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## Development of self-determination in youth with intellectual and developmental disabilities in 4-H programming: a qualitative study

Myra Jo Monroe

*Louisiana State University and Agricultural and Mechanical College*

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DEVELOPMENT OF SELF-DETERMINATION IN YOUTH WITH INTELLECTUAL AND  
DEVELOPMENTAL DISABILITIES IN 4-H PROGRAMMING: A QUALITATIVE STUDY

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

in

The School of Human Resource Education and Workforce Development

by  
Myra Jo Monroe  
B.S., Clemson University, 1984  
M.S., North Carolina State University, 2007  
May 2011

## Dedication

This dissertation is dedicated to my late mother, Frances Butler Monroe. I am continually inspired by her memory and guided by her example of acceptance of all persons regardless of ability or disability. I am blessed to have her for a mother and honored to have had her as a friend.

## Acknowledgements

Though only my name appears on the cover of this dissertation, many people have contributed to its production. I owe my gratitude to all those people who have made this dissertation possible and because of whom my graduate experience has been one that I will cherish forever. These printed pages, while representative of the culmination of years of study, fail to adequately reflect the greater accomplishment of relationships, both new and renewed, that have inspired me to continue on the path to find my better self. I am forever indebted to each of you for your contribution to my development as a scholar, teacher, mother and friend.

To my Lord and Savior, Jesus Christ, thank you for the strength and ability to work and learn every day. During these last four years, it has been a comfort and supply to be able to turn my life over and be still and know that you are God.

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Well, Pam, my beautiful sister, I saved you for last! Partly because I knew it would take me that long to wordsmith the words I needed! Then I realized that words would always be inadequate to impart to the many readers of this dissertation what we have shared these past four years. Little did I realize that some five years ago when you suggested I just come on down to LSU, that the degree I would receive would be secondary to the friendship we would find. You are a vision of God’s love for me as you tolerate my deficits every day. I love you for being my big sister, cheerleader, editor, confidant, babysitter, voice of reason, counselor, life raft and source of sanity. You have always remained non-judgmental of me even though I know there were times you must have dug your nails into your hand! Through that unconditional love, you created for me a safe space where I could dig deep into the muck and find the gems of my existence. Most importantly, thank you for always showing me how to ‘find the yes’ in my life. The best is yet to come!

## Table of Contents

Dedication.....	ii
Acknowledgements.....	iii
Abstract.....	vii
Chapter	
1 Introduction.....	1
2 Review of Literature.....	19
3 Methodology.....	49
4 Results and Discussion.....	73
5 Conclusions and Recommendations.....	164
References.....	183
Appendix: Sample Lesson Plans and Activity Guides.....	194
Vita.....	229

## Abstract

The purpose of this qualitative case study was to examine how 4-H programming may support positive youth development in youth with intellectual and developmental disabilities (IDD). Using Wehmeyer's Functional Model of Self-Determination as the theoretical framework, sixteen youth aged 14-21 years in an intact vocational training classroom engaged in a semester-long program utilizing direct instruction and environment theorized by Wehmeyer to enhance the emergence of self-determination in youth with IDD. This study drew from the fundamental principle that a person who was self-determined exhibited behaviors that reflected certain essential characteristics (Wehmeyer & Field, 2007). The study utilized data collected from three phases; pre-program, on-going, and post-program, and multiple sources including the students, their parent(s), the classroom teacher and the researcher. The data points elucidated the experiences of these participants and provided evidence as to the degree their 4-H experience supported positive development of independence, primarily in the realm of self-determination, by youth with IDD. Findings suggested that 4-H programming provided a context for youth with IDD that enhanced understanding and performance of behaviors related to self-determination. 4-H members demonstrated changes in their personal autonomy and autonomous functioning within their families and community settings. They demonstrated greater interest and competence in self-directed lives; and their families expressed increased confidence in permitting the youths to exercise more autonomous decision-making behaviors. 4-H members developed a higher level of cognitive understanding of self-regulation and demonstrated an increased ability to perform the behaviors related to self-management: self-monitoring, self-instruction, and self-reinforcement.

4-H members revealed a psychologically empowered personal posture within their families and community settings in reporting an increased feeling of control in their lives, realistic self-efficacy, a heightened sense of ownership and response to coaching for more effective performance of behaviors related to self-determination. Lastly, the 4-H members became better able to identify personal strengths and limitations and transfer this self-realization to other settings. Implications for 4-H agents and volunteer leaders and recommendations for future research on youth with IDD in 4-H programming were provided.

