</td>
<td>16%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Directed</td>
<td>25%</td>
<td>71%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>33%</td>
<td>63%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>30%</td>
<td>57%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Regulating</td>
<td>17%</td>
<td>74%</td>
<td>9%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>23%</td>
<td>45%</td>
<td>32%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Control Expectancy</td>
<td>18%</td>
<td>59%</td>
<td>23%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>24%</strong></td>
<td><strong>61%</strong></td>
<td><strong>14%</strong></td>
<td><strong>1%</strong></td>
<td><strong>0%</strong></td>
</tr>
</tbody>
</table>

Table 16 shows that the overall mean of educational coaches defining self-determination words was 3.22 while Table 17 shows the overall mean for coaches feeling prepared to teach self-determination skills is 4.08. This is a considerably large difference on a 5 point response scale. This difference means that coaches feel prepared to teach
skills they actually don’t understand or have limited knowledge about. The lowest mean of preparedness was “I am prepared to teach my students how to be autonomous individuals” (3.8) and coaches ability to define autonomy was 3.89 these two means are consistent; although, the 3.89 for the definition was the highest of the definition means. The lowest mean score of provided definitions was control expectancy (2.15), while control expectancy was the third lowest for coaches feeling prepared to teach. The inconsistencies between coaches ability to define terms verse feeling prepared to teach them will be discussed in chapter 5.

Table 18 displays the overall agreement and disagreement percentages of educational coaches preparedness to teach the 9 self-determination related areas (self-determination, autonomy, self-initiating, self-direction, problem solving, goal setting, self-regulating, psychological empowerment, and control expectancy). No (0%) of coaches felt unprepared to teach any of the areas and overall only 1% of coaches disagreed with any of the statements regarding their preparedness to teach these skills. Autonomy was the only category to have any coaches disagree with being prepared to teach their students the skills; it is interesting to note that it was the highest mean definition and lowest preparedness. This is thought provoking considering the mean for both the definitions and preparedness having an interesting correlation. Neutral was an option for coaches who didn’t feel strongly about being prepared or unprepared to teach self-determination skills. As with any likert-scale type survey the worry is that people will gravitate towards all the middle responses, in this survey the percentage spread of neutral was even when compared to agree and disagree. Psychological empowerment had the highest percentage of coaches at 32% followed by: autonomy (24%), control
expectancy (23%), self-initiating (16%), goal setting (13%), self-regulating (9%), self-determination (7%), and self-direction and problem solving both (4%).

The majority of coaches agreed or strongly agreed that they were well prepared to teach their students self-determination skills and component skills. Self-regulation was the highest area of coaches agreeing (74%) that they were prepared to teach it while psychological empowerment was the lowest agreement at (45%). Self-direction was the second highest area at (71%) for coaches to feel prepared to teach. The other 6 component areas were between 50% and 70% and are as follows from highest to lowest: self-determination (67%), autonomy (64%), problem solving (63%), control expectancy (59%), goal setting (57%), and self-initiation (52%). Twenty-four percent of coaches strongly agreed that they were prepared to teach all of the skills of self-determination. Although when looking at each category individually the percentages across the 9 areas ranged from 12%-33%. Coaches felt the strongest about teaching problem solving and the lowest about autonomy. Self-initiation was the second highest and a 1% difference from problem solving. The distributions of scores for the following 6 areas are as follows: goal setting (30%), self-direction (25%), psychological empowerment (23%), self-determination (22%), control expectancy (18%), and last self-regulation (17%).

Table 19 displays the individual coaches distribution percentages across the five response categories to statements regarding their preparedness to teach self-determination skills. Only one coach strongly agreed 100% that they were prepared to teach self-determination skills. Seven coaches agreed they were prepared to teach self-determination skills and one coach responded with 100% neutral feelings towards their preparedness. No coaches 100% disagreed or strongly disagreed with any of the
statements reflecting their preparedness to teach self-determination skills. No coaches strongly disagreed at all with any of the statements reflecting their preparedness and only one coach disagreed (25%) with statements regarding their preparedness to teach self-determination skills. Overall, the majority of the distributions of the coaches responses were between strongly agree, agree, and neutral feelings towards statements regarding their preparedness to teach self-determination skills of students with intellectual disabilities.
Table 19. Individual educational coaches total agreement or disagreement percentages of their preparedness to teach self-determination skills.

<table>
<thead>
<tr>
<th>Coach</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>0%</td>
<td>44%</td>
<td>56%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>0%</td>
<td>33%</td>
<td>44%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>78%</td>
<td>22%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>6</td>
<td>11%</td>
<td>78%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>56%</td>
<td>44%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>22%</td>
<td>78%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>9</td>
<td>14%</td>
<td>86%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>10</td>
<td>22%</td>
<td>56%</td>
<td>22%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>56%</td>
<td>33%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>44%</td>
<td>44%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>13</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>14</td>
<td>56%</td>
<td>44%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>15</td>
<td>22%</td>
<td>44%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>16</td>
<td>0%</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>17</td>
<td>0%</td>
<td>60%</td>
<td>40%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>18</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>19</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>20</td>
<td>0%</td>
<td>89%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>21</td>
<td>89%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>22</td>
<td>0%</td>
<td>78%</td>
<td>22%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>23</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>24</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>25</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>26</td>
<td>0%</td>
<td>67%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>27</td>
<td>0%</td>
<td>67%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>28</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The total percent agreement (Table 19) of educational coaches feeling prepared to teach self-determination skills was 85% compared to 1% of not feeling prepared. This means that only 15% of all the educational coaches surveyed feel subpar or not prepared at all to help teach their students self-determination skills.

Based on information from the interviews and focus groups a clear theme the importance of preparedness emerged. The importance of self-determination and pushing
the students to be more independent was discussed and how the role and responsibilities of the educational coaches play a huge part. Prompt dependency or lack of confidence in decision-making does inhibit the students on campus. The educational coaches will prompt students without realizing they prompted because it is part of their job. Below is a quote that highlights the importance that both the coaches are prepared to teach self-determination skills and they are prepared because they’ve developed their knowledge and skill base. Without an awareness and knowledge of self-determination it can negatively impact student development. For example one coach said,

“To be a good educational coach an individual needs to not be lazy, have initiative, blend in, and most importantly be able to fight the urge to prompt or help. Students need to make mistakes to learn and if educational coaches prevent the mistakes the learning will be curved.”

Coordinators were asked to provide a list of the components of their programs that are most effective in teaching educational coaches to teach or enhance self-determination skills of the students. In general, the coordinators referenced professional developments they offer most often at the start of the semesters. This is also an orientation to the campus and the program. One campus offered training on the importance of allowing students to make mistakes and take risks and how that will positively influence self-determination growth. One coordinator provided examples of materials they share with their coaches "19 Ways to Step Back...and Build Independence" adapted from Classroom Collaboration by Laurel J. Hudson and "Students and Educational Coaches: Developing a Support Plan for College" from Insight, Issue 4, Dec. 2010. One coordinator suggested Think College’s on-line Learning Modules. Three
campuses specifically referenced trainings provided by Think College and these trainings also included peer mentors. Providing on-going support for the educational coaches through coffee hour workshops, allowing open door policy for coaches to consult with the coordinator, 1:1 trainings, and having experienced educational coaches serve as mentors to new coaches, there were some informal training the campuses were all implementing to varying degrees. One coordinator referenced that the programs, across the state, need to target more direct professional development for the educational coaches. One way the campuses could promote the trainings is working with and educating Local Education Agencies to select educational coaches who understand, believe in, and will follow the MAICEI model and encourage students to become more self-determined.

Stan, the Educational Coach was asked if he had received any specific training related to self-determination, and if so, were they offered to him or did he seek them out? Stan said,

“It was at the first Emerging Trends ICEI Statewide Technical Assistance meeting in June 2015 that I was fully introduced to the concept of self-determination. At the conference I was provided a copy of Wehmeyer’s ARC and began using it in fall 2015. I use it before each semester with the students to measure progress; I am not implementing it as a fully controlled program but more or less to use it as a guide. I honestly have felt that just doing the ARC has increased the questioning and awareness of self-determination of the students and other coaches and the motivation to change.”
Emerging Trends is the ICEI Technical Assistance Annual Conference each year. The conference is open to the public but all k12 and higher education partners are invited to attend for free. As for other trainings,

“In general I am not offered many opportunities and a lot of my schools professional development days happen when we (educational coaches) are unable to be there because they are during the college calendar, which is difficult. We attended an executive functioning conference that I felt some of the information related directly to self-determination and our students, especially with lower executive functioning skills. Following this training we started using the ‘GOAT’ Graphic Organizer Arranging Tasks form with our students. The GOAT is a sheet with 30-minute blocks with options of activities for each day and the students can arrange their days. The level of independence, choices, and decisions are based on each individual student and has helped the other coaches as well.”

*Question 5: Does the ICEI Program Model have components that support the development of self-determination among the students?*

All data collected throughout the entire evaluation were used to answer question 5. The expansive answer to question 5 is yes, the ICEI Programs have components that support the development of self-determination among the students. The smaller answer is there is much variation among the different programs and staff abilities resulting in each program not having every necessary component to support the development of self-determination skills. This section will present all of the data to support this question gathered from every source previous referenced and a records review of the 2017 grant RFP.
Descriptions of 3 ICEI Sites

Campus A is located on the Southern coast of Massachusetts less than 30 miles from Boston. Campus A has 11,090 undergraduates and graduate students, with an average class size of 22 students, it’s own T (train) stop, and 95 student clubs and organizations. The Inclusive Concurrent Enrollment Initiative Program (ICEI) at Campus A has been in operation since January 2011 and began offering a residence life component in September 2016. The program provides opportunities for students with intellectual disabilities to take a course at the University and access support services (library, computer labs, disability resources, tutoring, academic advising, and counseling) on the university campus. Students can either take courses for credit or audit. During both fall 2015 and spring 2015 the Campus A ICEI Program served 19 students from their sending districts. The goal of the program is that students will: discern their own strengths, preferences, interests, needs; become advocates for their own choices and decisions around academic, social, and work activities; access student support services; participate in the life of the college; and participate in training workshops to better prepare themselves for integrated competitive employment opportunities.

Campus A has three full-time staff, a director, coordinator, and employment specialist. The staff at Campus A oversee any program specific activities and serve as college and employment advisors but are also responsible for day-to-day programmatic decisions including student intake. Other inputs are student support, peer mentors, educational coaches, and high school liaisons.
Campus B is a 2-campus public Community College. The ICEI Program is mainly based on the campus that is located 15 miles Northwest of Boston. Between the two campuses, there are about 13,000 students enrolled total 5,300 of which are full time. The average class size is 21 students and there are 125 full time faculty and 460 part time faculty. There are more than 30 student organizations, as well as many cultural, social, and recreational activities.

Campus B has been in operation since September 2014. There were 9 students each semester during the 2015-2016 school year. The program is partnered with a Collaborative, which enrolls students from 5 local districts. There is one Program Coordinator on campus who also serves the role of employment specialist and three educational coaches from the collaborative. One of the educational coaches serves as the Lead Educational Coach. The Lead Educational Coach trains all the other educational coaches, engages in daily communication about student activities and expectations with coaches, coordinators and professors when needed, makes student specific programmatic decisions, and serves as liaison between the ICEI Coordinator, the collaborative, and the other educational coaches. The program provides opportunities for students with intellectual disabilities to take a course for either credit or audit and access support services (library, computer labs, disability resources, tutoring, academic advising, and counseling) on both campuses.

Students attending the program spend 2 to 3 days a week on campus and work in the community the other days. The students mainly use public transportation and are provided transportation training by the educational coaches. There is a bus stop about 10 minutes from their school base, some of the students arrive at their school site in the
morning via school transportation and then use the public transportation to get to campus. It is encouraged that all students have a cell phone as an integral part of their travel training. Students are taught to call a certain school person if there is a problem and text to check in. The travel-training plan is student specific and requires the educational coaches to fade when the student meets predetermined benchmarks.

The ICEI students are typically on campus between 9:00am and 2:25pm. All 9 students typically begin their days by stopping in the campus center to check in with educational coaches and get a snack or drink. After the initial check in, all the students have individualized schedules that they either create independently or with the assistance of their coaches. Activities throughout their days could be but not limited to: Class, Library, Travel Training (public, Campus Shuttle), Communications (emails, social media, check-in with ICEI coordinator), eating, spending time with peer mentors, fitness center, writing labs and/or tutoring provided through disability services, student lounge (video games, Ping Pong, TV), clubs (Dungeons & Dragons, Mediation Club, Fashion Club), and other various activities that arise throughout the year.

Campus C is located on 256 acres about two hours from Boston and one hour from Albany, New York. The overall total enrollment is over 6,000 broken down by 5,000 undergraduate day students, 600 undergraduate continuing education students, and 800 graduate and post-baccalaureate students. The average class ratio of students to professor is 17:1. The faculty is comprised of full-time, part-time, and adjuncts and spread across 28 majors.
The program has been enrolling students since September 2013. The program has enrolled a total of 39 students over three years by steadily increasing student and partnership LEA numbers. The break down of student enrollment over the three years is as follows; Year 1: fall 2013 5 students and spring 2014 8 students from 4 partner districts; Year 2: fall 2014 20 students and spring 2015 17 students from 6 partner districts; and Year 3: fall 2015 22 students from 8 partner districts and spring 2016 21 students from 10 partner districts. Currently, the program is partnered with 10 local districts.