## Chapter 1

### Introduction

The National 4-H Organization is a non-formal, educational program for youth administered by the Cooperative State Research, Education, and Extension Service of the National Institute of Food and Agriculture (NIFA). With programming in over 80 countries, 4-H programs all share a common mission: to “empower youth to reach their full potential, working and learning in partnership with caring adults” (USDA, n.d.a, p.1). With its core roots in agriculture, the modern 4-H program is focused on citizenship, healthy living and science, engineering and technology programs.

Toward the end of the nineteenth century many rural youth were leaving the farms for the more financially secure opportunities offered in the cities. These opportunities for advancement, while ostensibly positive, were a source of concern for the future of rural America (Reck, 1951). During this time there existed a sentiment on the part of educators that the rural schools of the day were not related to improved farm living, choosing rather to focus on curricula geared towards more urban lifestyles (Reck, 1951). The United States Congress responded to the need for advancements in agricultural education with the passage of the Morrill Acts of 1862 and 1890 which provided federal land to establish land-grant colleges. The progressive climate of these colleges, combined with other agricultural educational agencies of the day, envisioned a pivotal role for rural youth: with their openness to new ideas and innovations, youth would be the portal through which their parents would access the land-grant university’s innovations in research and education (Wessel & Wessel, 1982). By introducing new agriculture technology in this fashion these early faculty members were laying the foundation for 4-H club work.

Due in large part to the financial support of the Smith-Lever Act of 1914 and subsequent acts, the 4-H organization became a formal entity in 1924 and has continued to grow and flourish in America (Wessel & Wessel, 1982). The curriculum offered to rural youth expanded beyond the traditional offerings and urban youth were drawn to this youth development organization. Today's 4-H program boasts enrollment in excess of six million youth in the United States representing thirteen percent of all youth recorded by the U.S. Census (USDA, REEIS Report, 2010). Current 4-H programs continue to be rooted in agriculture, but vigorously promote ideals in youth development and personal growth of the 4-H member. Life skills development became the connecting thread in various programs designed to assist youth in becoming contributing, productive, self-directed members of society. To symbolize this, the 4-H emblem, a four-leaf clover, represents the four-square approach promoted by the Extension service as necessary for youth development: educational development, fellowship development, physical development, and moral development (Wessel & Wessel, 1982).

From its inception in 1924, the 4-H organization used a model of pragmatic, hands-on learning in program delivery. Early scholars such as C.S. Peirce and William James laid the foundation of experiential learning based on empirical and pragmatic knowledge; a foundation built upon by John Dewey in his early 20<sup>th</sup> century work developing the theory of experiential learning (Sleeper, 2001). As Dewey's ideas were evolving, Cooperative Extension adopted the pragmatic concept of "learning by doing" (USDA, n.d.b, p.2). Seaman Knapp, the father of Cooperative Extension, described pragmatic learning as "what a man hears, he may doubt; what he sees, he may possibly doubt; but what he does himself, he cannot doubt" (International Adult & Continuing Education Hall of Fame, 1997, p.1). Knapp's assertion was formalized in the mission of Cooperative Extension in the Smith-Lever Act of 1914, articulated as "the

development of practical applications of research knowledge and giving of instruction and practical demonstrations of existing or improved practices or technologies in agriculture” (U.S.C., P.L. 107-293, 2002). 4-H programming carried out the mission of Cooperative Extension through home-based project work and competitions. Project-based work created an opportunity for experiential learning through a cyclical process of inquiry and reflection (Kolb, 1984) with competitions adding culmination to the experience.

With the increased focus on pragmatic methods, educators recognized that experience alone does not guarantee learning. Several models of experiential learning have been developed since Dewey’s initial work (e.g., Dale, 1946; Joplin, 1981; Kolb, 1984; Enfield, 2001; Roberts, 2006) and all concurred that for true learning to take place there must be more steps than just the experience. These models varied in the number of steps in the process but they all embraced three discrete components: a concrete experience, where the learner was involved in an exploration, actually doing or performing an activity; a contemplation phase or reflection stage, where the learner shared reactions and observations publicly and processes the experience by discussing and analyzing; and an application phase that helped the learner deepen and broaden their understanding of the situation by cementing their experience through generalizations (Kolb, 1984).

### Significance of the Study

The research literature was practically devoid of evidential substantiation as to the quality and degree of participation of youth with intellectual and developmental disabilities (youth with IDD) in 4-H. There existed largely anecdotal or token accounts of a youth with a disability, primarily a physical disability, showing a steer, riding in a bike race, etc. (Brady & McKee,

2005; Tormoehlen & Field, 1994; Stumpf, Henderson, Lukan, Bialeschki, & Casey, 2002), but what was lacking was empirical evidence of inclusion efforts and positive outcomes among youth with IDD. More specifically, there was no evidence that these youth with IDD had participated in learning activities for the purpose of educational development, fellowship development, physical development, and moral development (Wessel & Wessel, 1982).

Couple this dearth of relevant literature with reports from 4-H agents, volunteers and other stakeholders that they perceived themselves as inadequately prepared to work with youth with disabilities in their various programs (Boone, Boone, Reed, Woloshuk, & Gartin, 2006; Coleman & Booth, 1984; Ingram, 1999), and one may conclude that the 4-H experience for youth with IDD is less than optimal. Without such empirical research, extension agents and 4-H leaders may lack the awareness and understanding to adapt their methodology for delivering 4-H programming to youth with IDD so that such youth may reach their full potential for personal development.

Currently, 4-H efforts within the inclusive realm focus heavily on the physical and structural considerations that made 4-H activities accessible to youth with physical disabilities. The National Collaborative on Workforce and Disability for Youths (2004) reported that despite the positive outcomes associated with youth development programs for traditional youth, youth with IDD often were isolated from mainstream youth development programs. The opportunities in 4-H for youth with IDD have been described as “a mixed bag- much as they were more than a decade ago” (Wagner, Newman, Cameto, Levine, & Garza, 2006, pg. 78).

Just as research supported inclusion of broadly-defined special needs youth in educational programming, 4-H programming could develop a broadly-defined inclusive

environment for youth that would serve both the youth with disabilities and the youth without disabilities. Although programs were implemented that promoted physical inclusion of youth with IDD in 4-H programs, less emphasis was placed on instructional strategies that leaders can use to promote successful inclusive learning environments, such as those recommended by Inos and Quigley (1996): direct instruction, self-monitoring strategies, goal-setting strategies, and program evaluation (i.e., self-reflection). Inclusion goals may best be accomplished by a volunteer leader who has disability and inclusion training and experience beyond formal subject matter training. Volunteer leaders need supplemental training to teach social skills to youth with IDD and a real desire to accept all youth, regardless of disability. Indeed, 4-H agents self-reported that they were willing to provide such leadership but were missing these key training components (Boone et al., 2006).

Possible benefits of this research may include a better understanding of 4-H youth with IDD and the program elements that contributed to their positive youth development. A better understanding of these elements could help 4-H agents, volunteer leaders and support persons to identify, plan for, and provide support to youth with any disabilities as they participate in 4-H, thereby enhancing the experience not only for the youth with the disability, but for other 4-H members and adults as well.

### Purpose of Study

The purpose of this study was to examine how 4-H programming may support positive youth development in youth with IDD, using a qualitative methodology. The specific research focus is on one characteristic of positive youth development: independence, and the particular component of self-determination, in youth with IDD. The central question of this study was:

How may 4-H programming support positive development of independence, primarily in the realm of self-determination, in youth with intellectual and developmental disabilities?

To focus the qualitative study while leaving the discovery process open, the four sub-questions become the topics that are specifically explored in the data collection (Creswell, 1998; 2003). The sub-questions for this study were:

- 1) How may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to autonomy?
- 2) How may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-regulation?
- 3) How may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to psychological empowerment?
- 4) How may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-realization?

### Functional Theory of Self-Determination

Advances in the rights of people with disabilities over the past two decades evoked an increased focus on the importance of self-determination in education. Six researchers were funded in 1990 by the US Department of Education, Office of Special Education Programs, to develop projects targeted at the promotion of self-determination as a component of transition services for youths with IDD. Among these six researchers was Michael Wehmeyer. His work

on self-determination provided a Functional Theory of Self-Determination that defined self-determination as a dispositional characteristic describing the function of a person's behavior in becoming a causal agent in one's life (Wehmeyer, Abery, Mithaug, & Stancliffe, 2003, p. 176).