Campus C staff consists of a Program Coordinator and a 10-hour a week Assistant Coordinator who also serves as the employment specialist and lead educational coach. The educational coaches are hired through the district or from an community adult agency provider. The goal of the assistant coordinator serving as lead educational coach is to provide consistent support, feedback, and communication across coaches and across districts. The assistant is a former educational coach from a partner district.

Campus C has a peer mentor club, pLECEs “Positive Inclusion of Everyone Creates Educational Success” whose mission is to ensure the students in program have every opportunity to engage in all aspects of college life activities including weeknights and weekend events. Students in the ICEI Program are encouraged to attend club meetings and join one of the 80 other clubs on campus. The students as a group also identify 1-2 charities and/or charitable events each semester to give back to the local area while learning about different needs of people. These activities enable students to learn about local current events and how to give back in their own communities while developing social-leisure skills.
The ICEI students are typically on campus between 8:00am and 2:00pm ranging how many days per student. Some students are on campus only on the days of their classes (Tuesday/Thursday; Monday, Wednesday, Friday) while other students are on campus 4-5 days a week including days without classes. Transportation ranges from public transit, ADA public transit, school transportation vans, parents, or students drive themselves. All the students typically begin their day by meeting their educational coaches in Parenzo Hall and checking in at the ICEI office. After the initial check in, all the students have individualized schedules that they either create independently or with the assistance of their coaches. Activities throughout their days could be but not limited to: Class, internships, employment seminars, social-emotional seminars, travel training, communications (emails, social media, check-in with ICEI coordinator), eating, spending time with friends, exercising in one of the fitness centers or the park, studying in the library or computer lounges, and other various activities that arise throughout the year.

Logic Models

A total of seven logic models were developed for minimum of one activity at each of the three previously identified campuses. The purpose of creating the logic models was to align the current activities on campus with an outcome oriented process see Figure 1 for example. Based on the information in all seven logic models it is evident that the ICEI Programs do have activities that promote the development of self-determination skills of the students. Some activities were more clearly explained which resulted in a greater ability to align the activities to the specific self-determination components. The activities that were not as clearly explained during the campus visits
does not mean that activity is not adding to the development of self-determination skills, it just highlights the need for greater evaluation and in depth analyses and strategic planning.

The logic models are able to visually provide information that support the activities that involved students interacting with one another and/or having to participate in front of peers greatly enhanced students levels of self-determination. Each logic model included inputs, activity descriptions, outputs, short-term, medium-term, and long-term outcomes as well as highlighting the self-determination skills that would be promoted through participating in the activity. All of the inputs were students and various staff and outputs focused on number of students, average attendance, and/or number of things accomplished per activity (i.e. goals set at meeting). Below is an overview of the short-term, medium-term, long-term outcomes and self-determination skills.

Short-term outcomes:

- Students participate in class activities
- Work with other students on small class projects
- Knowledge of working together and setting group goals
- Developing lists of interests on campus and in the community
- Understanding daily goals verse long-term goals
- Knowledge of goal setting
- Developing interpersonal skills
- Develop employment materials (resume, portfolio, MASS CIS)
- Developing appropriate relationship seeking behaviors
- Identifying appropriate and inappropriate social behaviors

Medium-term outcomes:

- Developing coping strategies for stress, anxiety, change
- Social boundaries
- Developing long lasting friendships
- Understanding goal attainment and modification of goals based on experiences
- Exploring various job internships (MA WBLP)
- Understanding self-management based on social interactions
Understanding the difference between short, medium, and long-term goals
Evaluate goals and progress
Realization/attainment of goals
Understanding of abilities
Public speaking skills
Self-awareness skills

Long-term outcomes:

Self-advocacy
Ability to express needs, wants, preferences in ‘own’ voice
Develop independent goals
Makes decisions about future goals and independent or supported activities
Maintain stronger self-relationships
Maintain stronger peer-relationships
Obtain and maintain employment
Maintain stronger independent work skills

Self-determination skills:

Choice-making
Decision-making
Self-management
Problem solving
Self-advocacy
Self-awareness & self-knowledge
Self-initiation
Control expectancy
Self-management
**Enchanted Circle Theater:** Theater is a powerful catalyst for learning, artistry and finding your voice. Theater techniques develop important life skills in the areas of communication, concentration, emotional & physical discipline, self-confidence, personal narrative writing, public speaking, visual imagery, photography, social learning, and self-presentation. In this 8 week workshop series, students and Ed coaches will explore:

- Self-presentation skills including posture and attitude, body language, eye contact and voice control
- Theater training skills such as diction, pace, projection and articulation
- Journaling exercises to ensure clear and effective thought processing and personal written dialogue
- Observational and Sensorial experiences both on and off campus to allow students the opportunity to tune in to their surroundings
- Read aloud strategies to help students feel confident in speaking in public
- Photography opportunities
- Focusing activities to practice maintaining maximal concentration, as well as techniques for avoiding distraction
- Confidence and Collaborative building theater games to help envision success on the individual level, and as part of an ensemble
- Individual, small and large group activities and presentation opportunities
- This program may culminate in an informal presentations, demonstrations, readings or personal sharing’s by the participants in and around the campus or even off campus.
Grant Reviews

Ten implementation grants for 2017 fiscal year were reviewed and then broken down into categories if they specifically mentioned self-determination and how they targeted 8 different categories: student enrollment, coursework selection, peer involvement, educational coaches, employment, general activities, data collection processes, and partner leadership teams. There was no official scoring form used due to all of the grants being written for programs at different points in their development along with different number of students. The grants were reviewed to gain a deeper understanding for all of the campuses to develop a summary of what campuses offer, strengths, weaknesses, and programming components. The goal of the grant reviews was to be able to provide suggestions regarding programmatic decisions could be easily implemented throughout the initiative across the state.

Self-determination. Many of the grants included information regarding activities and programmatic decisions that would naturally impact the development of self-determination skills. One campus offered learning community seminars specifically related to career goals for students. The seminars provided learning environments for academic and personal growth while preparing students to work effectively in collaborative work environments and help foster self-determination and self-advocacy skills. The frequency of the learning community seminars was not included. Another campus included information about the importance of educational coaches receiving trainings about self-determination in order to effectively promote the skills of their students. None of the grants specifically articulated the connection of its specific programming to self-determination.
**Student Enrollment.** Students need to be motivated to attend a postsecondary education program. The motivation of students is aligned with self-determination, in regards to choice making, decision-making, goal setting and attainment, and self-advocacy. All of the campuses are partnered with local school districts and rely on the individual districts to identify and refer potential students. Students between the ages of 18-22 are prioritized based on their need for additional services such as daily living skills, social skills, transportation, vocational skills, and functional skills. The program is often explained to students and families, at IEP meetings and followed by a tour of the campus and meeting with the coordinators. The campuses all have different applications; some require release of records including any relevant assessments, IEPs, Transition Planning Forms, and any other supporting documents. Person-centered plans are scheduled following an acceptance but some school districts are also using a person-centered plan process and that information is provided to coordinators upon applying to the program. Some programs observe and/or interview students before accepting them into the program.

**Coursework Selection.** Each grant proposal discussed the process for student course selection within the parameters of their campuses. All campuses stated the course selection was driven by the person-centered plans (PCP) of the students. The actual process of the PCP’s was not discussed in any of the grant proposals but the templates were included in the appendices. One campus requires all students to enroll in a first semester campus seminar before selecting a course aligned with their employment goals; this seminar will soon be a requirement for all students outside of the ICEI program on that campus. The first year seminar focuses on strategies for personal, academic,
professional success, self-advocacy, critical thinking, goal setting, problem solving, communication, study skills, and teamwork. The students who complete this seminar are able to select an additional course connected to post school goals.

The RFP for the grant requires students in the ICEI Program to have a plan aligned with employment goals. Each campus discussed how they align course selections with employment goals. One campus stated the student selects their top 3 courses based on employment, independent living, community participation, strengths, interests, person-centered planning (PCP), transition planning form and other related IEP goals, and visions and interests. One campus discussed using an abbreviated person-centered plan along with 1:1 advising, comprehensive career assessments, IEPs, and transition planning forms.

Another campus used the PCP to allow the student to identify their employment and future goals. Following the PCP an individualized courses catalog is created for the student including courses that align with their post school goals and visions along with any scheduling parameters set forth by the student, family or district. The student selects their top 3 courses from the list and the coordinator registers the student. For careers that the student identifies that the campus does not offer a track for, a list of skills and qualities needed for that type of work is developed and courses will be identified and aligned with this list.

Although it wasn’t specifically identified as needing to be discussed in each grant, it was evident that the coordinators are responsible for registering the students. This is due to the various campus barriers often based on how the program is integrated into the
College or University. The classes identified were predominately classes that students would be auditing. Three campuses discussed credit-bearing options and the other 7 predominately discussed audit options. The grant has requirements regarding class options for students, but the parameters of the campuses allowed course selection processes very differently.

**Peer Involvement.** The inclusion of students in the ICEI Programs is vital to their self-determination development, especially amongst their same age peer groups. Campuses all target peer involvement through different models, unpaid and paid peer mentors, internship or credit receiving peer mentors, or peer clubs. The goal of the peer involvement seemed to differentiate based on different models. Generally though the peers are assisting students in accessing college life experiences including club involvement, trips, and events. Below are descriptions of the recruitment, requirements, roles, and club membership

**Recruitment for Mentors:**

- Phi Theta Kappa Honors Society
- Human Service Major Undergraduates
- Open to all students with a competitive application & interview process.
- Mentors need to have: above identified GPA, knowledge in working with individuals with ID
- Education or related field majors

**Time Requirements:**

- 5 hours a semester
- Once a week meetings with students and mentor
- Attend online & face-to-face workshops
- Monthly group meetings to reflect challenges and positive experiences
- 2 days or preservice training
Roles:

- Attend classes with students and serve as a tutor and note taker.
- Model appropriate classroom behavior.
- Model appropriate social skill
- Assist in transportation training
- Assist at campus events

Peer Mentor Clubs:

- Fosters social skills building and improves communication between participants and college students
- On campus, the peers accompany students during a wide range of activities such as: working out, going to the library, socializing, eating in the dinning commons.
- Working with educational coaches to allow space so students and peers can develop meaningful relationships.
- Attend weekend and weeknight campus events

**Educational Coaches.** The role of educational coaches is vital in student development on the college campuses. The grant doesn’t require specific job descriptions for educational coaches in the manner it does for Coordinator, Employment Specialist, and district liaisons. The grant RFP provides a description of an Educational Coach. An educational coach in an institution of higher education performs similar duties to a paraprofessional in a K-12 school district. These duties will differ depending on the needs of the participating students and may include direct or indirect services (e.g., tutoring, assistance with connecting to the disability support office, homework, classroom support, supporting students in extracurricular and nonacademic activities, promoting participation in student life of the college community, supporting community-based employment). The Educational Coach will receive training in promising practices related to transition that support improved post-school outcomes for youth with disabilities, including:
1. youth development;

2. person-centered planning;

3. Strategies to promote access to post-secondary education; and

4. Career development and employment.

The RFP doesn’t reference who will provide the coaches with the training in promising practices. Those writing for the grant are asked to describe the selection, training, and participation of Educational Coaches in the partnership and how improvements will be made from the previous year. Include information on scheduling and coordination between College or University and high school schedules. Data gathered from this question is summarized below.

Requirements:

- 3 years in the field, associates or bachelors degree, agree to participate in LABBBS professional development opportunities
- Hired by LEA’s
- One campus hires 2: experience working w/youth w/ID in education setting
- Ensure the plans for IEP PSE, employment, community, independent living are considered in course selection.
- Coaches identified based on student interests
- Follow College or University calendar

Responsibilities:

- Foundational support
- Support navigating academic and campus life
- Provide academic support
- Promote self-advocacy skills
- Teach and practice safety and travel skills
- Disability accommodations
- Job coaching on campus
- Communicate regular basis with parents (1 campus)
- Attend monthly campus events (health, wellness, career services)
Training & Support:

- Orientation
- Meet with coordinator bi-weekly
- Self-evaluation review with coordinator (1 campus)
- Online (blackboard) forum to discuss teaching practices, strategies, issues
- Coffee Hour
- Weekly lunch with coordinator & students
- Attend partnership meetings
- Professional Development Workshops
- Training provided by ICI
- Encouraged to attend statewide technical assistance meetings

**Student-Educational Coach Agreement (SECA).** The Student-Educational Coach Agreement is a tool is designed to help students develop a working relationship with their educational coaches and promote independence. In each of the areas outlined in the agreement (transportation, mobility around campus, communication with instructors, meeting with coordinator, using accommodations, free time, social activities, schedule, parent communication, emergency procedures, etc.) the students and coaches determine what the student will take responsibility for doing on his or her own and what support the educational coach will provide if any is needed.

**Employment.** The Employment Specialist is responsible for locating and securing on-campus internships and providing students with opportunities to development soft and hard employment skills. The internships selected are based on preferences and needs. The grant requires the Employment Specialist to be a minimum of 10 hours a week position. Only one campus has a full time employment specialist (37.5 hr/week). Other employment specialist requirements are met through a community-based employment agency, for example STRIVE in the Boston area or the district solely provides in-kind contribution consisting of the vocational coordinators. The general responsibilities of the employment specialist are: assisting students to identify career
objectives and identifying needed employment skills areas: resume building, career resources, interview techniques, professional attire, and effective communication, and business etiquette.