Wehmeyer's work while developing the Functional Theory of Self-Determination applied research in personality, social and developmental psychology to the education of youth with IDD (Wehmeyer, 1999). Wehmeyer adopted the position of personality psychologists such as Hall and Lee in 1957 (cited in Wehmeyer et al., 2003) that it is imperative to study the whole person to understand human behavior. Furthermore, human behavior must be studied in context and interpreted in relation to the rest of the individual's behavior (Wehmeyer et al., 2003). In constructing a Functional Theory of Self-Determination, Wehmeyer categorized self-determination as a disposition; that is "people who consistently engage in self-determined behaviors can be described as self-determined, where self-determined refers to a dispositional characteristic" (Wehmeyer et al., 2003, p.179). He added that dispositional characteristics involve "the organization of cognitive, psychological, and physiological elements in such a manner that an individual's behavior in different situations will be similar (though not identical)" (Wehmeyer et al., 2003, p.179). Self-determined people begin to exhibit self-determination across settings. Such behaviors were used to characterize people and were evidenced by the differences between people.

Wehmeyer defined self-determination by the function served by the person's actions or behaviors (Wehmeyer, 1996; 1999) when "acting as the primary causal agent in one's life free from undue external influence or interference" (p.24). Wehmeyer delineated what he described as the constitutive definition of the self-determination with four essential characteristics that

must be present for one's actions to be considered self-determined behavior: (1) the person acted autonomously; (2) the behavior was self-regulated; (3) the person initiated and responded to the event in a "psychologically empowered" manner; and (4) the person acted in a self-realizing manner (originally presented in Wehmeyer, 1992, p. 304).

Wehmeyer and colleagues then operationalized the definition of self-determination by originally identifying a set of eight component elements of self-determined behavior (Wehmeyer, Sands, Doll, & Palmer, 1997), later expanding the list to twelve (Wehmeyer et al., 2003). Any researcher using Wehmeyer's theory and focusing on the four essential characteristics of self-determination to develop interventions, instructional methods, curricula, or assessments must consider these operational component elements: choice-making skills, decision-making skills, problem-solving skills, goal-setting and attainment skills, independence, risk-taking and safety skills, self-observation, evaluation and reinforcement skills, self-instruction skills, self-advocacy and leadership skills, internal locus of control, positive attributions of efficacy and outcome expectancy, self-awareness, self-knowledge (Wehmeyer et al., 2003). In an individual, self-determination emerges through the increased knowledge resulting from direct instruction and the increased confidence resulting from opportunities for practice and application or transfer of these interrelated, operational component elements (Wehmeyer et al., 2003). The Functional Theory of Self-Determination posits that self-determination emerged across the life span as people learned skills and developed attitudes that revealed these component elements (Wehmeyer, 1999). As such, these skills and attitudes enabled people to be causal agents in their lives and to act volitionally (Wehmeyer, 1996).

Wehmeyer then shaped a Functional Model of Self-Determination based on his Functional Theory of Self-Determination (see Figure 1). The Theory described the four essential characteristics of self-determined behavior; the Model displayed the inputs comprising capacity, opportunity and supports that impact the four essential characteristics: people that are self-determined acted autonomously, were self-regulating, acted in a psychologically empowered manner, and were self-realizing (Wehmeyer et al., 2003). Assessing the four functional characteristics allowed a researcher to determine a person's location on the continuum of relative self-determination. Furthermore, the model predicted that the emergence of self-determination was based on the enhancement of individual capacity as well as environments and supports that emphasized the operational component elements.

To stimulate individual capacity development, students must receive direct instruction in the use of the operational component elements (Stancliffe & Wehmeyer, 1995). Additionally, during the course of direct instruction on the operational component elements, the students must be provided opportunities to practice each of the operational component elements as a volitional and causal agent (Wehmeyer & Kelchner, 1995).

In general, the emergence of self-determination was associated with adolescence and recognized as accomplished by most people upon reaching adulthood. Sands and Wehmeyer (1996) emphasized that while self-determination may be viewed primarily as an adult outcome, it may only be achieved if there was a lifelong focus on the development of self-determination beginning in early childhood. The primary target for self-determination development as outlined in Wehmeyer's model was youth with various disabilities, primarily intellectual and developmental. As with any child, persons with IDD (of any age) were limited in their cognitive

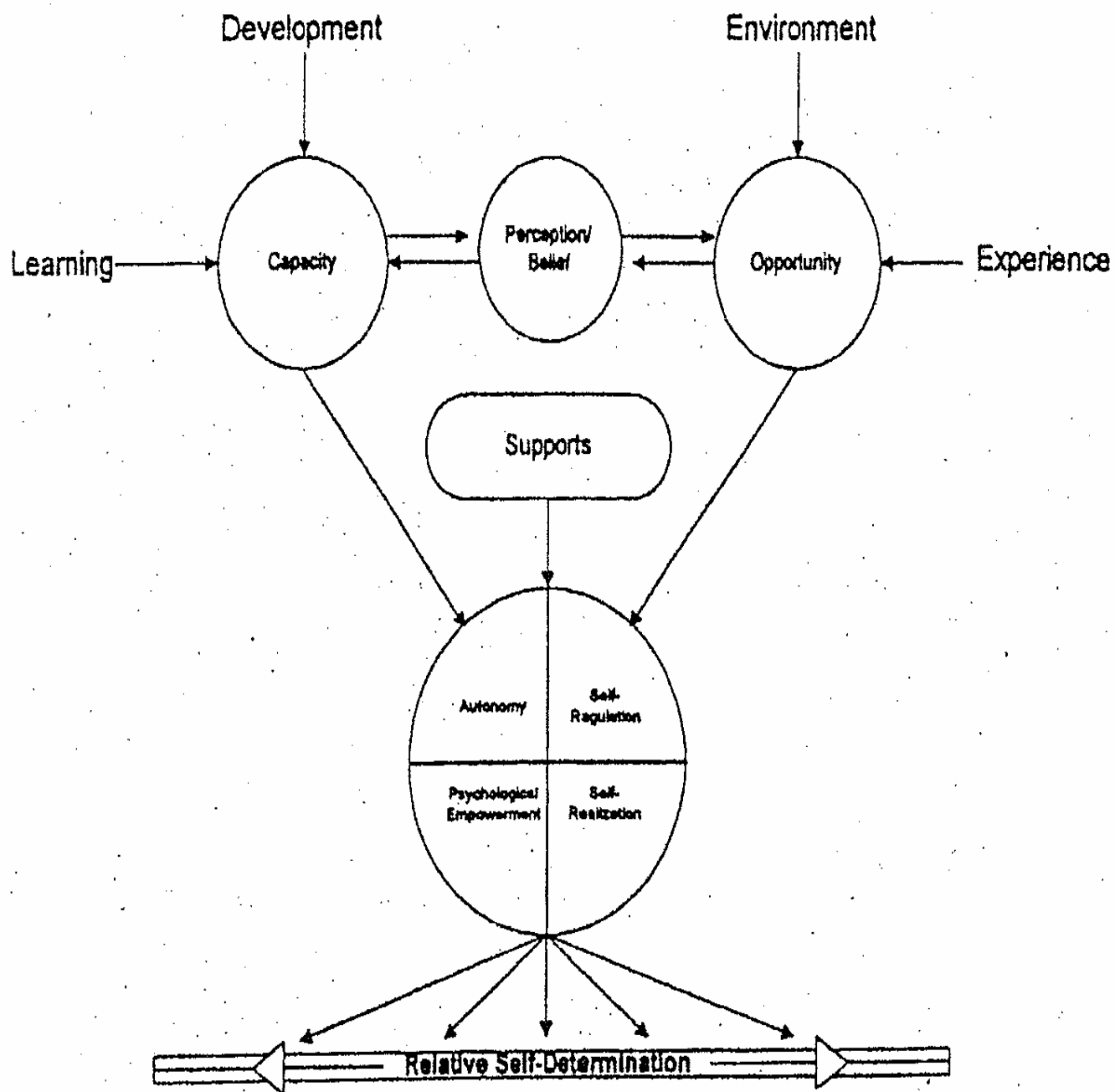


Figure 1: Wehmeyer's Functional Model of Self-Determination (Wehmeyer et al., 2003)

understanding of, as well as opportunities to practice, the operational component elements. Viewed as part of the process of individuation, the emergence of self-determination must be accompanied by critical milestones in an adolescent's development. It was impractical to expect a child independently to comprehend self-determination instruction or perform actions recognized as self-determined behaviors before a certain maturity level (Ryan & Deci, 2000).

### Rationale for Study

Reflecting upon the statement of purpose for this study - to examine how 4-H programming may support positive youth development in youths with IDD – there were several reasons that undergird the rationale for this study. First, as the 4-H organization adopted the philosophies of positive youth development to guide interaction with all youth, Wehmeyer's Functional Theory of Self-Determination provided a parallel basis for positive interaction with youths with IDD. These two ideas were similar enough to provide a solid philosophical and theoretical foundation from which to explore self-determination in the context of 4-H programming. Second, self-determination research suggested that youth with IDD would benefit from student-centered learning as such environments could facilitate individuation and lead to self-directed lives. Next, the 4-H organization provided the necessary opportunities for youth with IDD to practice the operational component elements of self-determination in a safe environment and the support of caring adults such as agents, volunteer leaders, and parents; accommodating environments; and predictable consequences necessary for youth to express self-determination (Field & Hoffman, 2001). Finally, the 4-H organization provided the elements that Wehmeyer theorized were essential to the emergence of self-determination in youth with IDD,

thus providing the fundamental rationale for this study. This four-part rationale is briefly developed below.