The RFP requires campuses to also use the Massachusetts Work-based Learning Program (WBLP). The WBLP is a diagnostic, goal-setting and assessment tool designed to drive learning and productivity on the job. The Massachusetts Department of Elementary and Secondary Education developed the WBLP through an interagency collaboration of employers, educators and workforce development professionals. The Work-Based Learning Plan can be completed online or as a pen-and-paper document. The campus that has a full time Employment Specialist referred to using the WBLP the most.

**Data Collection.** All campuses are required to enter data regarding the students in the programs for the Executive Office of Education. There are no other statewide data collection processes currently in place. Other data collection processes mentioned in the grants were more focused around the expectations and satisfaction levels of consumers. Surveys, rating scales, and open-ended questions were used to gather information regarding program components, support services, employment, and effects of being in the program and importance of the program. The consumers that complete the various surveys ranged from student, families, and school practitioners.

**Partner Leadership Teams (PLT).** The PLT is an extremely essential component of the ICEI Programs success. They should be comprised of Institute of Higher Education staff, K-12 staff, outside providers, students, educational coaches,
parents, and other key personnel depending on the partnership. None of the grants referenced training or professional development specifically for the partnership.

Partnerships meet monthly, bi-monthly or twice a year. The schedule of meetings is determined by the coordinator and the PLT to match the needs of the program. New and developing programs should meet monthly to establish a solid base of expectations and goals. Constant communication via email between IHE staff and the PLT is necessary.

**Activities.** A comprehensive list (Table 20), not including descriptions, of campus life activities was compiled. Similar activities that were mentioned on different campuses are only listed once, club membership is listed and specific clubs are also included.

<table>
<thead>
<tr>
<th>Advising</th>
<th>Disability Services</th>
<th>Math Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anime Club</td>
<td>Earth Day</td>
<td>Mediation</td>
</tr>
<tr>
<td>Athletic Events</td>
<td>Employment Events</td>
<td>Multicultural Day</td>
</tr>
<tr>
<td>Atomic learning modules</td>
<td>Enchanted Circle</td>
<td>Open Gym</td>
</tr>
<tr>
<td>Awareness &amp; Action</td>
<td>Expressive Arts</td>
<td>Peer Mentoring</td>
</tr>
<tr>
<td>Best Buddies</td>
<td>Fine Arts</td>
<td>Radio Broadcasting</td>
</tr>
<tr>
<td>Black History</td>
<td>Fitness Centers</td>
<td>Recreational Activities</td>
</tr>
<tr>
<td>Bookstore Shopping</td>
<td>Game Rooms</td>
<td>Social Emotional Groups</td>
</tr>
<tr>
<td>Campus Events</td>
<td>Get Involved Days</td>
<td>Special Interest Groups</td>
</tr>
<tr>
<td>Career Center</td>
<td>Gym</td>
<td>Spring Fling</td>
</tr>
<tr>
<td>Career Fair</td>
<td>Health Counseling</td>
<td>Stress Buster Weeks</td>
</tr>
<tr>
<td>Club Fairs</td>
<td>ICE Orientations</td>
<td>Student Lounges</td>
</tr>
<tr>
<td>Clubs</td>
<td>Internships</td>
<td>Student Trips</td>
</tr>
<tr>
<td>Community Garden</td>
<td>Intramurals</td>
<td>Swimming</td>
</tr>
<tr>
<td>Community Services</td>
<td>Labs</td>
<td>Theater Performances</td>
</tr>
<tr>
<td>Computer Labs</td>
<td>Laughter Therapy</td>
<td>Travel Training</td>
</tr>
<tr>
<td>Counseling</td>
<td>Library</td>
<td>Tutoring</td>
</tr>
<tr>
<td>Dinning Commons</td>
<td>Marine Options</td>
<td>Writing Center</td>
</tr>
</tbody>
</table>

Overall, the grant review provided evidence that despite campus barriers the ICEI Programs do have components that support the development of self-determination skills among the students. None of the programs were identical but did all have unique program
qualities that support the development of self-determination. The roles of all individuals connected to the program all have intricate roles in the individual development of self-determination skills for students. Suggestions regarding programmatic decisions that should be implemented throughout the initiative across the state will be discussed in chapter five.

Table 21. Percentages of coordinators agreement perceptions regarding the importance of students demonstrating self-determination skills on campus, importance of programs specifically targeting the skills, and if each coordinators program was specifically teaching or enhancing the skills.

<table>
<thead>
<tr>
<th></th>
<th>Self-Determination</th>
<th>Problem Solving</th>
<th>Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think it is important</td>
<td>100%</td>
<td>100%</td>
<td>77%</td>
</tr>
<tr>
<td>that the students in the ICEI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programs are self-determined?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think it is important</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>that the ICEI Programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>specifically target self-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>determination skills?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your ICEI Program</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>specifically focus on teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or enhancing self-determination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>skills?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think it is important</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>that students in ICEI Programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>demonstrate problem-solving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>skills?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your ICEI Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>specifically focus on teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>problem solving skills?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your ICEI Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>specifically focus teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goal setting &amp; attainment skills?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your ICEI Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>specifically focus teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goal setting &amp; attainment skills?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coordinators were asked their beliefs regarding the importance of students demonstrating self-determination skills and the importance of teaching self-determination, problem solving, and goal-setting and attainment skills. Coordinators were also asked if their program specifically targeted the three areas and if so what specific
activities do they feel were most effective in enhancing the skills. The results from this portion of the coordinators survey are presented in Table 21.

There was 100% agreement that it is important that students in the ICEI Programs demonstrate self-determination skills, problem-solving skills, and goal setting & attainment skills. All of the coordinators also agreed that it is important that the programs focus on teaching self-determination skills, problem solving skills, and goal setting & attainment skills. The disagreement amongst coordinators was whether or not programs specifically teach the three different areas; self-determination (100%), problem solving (77%), and goal setting (77%).

All coordinators agreed that their programs specifically focus on teaching self-determination skills. Examples of activities that specifically focus on teaching self-determination skills are: person-centered plans, course selections, monthly goal setting meetings, SECA, social-emotional workshops, employment workshops, internships, communicating with coaches, independent scheduling that involves choice-making such as what to do with their free time, who to socialize with, where to eat lunch, when to work on course assignments, etc. One coordinator said that their campus “employs the adolescent version of the Arc's Self-Determination Scale prior to a student's first semester and re-take at the end of each semester. This identifies the areas that need specific teaching for each student.”
Another coordinator provided an excerpt to describe their program development mission from http://ngsd.org/sites/default/files/research_to_practice_sd_-_issue_6.pdf

“College is a time that is filled with the opportunity to make choices, some good and some not so good, and a time to learn from those choices and their consequences. College is also a time that fosters maturation and acquisition of the desire for lifelong-learning and lifelong friendships. College has provided these students the chance to learn more than just the content of their classes. These college students are overcoming fear and self-doubt and doing things that they had previously felt were impossible. These college students are learning to see themselves differently, and redefine who they want to be. These college students are becoming proud.”

Two campuses reported not specifically teaching problem-solving skills, which resulted in 77% agreement across the campuses. It is alarming that 2 campuses said no because even if they are not using a structured problem solving curriculum there are unquantifiable incidental teaching moments throughout the college day. This lack of problem solving teaching also coincides with students not being able to identify problems. If coordinators don’t target problem-solving skills then it makes sense that coaches and/or students wouldn’t have the skills to identify problems. The activities that coordinators identified that do teach problem solving were: incidental teaching throughout the day, typically identified by educational coaches; potential life problems, such as having no lunch money, and steps to solve certain problems are targeted in social-emotional groups; coaches and peer mentors are taught how 'step back' to build independence; opportunities for failure and mistakes are promoted, which is a difficult
but extremely effective for incidental teaching; organically occurs through coursework, employment and campus life with the support of educational coaches, transition specialists and college advisors. A coordinator provided example of an organic problem that students are able to rely on natural supports, “Students get locked out of their email accounts more often than not. They need to follow the prompts to create a new password and log in again.” The computer prompts them to follow the necessary steps and the support necessary from their coaches is limited.

The same two campuses that reported not specifically teaching problem-solving skills also reported not teaching goal-setting and attainment skills; resulting in 77% agreement across the campuses. Similar to problem solving, it is alarming that 2 campuses said no because even if without a structured goal setting curriculum there are many naturally occurring moments to teach goal setting skills, for example when talking with students about what class they want to take and how the student wants to do in the class. Examples of activities designed to teach goal-setting skills across campuses are: Monthly goal setting meetings setting short and long term goals for each semester, SECA, weekly check ins with college advisor, email communication with transition team, formal advising during registration of classes, and portfolio development to use to attain goals.

Of all the activities coordinators listed that influence self-determination, problem-solving, and goal setting coordinators identified person-centered planning, course selections, goal meetings, SECA, peer mentor involvement, 1:1 support from educational coaches and coordinators, and employment based supports to be the most effective in enhancing all the areas of self-determination. Small daily tasks such as emailing,
organizing schedules, selecting meals to larger tasks such as term papers, working at an internship, joining a club all greatly enhance self-determination but the level of support required during all of these activities is student based. The responses on this portion of the survey provide support that the ICEI Programs do have the components necessary to support the development of self-determination skills of students with intellectual disabilities.

Focus Groups

The participants of the focus groups were asked to consider what the ICEI program for students would be like without any educational coaches or coordinators. The results provide evidence that coordinators and coaches are necessary for students in the ICEI Programs to promote self-determination skills. All of the participants agreed that if there were no coaches or coordinators the program wouldn’t run well and there could be significant issues. The support of both the coordinators and coaches are vital for professors, especially professors who might be new to understanding the program. Coordinators are also immensely important for all of the programmatic decisions, political relationships and relationship stability of the partnerships and with other departments.

One focus group discussed some students who might flourish without coaches by relying on natural supports, such as peers and campus resources, but due to the population that the program is serving there is also percentage of students that would potentially fail. Staff understanding each students abilities and goals in the program is imperative because if understood coaches could essentially remove themselves to give
the students the chance to succeed but still be there if needed. The student and his or her team could identify the needed supports and set them at a prescribed ratio; overtime students would identify natural supports.

Without coordinators and coaches there could be significant challenges. Issues with professors, was one of the first challenges that all participants in the focus groups identified. The difficulty would be the students not self-advocating for their needs in the classes, which is a problem for students not in the ICEI Program as the model is much different than the K-12 system. Safety was a large concern for the participants, safety crossing the streets and navigating the campus, navigating social situations, and the risk of being mistreated by others. Many students are enrolling in the ICEI Programs from sub-separate programs and the transition to a fully inclusive college based program requires support. The students most likely have been overly supported throughout their educational careers. The students in the ICEI Programs are dually enrolled so without a contact both on campus and in district issues could arise, such as missing the bus, needing a book, etc.

Another challenge that one participant identified is more of a global challenge then specific to no coaches or no coordinators and that is the focus of self-determination skills often focuses only on the component of self-advocacy. She said,

“We focus so much on teaching self-advocacy skills, saying what the students’ needs, we forget to focus and follow through on other areas. For example goal setting and problem solving in the world of social engagements are an area of difficulty. For many of our students, people have been responsible for arranging
plans for the students that if we don’t focus on teaching and the follow through to get the support and make plans how will the know how to do it as an adult?”

The focus groups were asked if they felt that students would have the same experiences as they currently do with no staffing? The consensus was that students would not have the same experiences they currently do have without a coordinator or coach. A participant said,

“I think having the supports in the place in part of the ICEI programs is important because our students want the support and they want to make sure someone is there, again all at different levels. So it could depend what type of support they want and need, but someone needs to make sure the students are understanding expectations of class, appropriate behavior, safe on campus, there’s a contact between school and college about what’s going on, are they attending classes, what are they getting from the classes, how are they doing, how is their behavior, how are they growing? The point of the program is to help the students become more independent and hopefully find jobs and prepare them with this education and social experience and unless we have someone with them or checking with them on a regular basis we don’t know if that’s happening if it’s even working.”

The overreliance that students have on their coaches was an area of concern and hesitation about whether or not students would succeed without coordinators and coaches. A coordinator who participated in the focus groups said, “There is a higher reliance on hanging out with the educational coaches socially. We have some awesome coaches and they’re fun to be around; so students feel comfortable and have a tendency
not pushing themselves to connect to other students because they have their coaches. Things like connecting with students to have lunch with or connecting to other students in their classes to work on assignments.”

The relationship between the student and educational coach can be an overreliance-circular relationship, meaning that the educational coach will also be reliant on the student and feel they need to provide more support than needed. A participant referenced a statement an educational coach made earlier in the week to her in regards to this. The coach told her that she can’t let the student fail. The participant reflected on this and said,

“Well, you can and you should. It’s that mindset of what is your goal in the student’s journey and when is it the student’s responsibility and ownership. And how can support personnel feeling confident and comfortable in decision making to not step in, over step, or over support.”

The perceptions of the student’s abilities and the perceptions of their job descriptions can impact self-determination development. There is a difference in the types of educational coaches. All participants agreed that educational coaches make or break the student’s experience.
CHAPTER 5
DISCUSSION

The purpose of this study was to evaluate Massachusetts Inclusive Concurrent Enrollment Programs specifically evaluating the programs capacity to promote self-determination skills of the students with intellectual disabilities. This study was unique and needed due to the limited evaluation research on fully inclusive postsecondary education programs for individuals and limited research specifically targeting the promotion of self-determination skills of individuals with disabilities in PSE programs. This study was also needed for research regarding the MA-ICEI Programs as the initiative continues to expand across the state. The participants in the study were: students with intellectual disabilities ages 18-22 in the ICE Program, Educational Coaches, Program Coordinators, ICEI technical assistance staff, and the ICEI state director. The study was designed to answer 5 research questions and within the framework of the CIPP Model.