In the late 1990's, the 4-H organization formally adopted the philosophies of positive youth development. The National 4-H Impact Design Implementation Team – Critical Elements group was comprised of land-grant university faculty including Stephen Carlson, University of Minnesota, chair; Kirk Astroth, Montana State University; Laura Marek, University of Connecticut; Ina Lynn McClain, University of Missouri; Anne Rumsey, University of Idaho; and Gary Gerhard, Kansas State University (K. Astroth, personal communication, March 9, 2011). Team members were asked to determine the essential elements of positive youth development associated with 4-H programming. The original eight elements offered by this team were: a positive relationship with a caring adult; a safe environment -- physically and emotionally; opportunity for mastery; opportunity to value and practice service for others; opportunity for self-determination; an inclusive environment (encouragement, affirming, belonging); opportunity to see oneself as an active participant in the future; and engagement in learning (Kress, 2004). Coincidentally, all of these elements can be identified within the Functional Model of Self-Determination Wehmeyer developed a few years earlier with its focus on youth with IDD.

Authors of self-determination research in the 1990's suggested that youth with IDD would benefit from student-centered learning as such environments could facilitate individuation and lead to self-directed lives (Algozzine, Browder, Karvonen, Test, & Wood, 2001). Overall, the experiential learning concept in 4-H was appealing for all students as it was student-directed,

hands-on, and allowed for individually paced, flexible learning. The challenge has been that youth with IDD may experience difficulty making the abstract leaps required in experiential learning without first having “conspicuous strategies” that infuse direct instructional methods into experiential learning environments (Kame’enui & Simmons, 1999; p. 15). The implementation of self-determination instructional methods was meant to blend the two teaching strategies, teacher-directed and student-directed, in that the teacher or 4-H leader directed the learning only as it concerned teaching the youth with IDD to self-direct their own learning (Field & Hoffman, 1996). The 4-H agent or volunteer leader may then be able to provide the direct instruction and assist the youth with IDD in experiential learning methods of reflection and evaluation. The blending of these two instructional styles in educational settings may promote a more effective learning environment for youth with IDD (Dever & Knapczyk, 1997).

The third reasoning that undergirded this study was the opportunities for youth with IDD to practice the operational component elements of self-determination in a safe environment and the support of caring adults such as agents, volunteer leaders, and parents; accommodating environments; and predictable consequences necessary for youth to express self-determination (Field & Hoffman, 2001). Wehmeyer’s Model of Self-Determination indicated the impact of the opportunities to practice the operational component elements of self-determination in a safe environment on emerging self-determination (Wehmeyer et al., 2003). Youth with IDD may not be offered adequate opportunities to practice self-determined behaviors, as the adults in their settings may be overly cautious, unresponsive to the youths’ efforts, or unwilling to believe the youth are capable (Wehmeyer, 2007). For youth with IDD, Wehmeyer proposed the incorporation of structured opportunities designed specifically to give the youth complete control over their choices and decisions (Wehmeyer, 2007). Furthermore, these structured opportunities

should have natural, predictable consequences, positive or negative, for the youths' choices and decisions. Once a consequence, positive or negative, has occurred as a response to the youth acting on his or her choices, it was important for a teacher or leader to guide the youth through the reflection process to arrive at the evaluation. The structure and delivery mode of 4-H project work provided structured opportunities for all youth. The range of 4-H project complexity provided stimulating opportunities in an environment that forgives failure and acknowledges success.

The final aspect of the rationale for examining how 4-H programming may support positive youth development in youth with IDD was that 4-H programming provided youth with IDD the supporting individuals that Wehmeyer deemed necessary for the emergence of self-determination (Wehmeyer et al., 2003). These supports included caring adults, such as 4-H extension agents and volunteer leaders. Additionally, the 4-H organization encouraged the involvement of parents and family as member of the support network. Another type of support was an accommodating environment that can be personalized for the youth with IDD (Field & Hoffman, 2001). A third type of support important for these youth was one in which consequences for actions were predictable (Field & Hoffman, 2001). For youth with IDD to feel safe and to take risks related to the development of self-determination, they must be comfortable with an environment where consequences were explicit and predictable.