Summary of Findings

The overall findings were that the Inclusive Concurrent Enrollment Initiative Programs in Massachusetts do have components that support the development of self-determination skills of individuals with intellectual disabilities. The range in what the different programs offer and the impact of staffing at the various programs provide evidence that there is room for improvement at each campus and for the initiative as a whole. Specific details regarding each question will follow.

This chapter begins with a discussion of the research findings for each question. Themes prevalent throughout all the questions will also be presented. Thereafter,
recommendations for the ICEI programs will be presented and followed by strengths and limitations to the study that can influence future research.

*Question 1: Do students with Intellectual Disabilities (ID) and Autism Spectrum Disorder (ASD) in postsecondary education (PSE) think they are self-determined in their daily lives?*

Based on the student surveys, interviews with students and program staff, and observations I found that students with intellectual disabilities and ASD generally believed that they were self-determined in their daily lives. The questions from the student surveys directly asking about their own self-determination skills revealed that overall 23 of the 28 students surveyed agreed more than 50% that they are self-determined individuals; their agreement perceptions ranged from 40% to 100%. None of the students had more than 50% disagreement with their own self-determination perceptions; their disagreement with the statements ranged from 0%-45%. There were 40 questions regarding the student’s own lives and none of the questions and overall the students rated themselves very positive in their perceptions of their own self-determination skills. One student answered strongly agrees for all 40 questions, and no students answered all disagree or strongly disagree.

Part of the SDIS required students to complete a story by selecting the best middle of a short story. Twenty-three of the students chose to complete the story section of the surveys. There were six scenarios total and each scenario had a best response, an acceptable response, and a wrong response. Four of the scenarios had a best and decent response while 2 of the scenarios had a best and two wrong responses. The answers were originally coded for students who selected the best and then for those 4 with the second best answer these were also coded. Only one student answered all 6 scenarios with the
best answer each time. Every student selected the best response at least once and no students answered all 6 incorrectly. When best and second best percentages were combined the students ranged from 50%-100%, with the mode being 83, meaning the 5 or more correct partially correct answers. This provided evidence that when given specific scenarios students with intellectual disabilities are demonstrating they are self-determined based on their appropriate responses.

Student interview questions were developed following the results of the SDIS educational coach and student surveys. Overall, the 7 interviewed students from 3 different campuses all generally perceived that they are self-determined individuals. As the interviewer, it was observed that for at least 4 of the students, they were hesitant to answer at first often relying on their educational coaches assistance. Specifically when asked about problem-solving the students stated they didn’t experience problems on campus or ever and the educational coaches provided prompts for the students to remember times they did encounter problems. This observation, students being unable to identify problems, will be discussed in more depth in this section when describing what the findings mean.

Perceptions of Self-Determination. Based on the findings of the surveys and students rating themselves extremely high, it would mean that the answer to this question is yes; students’ intellectual disabilities and autism feel they are self-determined individuals. Though based on the interviews and observations there is a discrepancy between student perceptions and student abilities, as many students were not independently able to answer some questions or were unsure of what self-determination constructs were. After one of the students at WSU participated in the survey, he
approached the researcher and said, “How did I do? Did I answer correctly? Did I make you happy?” This raised a red flag as to the perceptions of our students for why we ask them to do things and what they really feel. The students in the ICE Programs are supported by adults on campus and most likely have received either 1:1 or a smaller ratio of support all through their K-12 education, this will be discussed in great detail throughout this section but does maintain the fact that the role of the coaches and relationships between student and coaches is critical.

Reliance on support is an issue across all grades and schools. Often, staff are hired to support students and this develops a double standard as they often develop an issue with letting the students fail or make mistakes; which is one way that we learn and develop greater self-determination skills. The students are accustomed to having the staff ask whether they are ‘prompt dependent’ or not they often wait for the staff to initiate or correct behavior. It could be hypothesized that the students positive perceptions could be correlated to not fully experiencing the questions or if they have not being aware of the support they received during them. This notion of overreliance is consistent with Giangreco (2009), that overreliance of paraprofessionals can greatly interfere with the development of self-determination skills of students with ID, DD, and ASD. The unnecessary dependency of students and paraprofessionals can influence loss of personal control or choices.

**Judgment & Awareness.** The findings from the “pick the best” portion of the surveys means that students are able to potentially socially analyze a situation and make a decision. These scenarios required students’ to use judgment about what choice or solution was right at a given time. In all 6 of the scenarios there was 1 wrong answer, but
it shouldn’t be looked at as the students picked the wrong answer because in life everyone makes bad decisions. Our decisions are influenced by our beliefs, values, and how we think the environment should be. The students could have picked the ‘wrong’ answer because they preferred that or they attributed to something in the answer. For example, one of the scenarios was “You want to take a class in hotel management. An academic advisor wants you to take a Family and Child Care class. You can only take one of the class”. The identified ‘wrong’ answer was “I want to take a class where I can learn to work in hotel management”. Seven students selected this answer. In retrospect, students might have selected that answer because that is what they wanted and that is what you say when you want some “I want to…” Reviewing the beginning sentence the words hotel management is in it. Students could have been matching and using testing strategies verse actually considering the question. The students’ selecting the best alternative for them is consistent with Wehman (2006) although it is unknown if the students assessed the probability of each consequence occurring for why they selected the answers they did. A way to examine this deeper would be to either do this verbally or after they select their answer ask them why they picked that one.

The open-ended questions also provide support that the students are aware of the steps for certain behaviors, which is often directly taught throughout their special education careers. The difficulty with a lot of special education teaching is the lack of generalization training. As Shogren (2012) stated promoting self-determination skills of students may require multiple teaching strategies, opportunities, and supports across a person’s life. Based on information gathered throughout the evaluation, many students’ may have received direct training on self-determination skills but not incidental teaching.
A way to use this information to solidify if students are self-determined would be to use their own real-life situations, engage the student in social autopsies, and reflect and reteach. These response questions specifically targeted student’s abilities more than perceptions. Data collected during the interviews addressed their abilities to navigate real-life situations and their perceptions of how they preserved through the situations.

ICEI students’ perceptions that they are self-determined are consistent with the literature. An implication based on the data supporting question one aligns with the fact that if students have higher perceptions of their own skills and abilities then they have a higher likelihood of being self-determined which results in higher quality of life and better adult outcomes, which is a positive future outcome for the students in the ICEI Program.

Findings from student interviews were not consistent with literature, none of the students were more aware of the things ICEI students were unable to do as Wehman stated in 2006. Wehman said that the awareness of things one cannot do influences the way in which they interact in their environments, the reliance of the educational coach could be the interaction with the environment, meaning the students were not fully aware of when they were unable to do things because of the support they were provided they thought they could do most things. It is important for individuals with disabilities to have internal locus of control but is often impacted by the over dependency/reliance on others due to past history of reinforcement and punishment. Many students are prompted to exhibit certain behaviors, which influences their perceptions on whether or not they can do things independently. The inconsistency of student perceptions and educator perceptions will be included in the discussion of findings for questions 2 and 4.
Question 2: Do the educators of students with ID and ASD in PSE feel their student’s perceptions about their self-determination skills are accurate?

I found that educators of students with ID and ASD had inconsistent reports about the extent to which they felt that their students were self-determined. However, I found substantial numbers of educators who did report that their students possessed high levels of self-determination and this aligned with the literature those perceptions of educators and parents of self-determination skills of individuals with disabilities tend to differ from the actual individuals (Wehmeyer). Despite the variability in the educator’s views, 45% of educational coaches believed that their students possessed all the self-determination skills and when broken down by category statements 54% agreed that their students were self-determined and 27% agreed their students were not.

Twenty-three students agreed more than 50% that they were self-determined and 13 educational coaches agreed more than 50%, only 2 coaches didn’t agree that their students were self-determined. There were more equal responses when comparing the educational coaches and students combined disagreement percentages. The number of coaches and students happened organically and was not planned for, meaning each coach surveyed wasn’t necessarily a coach of one of the students surveyed. For deeper analyses into the agreement of perceptions and beliefs of coach and students pairs could be surveyed, observed, and interviewed. Similar to Carter, Lane, & Sisco (2012) whom believed the main limitation of their study was that they relied exclusively on self-reported perceptions and actions of the paraprofessionals who participated.. Carter et al. discussed that the results may have been more meaningful if they had inquired why paraprofessionals rated certain components of self-determination more or less important.
Investigating this would have opened up the dialogue to explore how perceptions influence teaching or supporting individuals with disabilities.

An extremely interesting facet I learned throughout the study, especially during interviews and focus groups, was about what educators believed self-determination was. The definitions changed based on the individual and what their perception of how that individuals self-determination should ‘look’. Educators, coaches and coordinators, often reframed their interpretation of self-determination based on the abilities and characterizes of the students. This can be extremely problematic for a few reasons: lack of student outcome expectancy and how that interacts with teaching, educators inability to define or demonstrate what self-determined behaviors are, lack of training on how to identify students being self-determined and what that looks like for all different types of students.

Many educators would say something like “well these students yes definitely these others need more help, so they aren’t as self-determined”. While the definition of SD is constantly evolving and depends on environment, if the educators already have a preconceived baseline of what it should look like then that student will not be as self-determined as possible in the educator’s eyes. A recommendation for the ICE programs, which will be discussed in greater detail in the recommendations section, is training of coaches and using a Universal Design for Learning Model design framework with specific observable behavior examples and identifying access points for the variability of students. This may help educators accept a single definition of self-determination that allows for differences in needs or levels of support to achieve self-determination.
During one of the site interviews of an educational coach, I asked if agreed with how coaches perceived their students abilities and he said,

“I think that because people might not really know what it is or how it should look for every student could influence responses. Since our role is to promote independence and teach students some might have ranked their students higher because of observer drift and not always being aware that they might be interfering”.

His quote aligns with what Carter et al. (2009) found. One of their findings was that teachers reported that students demonstrated limited knowledge about self-determined behaviors and their students almost never to sometimes engage in these self-determination behaviors. The consistency between Carter et al. and this study is the role of teacher perceptions. The perceptions of self-determination of paraprofessionals may impede student’s self-determination. If coaches aren’t aware of what self-determined skills look like then they cannot know if the student was performing them.

I found that coordinators of the programs had varied in their perceptions about students’ self-determination skills and if they agreed with their coaches’ perceptions. Coordinators found students’ perceptions of self-determination were too high, citing reasons consistent with Carter et al., and the coach who was interviewed accounted for coaches’ perceptions, lack of knowledge. The coordinator said, “I don't think students fully understand self-determination and when asked questions regarding their lives they either over emphasize/inflate their abilities or don't understand the questions fully and respond with what we as educators might want them to say.”
Only 29% of the coordinators agreed with the reports of students (80% feel they independently solve-problems in their daily lives). The coordinators referred to observing simple problems being difficult for students. One coordinator replied, “I think students, they rate themselves higher because of specific problems we've taught them about. I think if asked about specific unknown problems different responses might be yielded.” Teaching students what to do during specific problems would often provide students the confidence to follow through during that, the test to determine student’s actual problem solving skills would be unknown problems arising. This also sheds light on what was discussed in question 1 about student perceptions of problems. Depending on perceptions, educators may think some problems are bigger than others. This makes it difficult for coaches who are hired to support the students and often feel they need to interrupt before a problem occurs so students might not actually be aware of all their daily problems. Because the coordinators also felt that the opportunities for students to experience problems and the role of the coaches perceptions of the problems was an area of discrepancy it should be explored further and could initially be targeted through trainings for staff and students.

The coordinators also responded about students’ perceptions on goal-setting skills, setting the goals, and progressing towards the goals. Half of the coordinators agreed with the education coaches that 52% of their students set goals. The coordinators reflected on their agreement or disagreement based on if the coaches know what the students goals are and whether or not the student is motivated to progress towards the goal, the difference between IEP goals and life goals. The area of motivation for students is something to explore deeper. It is important for coaches to learn about ways to
motivate students and work with students to create realistic goals that are motivating. It would be important to consider the difference in student perceptions of their IEP goals and their personal goals and examine if the goals overlapped.

**Focus Group Themes.** The focus groups yielded extremely rich and meaningful data. Themes that were discussed throughout the groups were: The relationship between the student and coach is an interesting dynamic in how it results in self-determination development; confidence verse competence; staff needing to learn to honor choices to solve problems, even if wrong so students are allowed dignity of risk (failing, skipping, etc.); and sometimes students aren’t been given choices or know what is a problem or isn’t a problem. Students with disabilities tend to have lower perceptions of their efficacy and outcome expectations than students without disabilities (Wehman, 2006) although the focus groups discussed the topic of confidence verse competence of the students. In general, all of the participants were able to provide an example of one of their students who has extremely high levels of confidence about their abilities but lacked competency to demonstrate the abilities.

Both confidence and competence are greatly connected to self-determination skills. Confidence is really important especially for bringing students with intellectual disabilities to a fully inclusive college campus experience. As students spend time on campus they become more confident and begin to develop more skills that result in increased competence. On the flip side, when students struggle and learn they increase their competence, which influences their confidence. The perceptions students have of themselves could potentially give them an inaccurate idea of what they are capable of and could be dangerous in certain situations. For example, if a student is confident he can talk
to another student requesting ‘she be his girlfriend’ but lacks the social competence to
introduce himself, carry on small talk, and engage the girl in a meaningful and
appropriate way (i.e. not saying you will be my girlfriend), the rejection of a girl can have
a traumatic impact that can have negative impacts on competence and confidence. It is
better to prepare a student for rejection that is typical of everyone and how to handle the
rejection (i.e. do not continue to pursue the girl), thereby increasing social competence,
and a more realistic confidence about that situation.