In sum, 4-H programming provided the elements that Wehmeyer theorized were essential to the emergence of self-determination in youth with IDD, thus providing the fundamental rationale for this study. As with promoting positive youth development, 4-H was identified to be

an effective youth development program by providing positive adult-youth relationships, skill-building activities, and youth leadership in the program (Lerner, 2004).

### Limitations of the Study

This study explored how 4-H programming may support positive development of independence, primarily in the realm of self-determination, in youth with IDD. Meaningful participation in any group or activity may be significantly influenced by multiple factors external to the planned setting in which it does or does not occur. For this reason, the phenomenon of context needed to be studied naturally without manipulation or control of variables. 4-H activities and programs are distinct and varied, as are the learning environments within these activities and programs. Data gathered in different activities and programs were dependent on these contexts, thus the context of each case was limited in the transferability of the findings to other groups. However, the use of qualitative research to provide a thick, rich description of the activities and programs allowed the reader to judge the information and make his or her own decision about whether or not the themes that emerged from the research may be transferred to other situations.

Another limitation of this study was the school-based 4-H program delivery in Louisiana versus the more traditional delivery of 4-H programs in community clubs. Having access to the youth in their school venue provided a more consistent setting and uniform delivery of the curricula. Such regularity may not be possible in states with primarily club based delivery methods for 4-H programming, where students may not be together every day.

A limitation to be noted in a qualitative approach was the participants' biases as a threat to establishing trustworthiness in this study. Due to the personal, friendly nature of the relationship between the researcher and the participants and parents, the participants or their parents may have responded in ways they thought would be pleasing. Being part of an extra-curricular activity, the participants' level of enjoyment was heightened and the participants or parents may have been more reluctant to report negative feedback that might have impacted the program's sustainability. This could have caused them to offer socially desirable interpretations of situations that may have not been altogether positive. I was constantly aware of this limitation and addressed any suspected biases with the classroom teacher and committee members to assess the authenticity of my interpretation of the student or parent account.

Finally, it was impossible to conduct qualitative research without acknowledging researcher bias and subjectivity. Unlike traditional positivist research designs that suggest research should be done with no personal significance, qualitative research reflects the researcher's personal beliefs and values in the choice of the research topic as well as the methodology and interpretation of findings. The inclusion of youth with IDD in 4-H programming was personally important to me as was the development of self-determination in youth with IDD. Clearly, who I am, my life's circumstances, career goals, and philosophical orientation were connected to this research topic, but these factors did not undermine the study. I believe these factors strengthened my desire to be objective as there was a personal stake in the accurate interpretation of these findings. At best, the findings of this study presented a partial truth as to the support of self-determination in youth with IDD by 4-H programming as they were dependent on the particulars of the research design. As future research on this topic may be

conducted, these findings may be used with other partial truths to bring us closer to stronger 4-H programming for all youth with disabilities.

### Approach

To discover the answers to the research questions previously presented, a case-study (Yin, 2009) approach was deemed appropriate for this exploratory study due to the dearth of empirical research on the question under consideration and because of the subject matter, the context, the data sources and types, and the participants in this study (Creswell, 2003). The research was conducted in a 4-H club within a vocational training class for 14 to 22 year old youths with IDD within an accredited K-8 private school. All activities for this group were conducted in a natural setting conducive to a comfortable, learning environment. The study participants were all familiar with the researcher in the role of 4-H leader and with the 4-H program in general. Additionally, all the study participants shared a common experience within the school as they remained within the same educational group for the entire day.

This study utilized data collected from pre-program assessments with the sixteen students, parent(s) and classroom teacher, journals, student activity books, mid-program interviews with students, researcher observations, post-program assessments with the sixteen students, parent(s) and classroom teacher, and post-program semi-structured interviews with the sixteen students and their parent(s) in an effort to understand and describe the experiences of these students. The data points elucidated the experiences of these participants and provided evidence as to the degree their 4-H experience supported positive development of independence, primarily in the realm of self-determination, by youth with IDD.