Educators were asked, “In the absence of competence is confidence a good
c Characteristic for the students to have?” The participants in the groups all generally
agreed that it could be good within reason. For anybody who is overconfident it can be a
bad quality as other students could perceive it as someone is ‘stuck up’ or if coaches
know the student doesn’t have the skills they may provide even more support than needed
limiting the students interactions with others. That could potentially result in less
inclusion on the campus. It is important to teach students to be self-aware and provide
them with experiences both strategically and incidentally that will increase their
competence and in result increase their confidence. Limited confidence in areas of low
competence is actually strength.

Support staff could develop overconfidence of the students by overpraising.
Praise should be constructive, discrete, and delivered on a healthy level. There is a large
emphasis in society to build up students with special needs as super heroes, while we
want to champion the small victories a good dose of reality is healthy and should be
considered. It is important for coaches and other staff to think about how the experiences
of a student align with their journey. Teaching coaches to not always focusing on the
single event and instead to think about the big picture, to consider how the event impacts the student’s self-determination skills and their transition into adulthood. If we are overpraising and over prompting we contribute to the paradigm of learned helplessness of our students. Students need to fail, to learn limitations and strengths. When staffs shield students from failure they may not learn the skills they need to be competent and therefore not increase their appropriate confidence, or have an unrealistic perception of their confidence because people didn’t let them fail or want to hurt their feelings.

The findings for question two align with what Carter, Lane, and Sisco (2011) found when they executed a simplistic but well devised study that provided evidence to support the belief that paraprofessionals have the potential to play a critical role in enhancing or impeding the development, maintenance, or promotion of self-determination components for the students they support. For the ICEI Programs, all program staff not just the educational coaches must play a critical role in the development of self-determination of the students. Selection of staff needs to be well executed to ensure that quality staffs are being selected. Training for all staff should be specific, consistent, and continuous in regards to an understanding of self-determination and an ability to develop self-determination skills.

**Question 3: How do educators define self-determination?**

Data for this question were gathered from educational coach surveys and interviews and program coordinators and staff surveys and focus groups. Most educators had the ability to define self-determination as a whole but used examples or large global ideas to do so. Educational coaches were asked to define 9 self-determination concepts,
including self-determination. I found that educators were moderately capable of defining self-determination and other concepts aligned with self-determination. Definitions were scored on a 5-point scale (5-exact, 4-mostly right minor flaws, 3-definition has relationship to SD but not actual definition, 2-more wrong than right, 1-wrong, 0-blank) and then the mean was found for each definition. Autonomy, self-direction, and problem solving were 3 of the words they defined most accurately. Autonomy, self-direction, and problem-solving all use their names in the definitions and can be accurately defined by doing so. Control expectancy and psychological empowerment are more obscure, they may seem very straightforward but their specific definitions are not.

ICEI Coordinators and technical assistance providers were asked to define self-determination in both the survey and focus groups. Overall, coordinators definitions were more accurate than the coaches. The focus groups discussed perceptions of the definitions aligned with the students more so than the actual definitions. The participants were asked if they used the same definition for self-determination to rate the students in the program as they do for students not in the program. Most coordinators said they would like to think they do but definitely think that they need to apply the definitions to the students based on where the students are. The application of the definition to the various students in the ICEI Program is a complex process that requires the many people mostly defaulting to only referencing choice making or self-advocacy.

The ability of staff to be able to assess a student’s abilities and needs aligned with their knowledge and perceptions of self-determination can impact the way the staff interact with the students. This aligns with what Lane et al. (2012) found regarding paraprofessionals beliefs. Lane et al. (2012) found that paraprofessionals perceptions and
knowledge of self-determination could influence whether they self-determination skill based opportunities are provided to students throughout the day. The relationship between the perceptions and knowledge of the staff with the needs of the students’ should be prioritized in training programs.

*Question 4: Do educators (i.e. transition teachers, coordinators, educational coaches) involved in the PSE program feel adequately prepared to teach self-determination skills?*

Educators involved in the ICEI Program felt prepared to teach self-determination skills. A total of 86% educational coaches agreed they were well prepared to teach the skills. Only one coach strongly agreed 100% that they were prepared to teach self-determination skills. Seven coaches agreed they were prepared to teach self-determination skills and one coach responded with 100% neutral feelings towards their preparedness. No coaches 100% disagreed or strongly disagreed with any of the statements reflecting their preparedness to teach self-determination skills. The fact that the educators felt prepared to teaching self-determination skills is reassuring because of what Wehmeyer (2000) reported that teachers only perceived the importance of self-determination based on their perception of their ability to teach self-determination skills. This perceived importance greatly influences teacher behavior of promoting self-determination.

Of all the coaches surveyed the mean of agreeing they were prepared was 4.08 while they were only able to accurately define any of the words with mean score of 3.22. This means that coaches feel prepared to teach skills they don’t actually understand. This is alarming because the educators felt very prepared to support and teach self-
determination skills. Trainings and professional development needs to be provided to the coaches, for many reasons discussed throughout this chapter. Perceptions of coaches on if they feel prepared to teach something they were unable to define can be very dangerous. Lane, Carter, & Sisco (2012) at the base of all student interactions, paraprofessionals and the highly qualified teachers need to have an understanding of self-determination. The intersection of personal views and actual practices among paraprofessionals is similar to that of teachers; they must demonstrate and have positive beliefs about self-determination.

Lane et al. (2012) indicated that paraprofessionals who had more opportunities to participate in professional development focused on self-determination also reported spending more time teaching self-determined behaviors to their students. This finding supports the fact that paraprofessionals should be provided with more on-going and systematic trainings. The educators surveyed and interviewed in this evaluation outlined that they often did not receive as much formal professional development training as needed. Training was more informal and on the go, for example: coffee hour workshops, allowing open door policy for coaches to consult with the coordinator, 1:1 trainings, and having experienced educational coaches serve as mentors to new coaches.

In many ways the educational coaches reflected some of the same competence and confidences inconsistencies displayed by the students. Coaches felt very confident or prepared to teach self-determination skills yet based on their inability to define terms and show an understanding it seems they lacked the actual competence to do so. This similarity to the students’ confidence verse competence discrepancy stimulates thinking about 2 different reflection ideas. First, if educational coaches are behaving more
confidently to mask their lack of competence could the students be observing this behavior and essentially modeling it, is it that we actually teach the students to behave confidently if they don’t have the competence? Second, is this type of behavior a form of a coping mechanism that we inadvertently develop throughout our lives? If so, then how do we as educators teach students the appropriate behaviors when lacking competence, such as asking for help, when we too engage in the same type of masking behaviors.

*Question 5: Does the ICEI Program model have components that support the development of self-determination among the students?*

The ICEI Programs do have components that support the development of self-determination skills. Students are provided opportunities to practice self-determination skills in the college environment. Researchers have provided evidence that when self-determination interventions are systematically introduced in a school setting, students demonstrate greater growth and ability to perform self-determination skills in other settings (Shogren et al., 2014). The systematic application of teaching interventions is where there is much room for improvement.

We do know that students who engage in some form of PSE are more likely to be self-determined and be competitively employed. The students in the ICEI Programs are engaging in a PSE program that needs to provide support for the students’ to progress towards their long-term employment goals. The partnerships between the IHE’s and the districts should also include community providers to aide in alignment and development of employment skills.
The grant reviews revealed that all of campuses identify who serves the role of the Employment Specialist, the person who is responsible for locating and securing on-campus internships and providing students with opportunities to development needed soft and hard employment skills. The grant requires the Employment Specialist to be a minimum of 10 hours a week position. None of the campuses filled the role in the same way. One campus has a full time employment specialist others had a 10-hour a week position. Other employment specialist requirements were met through a community-based employment agency, or the district solely provides in-kind contribution consisting of the vocational coordinators. The RFP also requires campuses to also use the Massachusetts Work-based Learning Program (WBLP). The Work-Based Learning Plan can be completed online or as a pen-and-paper document. The campus that has a full time Employment Specialist referred to using the WBLP the most.

A high quality post-secondary education program for students with intellectual and developmental disabilities should be inclusive to the most extent possible. PSE options for students with ID, DD, and ASD are a logical response to the transition needs of the students ages 18-21.

Morningstar et al. (2010) identified what a quality program should incorporate: promotion of self-determination, employment opportunities, access to courses attend by non-disabled peers, employ student-centered planning, person-centered planning, interagency collaboration, peer mentors, coaches, family involvement, faculty and staff buy-in, universal design for learning, access to all campus activities and services, flexibility to mold to each campus culture and dedication to providing students who may have not had a college opportunity a truly realistic college experience.
As a whole picture, the Massachusetts ICEI Program met all of these indicators; some campuses target certain indicators stronger than others. For example, one of the campuses visited had a large peer mentor organization that is student run with the mission to ensure that the students in the ICEI program are given a full college social experience and develops lasting and meaningful friendships. None of the peers from this group were paid and they spent a lot of time with the students during the school day, weeknights, and weekends. Some campuses paid their peers and assigned roles as a tutor position or a friend. Each campus was very different in how a peer mentor group worked, but payment was often inconsistent with authentic and meaningful relationships development.

Access to courses attended by non-disabled peers was provided at all of the campuses. Some campuses have a smaller selection of courses they are able to offer. The hope is that every student across the state is involved in student-centered planning highlighting person-centered planning but that wasn’t fully discussed in the grant review. When the three campuses were visited, the students identified their interests and reported that they wanted to be there and the courses aligned with their goals but none of the students spoke in detail about their person-centered plan meetings. One area of concern that emerged throughout all of the data collection was the role of parents and how on each campuses at least once a parent was pushing for their student to enroll in a class that the student didn’t want or in some situations the student didn’t want to go to the program and the push was from the parent. That is an area for deeper exploration and how that will contribute to either promoting or decreasing a student’s self-determination levels.

Interagency collaboration was discussed briefly some of the RFPs but at a more indirect way, such as the agency were members of the partnership team or they were
assisting the employment piece, very little details were available. The same goes for family involvement one of the indicators of the RFP requires the campuses to discuss a family participant on the PLT and again there was very little descriptions across the board. Faculty and staff buy-in was demonstrated more through testimonials on the different program websites verse in the grant reviews. For the programs to be successful there needs to be faculty and staff buy-in. Since the students are in the courses with faculty this could be an area to target promotion of self-determination skills.

Universal Design for Learning trainings were mentioned as being offered by Think College but none of the RFP’s discussed a specific training they use for it. UDL is extremely important for students to access the curriculum and as well as how coaches can help teach the students self-determination skills with a UDL approach. Based on the comprehensive list of activities and events compiled from the RFPs, it seems that students do have access to all campus activities and services. Unfortunately, based on where the program lives in the campus infrastructure and how the student’s are recognized in the databases, some services might not be available. For example, at one campus if a student audits the course they technically aren’t eligible for the student support services. On another campus if a student takes the class for credit, their educational coaches in classes can’t accompany them. This issue is more campus based than program based and does technically address the last indicator that Morningstar et al. addressed that there is flexibility to mold to each campus culture and dedication to providing students who may have not had a college opportunity a truly realistic college experience. As a whole, the initiative RFPs and IHEs should develop a typical track for
how the program can work on a college campus to provide the realistic experience. This would help existing programs and especially help prospective programs.

Logic models were created for program activities across the 3 visited campuses. The summary of the logic models provided evidence that many of the current activities were indirectly promoting self-determination skills resulting in short, medium, and long-term outcomes. It is important to note though that none of the grants identified activities or events chosen to specifically target self-determination. Programmatic decisions should be made with self-determination oriented short, medium, and long-term goals. This is important for the students for the effectiveness of programming, and for the coaches and other staff who would receive self-determination training. These activities would establish the link between the activities and the “why” of the activities. Every experience the students have on the campus through participating in the ICEI programs should naturally promote the students self-determination skills, but this requires staff to be aware of self-determination skills, how to promote them, how to measure them, and why it is important to allow the students to make mistakes as learning opportunities.

Limitations

Carter, Lane, & Sisco (2013) believed the main limitation of their study was that they relied exclusively on self-reported perceptions and actions of the paraprofessionals who participated. Self-report is variable, as people may not always be reporting the accurate truth due to social desirability or lack of knowledge. This is also a limitation of this study. Excluding the grant reviews and the campus visits all of the other collected information was self-report or reports based on perceptions of others behaviors. A way to address this limitation would be to also include a quantifiable approach to measuring
students’ self-determination behaviors. This study was limited in that it only focused on the ICEI Programs in Massachusetts, while for the purpose of this evaluation it was appropriate and that can also be a strength as the findings can provide support and evidence to what components are needed in a fully inclusive dual enrollment program.

A significant limitation of this study is that individual student outcome data were not collected or examined as part of this study. A follow up study with a more longitudinal scope (2-3 years) could be designed to collect and analyze data about short- and long-term participation in inclusive college-based program and how the influence of the programs promote longstanding self-determination in the student’s resulting in paid competitive employment; social inclusion; friendships; independent living; and, overall quality of life. Such a longitudinal study would involve collecting quantitative data about the lives of students who participate in Inclusive Concurrent Enrollment programs in throughout their experience.

Another limitation of this study was the variability K-12 experiences of students, which were not deeply investigated. Very little information regarding the students’ histories emerged. Since we know self-determination is a life-long process there could have been experiences that influenced their skills and perceptions that I measured.

Another potential limitation was my role as a researcher and a Program Coordinator. However, I followed principles of qualitative research such as I identified my role as both the researcher and Program Coordinator to participants, reviewed data objectively, and obtained objective feedback. Additionally, evaluation research is not removed from the sites of population like experimental research. My role as coordinator
actually helped inform my data collection and ability to deeply investigate the ICEI Programs.

**Recommendations**

This study was designed to make multiple contributions to the field and to fill the gap in the literature. It was expected that this study would add to the educational knowledge regarding the self-determination of individuals with intellectual and developmental disabilities in inclusive postsecondary education programs. It was also anticipated that this study would provide information regarding the role of staff including perceptions and competency regarding development and promotion of self-determination skills. Lastly, this study was expected to provide evidence regarding the functional components, of inclusive postsecondary education programs for students with ID in regards to the development of self-determination skills. It was intended that the information yielded from this study would provide support to professionals coordinating PSE programs for individuals with ID/ASD, to refine the programs and provide more appropriate programs to promote the self-determination of the students.

**Overall Program Recommendations**

**Continue to strengthen partnerships.** Strengthening the partnerships includes all stakeholders: k-12 staff, IHE staff, community agency members, workforce development members, students and families. Once a collaborative partnership is developed it is important that the group meets at least twice a semester once the program is thriving, in the beginning of partnerships it is important that the PLT meets on a regular basis, at least once a month. Once the PLT is developed strategic training for all stakeholders should
occur. This training should not just be for educational coaches but all stakeholders. This training should be on-going about self-determination not just what it is, but importantly the how to target, teach, and measure it. Throughout the meetings and trainings, a commonality of language and meanings should be devised. This language should be used across the state on all campuses, throughout the districts, and with any outside providers.

*RFP/Program Proposal.* Due to the state RFP Process there is limited relationship to the rigor of the grant and the funding. This past December the Governor made significant cuts to the budget, which resulted in the reduced funding for ICEI programs across the state receiving more than $30,000. This budget cut was done without attention to the grant requests and the specific goals of the RFP and resulted in decreased student enrollment numbers and programmatic activities. Grants should specifically expect partnerships to identify activities linking to self-determination skills and require the campuses to develop logic models, which will lead to specific and thoughtful planning. A recommendation is to incorporate Morningstar et al. (2010) list of what quality programs should incorporate (promotion of self-determination, employment opportunities, access to courses attend by non-disabled peers, employ student-centered planning, person-centered planning, interagency collaboration, peer mentors, coaches, family involvement, faculty and staff buy-in, universal design for learning, access to all campus activities and services, flexibility to mold to each campus culture and dedication to providing students who may have not had a college opportunity a truly realistic college experience) to the RFP and use them as a guideline to score and assess the appropriation of funds for each campus.
**Exploring Perceptions.** The notion of competency versus confidence and the roles that perceptions play on both assessing and teaching students should be explored in greater detail. Developing a scale to potentially measure competency of skills and then having students rate their confidence on completing those skills could initially provide a basis for understanding the student perceptions. Cross-analyzing this with coaches’ perceptions of the students’ confidence and competence would be interesting.

**Universal Design for Learning.** Due to many educators essentially evaluating students performance based on their application of the definitions to how they feel it would relate to the student raises an alarm for concern, because again of our perceptions. As a framework tool, instead of not necessarily using different definitions but more so identifying different approaches to how these skills could be taught, addressed, or evaluated. Providing individuals with a way to identify access points for teaching self-determination skills. Using the three pillars of UDL, engagement, representation, and action/expression to help educators initially identify how to target self-determination skills. An example of the UDL paradigm for teaching choice making is as follows.

Engagement focuses on motivating learning, choice-making skills are taught from an early age. Individuals are motivated to have and make choices and allowing choice making is an antecedent-based intervention (Miltenberger, 2006). This pillar would be easy to target no matter how the student presents especially because choices are constantly around us. Representation is how information is presented to an individual. Based on the learner, the coach might present choices with pictures, verbally, written words, pointing to the choices, asking the student what choices they want, etc. Lastly, action/expression is how the student shows what they know. The student could point to
what they want, say what they want, pick it up, use an AT device, write down what they want, text you what they want, etc.

**Training.** Strategic, effective, and on-going training needs to be provided to all stakeholders especially the students and peer mentors. Using the principles of Project Based Learning could be an extremely valuable and effective way to teach all stakeholders about self-determination skills. PBL provides its learners knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging and complex question. Having students and educators potentially work on case studies of the students and learn how to teach it could provide meaningful change in educators practice. Training needs to be competency based with mastery and not just a speak at the group workshop, ways for the individuals to demonstrate the learned knowledge and ways to monitor for lasting knowledge and change in practices should be devised.

**Educational Coaches.** Paraprofessionals perceptions and knowledge of self-determination could influence whether self-determination skill based opportunities are provided to students throughout the day (Lane et al.). We need to provide educational coaches and students with the knowledge of self-determination. Normalization of the educational coaches role is critical for program consistency. Currently, all of the campuses use various models of educational coaches who all have various backgrounds and experience. Districts need to use thoughtful and strategic procedure to selecting educational coaches instead of just telling someone that day they will be going to campus as an educational coach. Unfortunately, this type of occurrence is the nature of the beast especially if the ICEI Programs continue to require the districts to be responsible for the
selection of educational coaches. As programs move towards sustainable models this is something to consider exploring.

The professional requirements for the educational coach role also vary. Some educational coaches may have never went to college themselves and therefore have their own anxiety and nervousness about the experience. Based on the interviews and observations, coaches who are more laid back, have had a recent college experience and understand the importance of independence, social experiences, and some components of self-determination skills seem to have the most positive impacts on the students experiences.

The SECA is a very important document and agreement for students and coaches. Developing a prescribed ratio for fading support with the SECA and ways to collect and monitor data could potentially enhance the students’ experiences, independence, and self-determination skills. If a coach is responsible for recording data and following a prescribed ration for fading there is a likelihood of great adherence to the plan because of self-monitoring. Training on the SECA needs to occur with both the coaches and the students and also include family involvement when possible. Correspondence training is one strategy that could be used to teach coaches about the SECA process and fading. The coaches and student’s say what they are going to do, they do it, and then tell the coordinators and other staff that they did it.

Coaches should be included in the entire process for the students pursuing postsecondary education. They should be involved hosting the person-centered plan meetings. Coaches should be aware of all of the students’ goals, strengths, interests, and
different abilities otherwise they may perceive the student to not be able to do something on campus or think they wouldn’t want to do something. It would be beneficial for educational coaches to co-host person-centered plan meetings with students, if the students wanted. One recommended approach to teach educational coaches how to host PCP’s is I do, We do, You do.

**Educational Coaches Training.** There are significant training areas to target with educational coaches. The first topic is orientation. Orientation should be a two-fold training, orientation to the campus and orientation to the job. Training should also incorporate strategies for coaches to use across a variety of their daily experiences. It is important to not just teach about topics such as PCPs, self-determination but also teach how to target the topics and different pedagogical strategies. Coaches should be taught about modeling, video modeling, shaping, chaining, social autopsies, and the importance of using data to make changes and assess change. Educational coaches should also be taught how to be reflective practitioners. Teaching coaches how to reflect on their actions as a way to engage in continuous learning. It includes educational coaches having to pay attention to the values and theories they use to inform their every day actions with their students.

Unfortunately, there are barriers that exist that make training for all coaches difficult. Scheduling is the biggest barrier. Due to coaches being employees of their districts they often need to abide by the district calendar for trainings or are unable to attend training before the semester or outside of the school day unless volunteer based. This makes it difficult to then try to provide trainings while all the students are on campus. Some campuses are starting ‘coffee hours’ where they are hosting informal
trainings at least one a semester during the school day, but not all coaches can attend. Also, since coaches follow the campus calendar they tend to miss their in-district service learning days because they are on campus. This means there are coaches who may never be able to logistically attend training. A suggestion to this barrier is making all of the trainings accessible on-line and requiring coaches to complete the training. Follow up meetings could be used to reinforce and discuss materials from the online training.
CHAPTER 6
CONCLUSION

This study provides evidence that the Massachusetts Inclusive Concurrent Enrollment Initiative Programs includes the components to promote self-determination skills of individuals with intellectual disabilities. However, it is important to note that refinement of these components across all campuses will be vital in the long-lasting effective promotion of self-determination skills of individuals with disabilities. The role that the staffs play in students’ lives is complex and requires more careful consideration when pairing coaches and students. The role of the coach themselves also needs more specific programmatic guidelines, especially with respect to training. The fact coaches felt prepared to teach self-determination skills that they weren’t fully aware of was troubling.

I believe that students and staff overinflated students’ self-determination competency and skills substantial in self-determination. Moving forward, students and staff training should include the students about their own self-determination skills and the way in which experiences on campus can heighten the skills. The programs in Massachusetts are different models then many other programs throughout the United States. The dual-enrollment piece and partnering with local school districts is a unique model and provides a way for districts to comply with transition related indicators. This partnership needs to be more clearly outlined with expectations, trainings, beliefs and values as to institutionalize the relationship into all k-12 districts but have consistency across the state.
The ICEI Programs provide students with intellectual disabilities an authentic inclusive college experience. The program should continue to engage in program evaluation to ensure that the programs grow within the necessary parameters and always put the needs of the students first and foremost. The experience of getting to the college campus is initially increasing self-determination skills but the programs need to adopt the importance self-determination as a fundamental component. In order for students to demonstrate generalization of these experiences and skills to other areas generalization needs to be thoughtfully considered and planed for. However, for the students generalize their experiences to other domains the ICEI Programs need to dedicate substantive time and resources to self-determination instruction, support, and development. ICEI Programs need to support students in failures, develop coping skills, resilience, and most importantly a realistic self-assessment of strengths and limitations. Then the ICEI Programs will be a meaningful transition from school to adult life.
APPENDIX 1

INFORMED CONSENT/INVITATION TO
PARTICIPATE IN A STUDY

Consent Form for Participation in a Research Study
University of Massachusetts Amherst

Researcher(s): Lyndsey Nunes, doctoral candidate, Michael Krezmien, Ph.D. faculty sponsor

Study Title: Promoting Self-Determination Skills of Individuals with Intellectual Disabilities attending various Inclusive Concurrent Enrollment Initiative Programs throughout Massachusetts

1. What is this form?

We are inviting your child to take part in an evaluation study of the Inclusive Concurrent Enrollment Initiative (ICEI) Programs in Massachusetts. This study will provide information to the ICEI Programs in the state to be used to make decisions about programmatic changes to promote self-determination.

This consent form will give you the information you will need to understand why this study is being done and why your child is being invited to participate. It will also describe what you will need to do to allow your child to participate and any known risks, inconveniences or discomforts that your child may have while participating. We encourage you to take some time to think this over and ask questions now and at any other time. If you decide to participate, you will be asked to sign this form and you will be given a copy for your records.

2. WHO IS ELIGIBLE TO PARTICIPATE?

This study is seeking to students participating in the Inclusive Concurrent Enrollment Programs in Massachusetts. These students are between the ages of 18-22 and still receiving special education services through their school districts. The study is also seeking individuals involved in the ICE Programs at different capacities, educational coaches, program coordinators, transition liaisons, and statewide coordinator.

3. WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this research study is to examine is to understand the functional components of postsecondary education programs that promote self-determination for students with intellectual and developmental disabilities and to differentiate programs that include or do not include these components.
4. WHERE WILL THE STUDY TAKE PLACE AND HOW LONG WILL IT LAST?

Participants will be asked to respond a survey either on paper or on the computer. The survey should last about 30-45 minutes. Following the surveys, some participants will be asked to participate in focus groups. The focus groups will last no longer than 60 minutes and occur once.

5. WHAT WILL I BE ASKED TO DO?

If you agree to take part in this study, you will be asked to allow your student to participate in surveys and focus groups. The surveys and focus groups will occur on the campus the participant is connected to. The participants will not be required to travel.

6. What are my benefits of being in this study?

We do not know of any personal risk or discomfort your child will encounter from taking part in this study. While we cannot guarantee any personal benefit, our expectations are that the information gathered will provide ICEI Programs with valuable recommendations for improvement. Participation is however, completely voluntary and participation can be stopped at any time. We are hoping that this evaluation will provide us with valuable and meaningful information about the components of the ICEI Programs in Massachusetts specifically how the components are influencing promotion of self-determination for individuals with intellectual and developmental disabilities.

7. WHAT ARE my RISKS OF being in THIS STUDY?

We do not know of any personal risk or discomfort the one will encounter from taking part in this study.

8. how will my personal information be protected?

Information produced by this evaluation will be confidential and private. All materials collected from participants will contain pseudonyms’ for any identifying information, and all materials will be kept in a secure, locked file cabinet. Data collected by paper and pencil will then be transcribed onto a password protected computer for further summary and analysis. This data will be coded and any personally identifying information will remain in a separate secure location. Data collected on the computer will be transcribed through the survey program and loaded onto a password protected computer for further summary and analysis.

9. WHAT IF I HAVE QUESTIONS?

We will be happy to answer any question you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact the researcher(s), Lyndsey Nunes (413) 374-8606, lnunes@educ.umass.edu, Dr. Michael
10. CAN I STOP BEING IN THE STUDY?

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate.

11. SUBJECT STATEMENT OF VOLUNTARY CONSENT

When signing this form I am agreeing to voluntarily enter this study. I have had a chance to read this consent form, and it was explained to me in a language, which I use and understand. I have had the opportunity to ask questions and have received satisfactory answers. I understand that I can withdraw my child at any time. A copy of this signed Informed Consent Form has been given to me.

_________________________  _______________________
Participant Name:         Print Name:             Date:

_________________________  _______________________
Parent Name:              Print Name:             Date:

By signing below I indicate that the participant’s parent and the participant has read and, to the best of my knowledge, understands the details contained in this document and has been given a copy.

_________________________  _______________________
Signature of Person        Print Name:             Date:

Obtaining Consent
APPENDIX 2
EDUCATIONAL COACH INTERVIEW GUIDE

Ed Coach Interview Prompts

Themes from SD Definitions:

Drive-better than themselves
Goals, choices, in control
Decisions directly related to live
Motivation
Believing in oneself
internal drive
independent

Only 4 ed coaches said they disagreed with the statement “in general my students are SD’d people”. This means most were neutral, agreed, strongly agreed- what do you think made people rate students higher…

Most ed coaches said they’re prepared to help prepare students to be SD individuals.

Have you ever received training? Direct or indirect- did you have to seek it out or what was it?

Themes from Autonomy Definitions:

Independence
on their own
desire to be as independent as possible
Freedom
act to attain desired results
Don’t rely on others
Self-sufficiency
Goal-making, ability to make desire choices

Most ed coaches disagreed with the statement “in general my students are autonomous individuals” how do you think this differs from SD?

Most ed coaches said they’re prepared to help prepare students to be autonomous individuals. Have you ever received training? Direct or indirect- did you have to seek it out or what was it?
Themes from Self-Initiation Definitions:

Independence
starting on their own
ability to plan steps
Initiative in making decisions
start “something”

“in general my students are self-initiating people”.50/50 agree, disagree. Do you think this has something to result in prompt dependency?

Most ed coaches said they’re prepared to help prepare students to be self-initiating individuals. Have you ever received training? Direct or indirect- did you have to seek it out or what was it? Behavior analysis?

Themes from Self-Direction Definitions:

Self-guided
executive function skills to monitor life
moving on independent path
guidance from within self
steps to accomplish a goal

“in general my students are self-directing people”.50/50 agree, disagree. What examples have you seen?

Most ed coaches said they’re prepared to help prepare students to be self-directed individuals. Have you ever received training? Direct or indirect- did you have to seek it out or what was it?

Themes from Goal Setting Definitions:

Acknowledging a weakness in one’s self or life
Decide what you want and set a plan to accomplish it
Determined goals in transition
Processing of assessing one’s strengths
identifying something an individual wants
function of autonomy, it is the desire
Future goals and making a plan

“in general my students set their own goals”- the results are mixed. Of agree, disagree, neutral… do you prompt goal setting or do they set their own?
Most ed coaches said they’re prepared to help prepare students solve problems (strongly agree/agree). Have you ever received training? Direct or indirect- did you have to seek it out or what was it?

**Themes from self-regulation**

CONTROL of oneself
Control of behavior
Control of emotions

“in general my students set their own goals”- the results are more neutral or disagree. Do you think this is a result of students disabilities or learned behaviors?

Most ed coaches said they’re prepared to help students become self-regulated (strongly agree/agree). Have you ever received training? Direct or indirect- did you have to seek it out or what was it?

**Themes from Psychological Empowerment Definitions:**

Mental
emotional power
power to be own person
using psychological tools
self-efficacy
Mentally strong

“in general my students demonstrate psychological empowerment” agree or neutrals majority

Most ed coaches said they’re prepared to help prepare to help my students demonstrate psychological empowerment. Have you ever received training? Direct or indirect- did you have to seek it out or what was it?

**Themes from control expectancy**

Unfamiliar with term
internal decision
How much control one believes they have over their lives
How much control one believes someone else has over their live

“in general my students demonstrate control expectancy”- the results are more neutral or agree. Do you think this is positive or negative? Do students let others have more control
Most ed coaches said they’re prepared to help students demonstrate control expectancy (strongly agree/agree). Have you ever received training? Direct or indirect—did you have to seek it out or what was it?
APPENDIX 3

EDUCATION COACH GUIDE FOR STUDENT SURVEYS

Autonomy-

1. I plan weekend activities I like to do.

Coach can say:

This means:

“You tell my friends and family what I want to do on the weekends.”

“You decide what you want to do for fun on the weekends”

or….use activities you know your student likes and fill in a statement “I plan when I ________________ on the weekends”

Scoring examples:

If you decide and tell everyone what you will be doing this is a 5
If you decide and tell everyone what you will be doing most of the time this is a 4
If you do what your family or friends tell you what you will be doing this is a 1
If you do what your family or friends tell you what you will be doing this is a 2

A 3 is you aren’t sure, ed coach-feel free to use examples of the neutral for your student based on their interests

2. I choose the activities I want to do

Coach can say:

This means:

“You pick the things you want to do, like watching tv, going for a walk, calling friends” - -- or….use activities you know your student likes and fill in a statement “I decide to ________________”

feel free to add in other activities that you might know your student participates in

Scoring examples:

If you choose all the activities you do this is a 5
If you choose most of the activities you are doing this is a 4
If you do not choose any of the activities you do this is a 1

If you do choose some or a few of the activities you do this is a 2

A 3 is you aren’t sure, ed coach-feel free to use examples of the neutral for your student based on their interests

3. I text, e-mail or talk on the phone to friends or family when I choose.

Coach can say:

This means:

“You independently call people, text message, facebook, or contact them in other ways whenever you want to.”

If you always contact the people you want to whenever you want to this is a 5

If you contact the people you want to most of the time this is a 5

If you do not contact people, or don’t know how to contact people this is a 1

If you want to contact people and try sometimes but not often this is a 2

A 3 is you aren’t sure, ed coach-feel free to use examples of the neutral for your student based on their interests

4. I go to restaurants I like

Coach can say:

This means:

“You pick the restaurants you want to go to or the meals you want to eat”

If you choose all the places and foods you go or eat this is a 5

If you choose most of the places and foods go or eat this is a 4

If you do not choose any of restaurants or food you eat this is a 1

If you do choose some or a few of restaurants or food you eat this is a 2

A 3 is you aren’t sure, ed coach-feel free to use examples of the neutral for your student based on their interests

5. I choose what my room looks like.
Coach can say:

This means:

“You set up your room the way you want it to look, you keep it clean or messy based on what you want, you pick the colors and things”

If you choose exactly what your room looks like 5

If you choose most of what your room looks like but listen to input from family members or housemates 4

If your family sets up your room and cleans it for you 1

If your family sets up your room but you still pick out some of the things 2

A 3 is if you don’t really give much thought to your room

Self-initiation

1. I choose when to act or do something

Coach can say:

This means:

“When you want to do something, you decide without asking for permission”

or use activities you know your student likes and fill in a statement “I decide when I want to do ________________”

feel free to add in other activities that you might know your student participates in

Scoring examples:

If you choose when to do all your activities you do this is a 5

If you choose when to do most of the activities you are doing this is a 4

If you do not choose any of the activities you do this is a 1

If you do choose some or a few of the activities you do this is a 2

A 3 is you aren’t sure, ed coach–feel free to use examples of the neutral for your student based on their interests
2. **I start new activities on my own**

**Coach can say:**

**This means:**

“When you want to do something, you start doing it without me or Mom, Dad, etc telling to you do it”

or use activities you know your student likes and fill in a statement “I independently start____________________(ex. Going to lunch on campus)”

*feel free to add in other activities that you might know your student participates in*

**Scoring examples:**

If you start when to do all your activities you do this is a 5

If you start when to do most of the activities you are doing this is a 4

If you do not start any of the activities you do this is a 1

If you do not start some or a few of the activities you do this is a 2

A 3 is you aren’t sure, ed coach-feel free to use examples of the neutral for your student based on their interests

3. **I consider many possibilities when I make plans for my future**

**Coach can say:**

**This means:**

“When thinking about the future, where you want to live, who you want to live with, I think about all the possible options” (see statement examples with scoring)

**Scoring examples:**

If think about ALL possible options for your future this is a 5

If you think about a lot of options for your future, even if you only have one in mind 4

If you have no thoughts about the future 1
If you have one thought about the future but will not think about the other options 2
A 3 is you aren’t sure, ed coach-feel free to use examples of the neutral for your student based – might even ask what are your future plans, and if nothing then comes to mind then a 3

4. **My past experiences help me plan what I will do next**

   *Coach can say:*

   *This means:*

   “When you think about your life, things that have happened help you plan what you will do after college”

   or….use situations you know have happened in your students life ex: remember when you missed the bus after school, you have since learned all the other bus schedules for your future”

   **Scoring examples:**

   If every future decision is because of something that has happened in your life 5
   If most of your future decisions are because of experiences you have had on campus or in life 4

   If you don’t know any of your important past experiences 1

   If sometimes you think about past experiences but don’t connect them to your future 2

   A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student and if they have any interaction with future plans 3

5. **I change what I do when it has not worked in the past**

   *Coach can say:*

   *This means:*

   “When you make a mistake, do you learn from it or do you do it the same way next time? “

   or….use situations you know have happened in your students life ex: remember when you missed the bus after school, what do you now when it is getting close to 2pm?”

   **Scoring examples:**

   I learn from my mistakes immediately and don’t repeat them 5
I tend to learn from my mistakes but sometimes need the help of my coaches and peers 4

I make the same decisions and mistakes repeatedly 1

I need a lot of help changing how I do things when they haven’t worked in the past 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student

6. I look for new experiences I think I will like

 Coach can say:  

 This means:  

 “I am always looking for new activities to try”

 Scoring examples:  

 I independently find activities that I might like 5  

 I tend to have my coaches, family, or friends suggest activities I might like but I am always willing to try them 4  

 I have no interest in new activities 1  

 I tend to have my coaches, family, or friends suggest activities I might like but I am not always willing to try them 2  

 A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student

7. I do things I liked in the past

 Coach can say:  

 This means:  

 “When I do something I like, I continue to do it” example: going to the gym, attending campus events, etc

 Scoring examples:  

 I do things I’ve liked in the past all the time 5  

 I tend to do things I’ve liked in the past again most of the time 4
I will only try things once or twice, even when I like them 1

I tend to have my coaches, family, or friends remind me of activities I like but I am not always willing to try them 2

A 3 means you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student – neutral

Self-Direction

1. I set my own goals

   Coach can say:

   This means:

   “You decide what you want to achieve on campus”

   or….use activities you know your student likes and fill in a statement “I you decide you want to make new friends- you meet 2 new people a day..etc”

   Scoring examples:

   I set all my own goals with very little input from my coaches, peers, or family 5
   I set most of my own goals but use input from my coaches, peers, or family 4
   What are goals? How do I set them? 1
   I need a lot of coaching thinking about what I want to accomplish 2
   A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

2. I make my own decisions

   Coach can say:

   This means:

   “I make my own decisions, like what classes I want to take, what I want to eat at lunch, what my schedule is like during the day”

   Scoring examples:

   I make all my own decisions with little input from my coaches, peers, or family 5
   Sometimes my friends, family, and coaches help me make decisions or work through the options but I do as much as independent as possible 4
I make no decisions I do what I am told  1

I only really make decisions when my coaches, family, or friends really help me through every possible option 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

3.  I act on decisions I make

   Coach can say:

   This means:

   “When I decide I am going to do something, like what I want to eat for lunch, I actually eat that at lunch”

or use examples you know your student will identify with example “when you decide you are making your own schedule, you follow what you want to do”

   Scoring examples:

I follow through with every decision I make 5

I sometimes have my friends, family, and coaches help me start working towards the decisions I make but I do act as independently as possible 4

I don’t do anything when I make decisions 1

I tend to have my coaches, family, or friends prompt me through acting on all the decisions I make 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

4.  I do what is best for me when I face a challenge

   Coach can say:

   This means:

   “When something happens that is difficult for me to handle or unplanned, I decide what to do because it is right for me”

or use examples you know your student will identify with example “when you were upset with what your therapeutic mentor said, you reached out to Lyndsey and one of your friends”

   Scoring examples:
I am confident in what I decide to do when something challenges me (tough school assignment) 5

I tend to have my coaches, family, or friends suggest activities help me decide what to do when I face a challenge 4

I don’t do anything when I face a challenge, or I pick the wrong way to handle the problem 1

I tend to have my coaches, family, or friends suggest solutions to my challenges but I am not always willing to try them 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

5. **I take actions when new opportunities come my way**
   
   **Coach can say:**
   
   **This means:**
   
   “When asked to try something new, like host a school tour, you do it”
   
   or use examples you know your student will identify with
   
   **Scoring examples:**
   
   I try every new activity that comes my way with little prompting 5
   
   I tend to have my coaches, family, or friends suggest participating in new opportunities I might like but I am always willing to try them 4
   
   I have no interest in new opportunities or I say no 1
   
   I tend to have my coaches, family, or friends suggest participating in new opportunities I might like but I am not always willing to try them 2
   
   A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

6. **I think about each of my goals**
   
   **Coach can say:**
   
   **This means:**
   
   “After I set a goal, I think about it at other points in life other than the time I set it”
or use examples you know your student will identify with example “I set the goal to make plans with friends on weekends, I ask for help making the plans and for people to hang out with me”

**Scoring examples:**

I think about my goals with very little prompting 5

I tend to have my coaches, family, or friends occasionally remind me about my goals or assist in helping me think about working through them 4

I have set no goals or if I do I don’t think about them 1

I tend to have my coaches, family, or friends remind me about my goals but other than them reminding me or helping me I don’t think about them 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

**Pathways Thinking**

1. **I think of more than one way to solve a problem**

*Coach can say:*

**This means:**

“When I have a problem, I think of at least 2 ways to solve it”

or use examples you know your student will identify with example: “When I have a problem, like a tough class assignment and no computer, I think of more than one option to help me get through the assignment”

**Scoring examples:**

I always think of more than 2 options to solve a problem 5

I occasionally have my coaches, family, or friends suggest solutions to problems so I have more than one option to solve it 4

I have no clue when I have a problem or how to solve it unless told so 1

I tend to have my coaches, family, or friends suggest solutions to problems and am mostly prompted through the problem 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼
2. I find another way to get something done  
   
   **Coach can say:**
   
   **This means:**
   
   “If the way you are trying to complete something isn’t working, you decide on another way to finish it”
   
   or use examples you know your student will identify with example: “When I don’t have a computer at home but my assignment needs to be typed, I complete it on campus”
   
   **Scoring examples:**
   
   If I can’t get something done one way, I independently find another way 5 I tend to have my coaches, family, or friends help me find another way to get something done, but mostly independent 4
   
   If the way I know to get something done doesn’t work, I don’t get it done 1
   
   I am prompted by my coaches, family, or friends help me find another way to get something done 2
   
   A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼
   
3. I come up with ways to reach my goals  
   
   **Coach can say:**
   
   **This means:**
   
   “When I set a goal, I figure out steps to reach it”
   
   or use examples you know your student will identify with example: “You wanted to go to a hockey game with friends, you went online looked up the schedule, picked a game, and asked friends”
   
   **Scoring examples:**
   
   I come up with different ways to reach my goals mostly independent 5
   
   I tend to have my coaches, family, or friends help me think of ways to reach my goals or help me act on the ways I’ve decided to reach my goals, mostly independent 4
   
   I do not know what to do when I set a goal 1
My coaches, family, or friends suggest ways to reach my goals and give me lots of prompts along the way.

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¾

Psychological Empowerment

1. I tell people when I think I can do something

   Coach can say:

   This means:

   “When you think you can do something independently you tell us or you just do it” or “if asked by someone can you do it, you answer yes”

   if your student isn’t verbal use an example of how they would communicate this with you

   or use examples you know your student will identify with example: “You wanted to take a quiz on your own so you told me”

   Scoring examples:

   I always answer YES I can do it or tell people I can do something independently 5

   I say I can do something most of the time, occasionally needing help 4

   I don’t tell (verbally or physically) people when I think I can do something 1

   My coaches, family, or friends ask me if I can do something and often answer no or don’t answer at all (any mode of communication) 2

   A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¾

2. I think trying hard helps me get what I want

   Coach can say:

   This means:

   “When I want to do something or get something, I know I need to try hard”
or use examples you know your student will identify with “when I want to xxxx I know I need to try really hard, meaning…”

**Scoring examples:**

Yes! You need to try hard to get what you want 5

Yes, trying hard helps me get what I want, but sometimes people help me  4

I don’t think you need to try at all 1

I don’t think I have to try hard to get what I want 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

3. **I keep trying even after I get something went wrong**

    **Coach can say:**

    **This means:**

    “When something doesn’t work, or I get something wrong, I keep trying”

or use examples you know your student will identify with example: “You took a quiz in class and didn’t do well so you went to a tutor and did better on the next quiz”

**Scoring examples:**

I independently always try even if something goes wrong 5

I always try even if something goes wrong often getting help from my coaches or peers  4

Once I get something wrong I give up 1

If something goes wrong, I need a lot of prompts from coaches, peers, and family to keep trying  2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

4. **I know how to get what I want**

    **Coach can say:**

    **This means:**
“When you want something, food, activity, etc, you know how to tell us what you want”

or use examples you know your student will identify with example: “You wanted to eat lunch in Subway instead of the DC so you told us”

**Scoring examples:**

I know exactly what to do to get what I want 5

I know how to get what I want with known activities/things/people, I need prompts in new situations 4

I don’t know what to do when I want something 1

My coaches, family, or friends often guess what I want and I wait for their help 2 A

3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

5. **I can make good choices**

**Coach can say:**

**This means:**

“When you are given options, you pick the one that is best for your life”

or use examples you know your student will identify with example: “When you are in the dinning commons you eat 1 piece of pizza instead of 3”.

**Scoring examples:**

I always make good choices 5

I mostly make good choices, sometimes need prompts from coaches 4

If I make any choices, I make bad choices 1

I very rarely make good choices, I always have to be given forced choices from coaches and peers 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼
6. I make friends in new situations

*Coach can say:*

*This means:*

“When you are in a new place, class, group you make friends or try to communicate (talking, waving, smiling) to the people around you”

or use examples you know your student will identify with example: “You introduce yourself to the girl in your class who sits next to you and exchanged numbers”

*Scoring examples:*

I make new friends independently in all situations 5

I make new friends fairly independently, sometimes needing prompting or for the friend to initiate 4

I don’t communicate or connect with anyone in new situations 1

I only make new friends if someone else begins the conversation or my ed coaches really push me to talk 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¾

Self-Realization

1. It is better to be yourself than to be popular

*Coach can say:*

*This means:*

“It’s better to be yourself and be happy than do things just to be cool”

*Scoring examples:*

I agree 100% 5

I agree but sometimes I do things to make others happy 4

I would rather be popular 1

Most of the time I do things to be popular 2
A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

2. I know what I do best

Coach can say:

This means:

“You know your what you do best in the classroom, at work, at home, etc”

or use examples you know your student will identify with example: “You know you learn best when you get the notes ahead of time”

Scoring examples:

I know everything I do best (can name at least 10 strengths) 5

I know most of the stuff I do best but sometimes need reminding (can name at least 5 strengths) 4

I don’t know any of my strengths 1

My coaches, family, or friends have to point out and remind me of my strengths 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

3. I make up for my limitations

Coach can say:

This means:

“You know how to use things you are good at to help in the areas you have trouble with”

or use examples you know your student will identify with example: “You know you have trouble reading so you also listen to books on tape and use extra notes”

Scoring examples:

I know my limitations and how to make up for them 5

Most of the time I know my limitations and how to make up for them but require some prompting 4

I don’t try to overcome any of my limitations 1
I need prompting to identify my limitations and help me decide how to make up for them 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¾

4. Others like me

Coach can say:

This means:

“Other students like to hang out with you”

or use examples you know your student will identify with example: “You know how Katie always smiles when she sees you and likes to eat lunch with you”

Scoring examples:

Others really like me and I can tell 5

Most of the time others like me 4

Others tend to not want to be around me 1

Sometimes I’m not aware of the social cues and might not pick up on when others don’t like me 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¾

5. I am confident in my abilities

Coach can say:

This means:

“You are confident in your abilities to do things in the classroom, at work, at home, etc”

or use examples you know your student will identify with example: “You know you are athletic and feel confident playing pick up basketball”

Scoring examples:

I am extremely confident, I rarely need help 5

I am usually confident, sometimes needing help 4

I am not confident in my abilities 1
My coaches, family, or friends have to point out and remind me of my abilities 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

6. I know my strengths

Coach can say:

This means:

“You know your strengths in the classroom, at work, at home, etc”

or use examples you know your student will identify with example: “You know you learn best when you get the notes ahead of time”

Scoring examples:

I know all of my strengths (can name at least 10 strengths) 5

I know most of my strengths sometimes I need reminding (can name at least 5 strengths) 4

I don’t know any of my strengths 1

My coaches, family, or friends have to point out and remind me of my strengths 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

Control-Expectancy

1. I have the skills to carry out my plans

Coach can say:

This means:

“You know how to take steps towards things you want to do”

or use examples you know your student will identify with example: “You know how to ask someone on a lunch date”

Scoring examples:

I have all the skills I need to carry out my plans on campus and at home 5
I know most of the skills I need to carry out my plans on campus and at home but sometimes need prompts from family and coaches 4

I don’t know to carry out any plans 1

I need a lot of assistance to carry out all different types of plans 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

2. I have what it takes to reach my goals

Coach can say:

This means:

“You have the skills you need to work towards your goals”
or use examples you know your student will identify with example: “You wanted to be healthy so you signed up for the gym and started going 2 days a week”

Scoring examples:

I know exactly what I need to do to reach my goals 5

I know most of what I need to reach my goals and occasionally needs some help from coaches and family members 4

I don’t know where to begin to reach my goals 1

I need a lot of assistance and prompting to reach my goals 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

3. I work hard to reach my goals

Coach can say:

This means:

“I am always working towards my goals and don’t give up even if I make mistakes”
or use examples you know your student will identify with example: “After you set the goal to take your class for credit, you asked for help when you needed it to keep working towards your goal”
**Scoring examples:**

I independently work hard towards my goals 5

I mostly work towards my goals independently, asking for help or getting minimal prompts along the way 4

I don’t work hard to reach my goals, I give up easy 1

I need daily reminders and help to work hard toward my goals 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

4. **I pay attention to get what I want**

*Coach can say:*

**This means:**

“I listen to others and am aware of the situations to get what I want”

or use examples you know your student will identify with example: “When you wanted to join a club on campus, you looked at all the flyers to see when the club met”

**Scoring examples:**

I pay attention all the time to get what I want 5

I mostly pay attention to get what I want. Sometimes my coaches or peers need to remind me to pay attention 4

I am unaware of my environment, minimal attention 1

I need a lot of reminders to pay attention to my environment and anything I want 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¼

5. **I get help from my friends to carry out my plans**

*Coach can say:*

**This means:**
“My friends help me carry out my plans”

or use examples you know your student will identify with example: “You told your friends you wanted to go to the hockey game, they offered to pick you up and go with you”

**Scoring examples:**

My friends help me carry out my plans that I tell them about 5

Some of my friends help me carry out my plans 4

I don’t have friends who help me carry out my plans 1

My coaches help me tell my friends and ask for help with my goals 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ⅓

6. **I use my teachers to help me reach my goals**

   *Coach can say:*

   **This means:**

   “My teachers help me carry out my plans”

   or use examples you know your student will identify with example: “You told your teacher you wanted to go to college, they helped connect you to the ICEI program”

   **Scoring examples:**

   My teachers help me reach goals I set 5

   My teachers help me work towards most of my goals 4

   My teachers don’t help me reach my goals 1

   My teachers help work towards my goals but I don’t always follow through 2

   A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ⅓

7. **I use my parents to help me get what I want**

   *Coach can say:*

   **This means:**
“My parents help me get what I want at school and at work”

or use examples you know your student will identify with example: “You told your parents you wanted to live with a friend, they helped you sign up for housing”

**Scoring examples:**

My parents help me get what I want all the time when I tell them 5

My parents sometimes help me get what I want 4

My parents never help me get what I want 1

It’s very rare my parents help me get what I want 2

A 3 is you aren’t sure, ed coach-feel free to use examples of specific past experiences for your student to sway them to either ½ or ¾
APPENDIX 4

COORDINATOR FOCUS GROUP GUIDE

1. When you think about SD for our ICE kids, do you use the same definition that you would use for a typical college student?
   a. What is your definition of SD for the typical college student?

2. How well do you think our ICE students would do at your college if the ed coaches and the coordinators were no longer part of the program?
   a. What challenges would they face?
   b. What problems would they be able to solve independently?
   c. Would they have the same experience as they do currently?
   d. What kids would do well, what kids would not? Why?

3. How much does the cognitive capabilities of the students affect their SD and Independent Problem Solving?
   a. Are there differences in SD for high and low functioning students?
      i. Explain

4. What is the difference between confidence and competence?

5. A lot of the feedback from ed coaches and coordinators was related to student confidence. Many reported that the students were confident in their abilities. Most of the students reported high levels of confidence in their abilities.
   a. Is confidence a good characteristic in the absence of competence?
   b. Do students have inflated levels of confidence about their abilities, their problem solving, and their SD?
   c. Has the ICE staff contributed to over confidence? Under confidence? Have any of you?

6. How much of your perception of the skills of your students have to do with your perceptions of what people with ID are capable of?
7. Johnny uses public transportation to get to and from campus every day. On Wednesday he got on the bus and made the 45 minute commute to campus as usual. When he got off the bus he walked to class with a friend. When he sat down in class and the professor gave them the art assignment Johnny realized he had forgotten his sketch pad on the bus. He then got up and left class and called his mom to tell her he left his pad on the bus.

   a. What ways did the students demonstrate SD / Problem Solving

   b. What ways did they demonstrate a lack of SD / Problem Solving

What if Johnny was a student in the ICEI Program? What if he wasn’t? Would you still think he’s SD’d more than others?

8. Sally and her family have been very concerned about her health. She went into the dinning commons with her friends and made healthy meal choices- salad with chicken and fruit. After she and her friends left the dinning commons Sally went to the small pastry vendor and bought three donuts and ate them all within 5 minutes.

   a. What ways did the students demonstrate SD / Problem Solving

   b. What ways did they demonstrate a lack of SD / Problem Solving

What if Sally was a student in the ICEI Program? What if he wasn’t? Would you still think she’s SD’d more than others?
REFERENCES