## Chapter 1 Summary

In summary, 4-H programming is committed to advance the principles of positive youth development among today's youth. Within the 4-H population are youth with various disabilities, including intellectual and developmental disabilities. Self-determination in youth with IDD was recognized as an invaluable factor for successful adult outcomes (Wehmeyer, 2007). According to Wehmeyer's Functional Theory of Self-Determination and delineated in the Functional Model of Self-Determination, the inputs of direct instruction, opportunity to practice and support network positively impact the emergence of self-determination. Through qualitative methods, this research examined the experiences of youths with IDD in 4-H club activities, supplemented with a self-determination instructional method. This information was significant because it explored practices that could contribute to or inhibit the depth of the 4-H experience of youths with IDD. Chapter 2 of this study reviewed the literature on the 4-H approach to positive youth development and self-determination among youth with IDD, including the characteristics of self-determined behaviors and the primary factors that positively impact its emergence. Chapter 3 was devoted to a discussion of the methodology for this study including the rationale for using qualitative methods. Chapter 4 presented the findings as elucidated from the data and discussion of the findings. Chapter 5 closed the study with a summary and conclusion along with implications to be drawn from the study.

## Chapter 2

### Review of Literature

#### Introduction

Given the purpose of this dissertation, it was appropriate to review the relevant literature pertaining to the emergence of self-determination among youth with IDD. Although there was a plethora of work on the construct of self-determination, this study was viewed through the lens of Wehmeyer's Functional Theory of Self-Determination and the related Functional Model of Self-Determination. The researcher used Field and Hoffman's (1994) subsequent work, which included a self-determination instructional curriculum; and the study was placed within the context provided by 4-H for positive youth development. In order to set the context, the literature review began with a brief overview of the 4-H organization and the 4-H program commitment to positive youth development, then further explored the development and application to 4-H of Wehmeyer's Functional Model of Self-Determination. Chapter 2 closed with a review of the linkage of Field and Hoffman's self-determination instructional curriculum to Wehmeyer's Functional Theory of Self-Determination, and application as a pedagogical tool for use with youth with IDD in 4-H programming.

#### Early Legislation for Involvement of Youths with IDD in 4-H Programs

Youth with disabilities were reported as enrolled in 4-H clubs before federal mandates for inclusion existed (Wessel & Wessel, 1982), but the passage of civil rights laws in the 1960s brought about changes in 4-H programs to begin examining how to meet the needs of youth with IDD. 4-H expansion and review committees were formed to review 4-H programming trends as

to service of underserved audiences and made recommendations for future programming. A result of the civil rights laws associated with 4-H programming was similar to the results observed in other youth organizations of the day: to seek out ways to serve minority and underserved populations.

An early accounting of reform efforts was conducted by the Children's Bureau of the U.S. Department of Health, Education and Welfare over a three-year period in the late 1960s and early 1970s. In the final round of their study, the authors surveyed 616 agencies to estimate the type and quality of recreation services provided to physically disabled and mentally retarded youths and to identify barriers and recommend strategies for continued provision of services (Berryman, Logan & Lander, 1971). Within this sample were twenty-four randomly selected Cooperative Extension Service (CES) offices in nine states. Twenty-two offices reported involvement of youths with disabilities in their 4-H programs, with numbers served ranging from 4 to 900. The majority of the youths with disabilities in the study (68%) reported were identified by the offices as mentally retarded youths who participated in special clubs organized for mentally retarded youths in their special school settings (Berryman, Logan & Lander, 1971).

Also among the civil rights laws were several federal mandates concerning people with disabilities; these were primarily accessibility laws. The mandates included the Architectural Barriers Act (ABA) of 1968, the U.S. Rehabilitation Act of 1973, and Section 504 of the Rehabilitation Act in 1975, all of which provided for access to federal buildings and into the general workforce by barring discrimination, and provided for greater workplace equity and reasonable accommodations. In response to this federal legislation, the National 4-H Council published Together, a volunteer leader/agent workbook for 4-H programming to include youths

with disabilities (Krall, 1982). The Section 504 law was an especially powerful force in motivating youth organizations to put together publications like Together. Section 504 of the Rehabilitation Act of 1975 (US Dept. of Justice, 2005) specifically had a final pronouncement on 4-H programs by stating that “no otherwise qualified individual with a disability in the United States . . . shall, solely by reason of [her or] his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance . . .” (29 U.S.C. § 794). From this point on, 4-H clubs were not just available for youth with IDD to participate, they were obligated.

It was in this context that Together encouraged programming that practiced integration of youths with and without disabilities. Together moved beyond basic accessibility and included goals of self-direction, productivity, social development, self-worth, belonging and vocational skill development through real-life experience (Krall, 1982). Krall (1982) called for 4-H to be an “organization free of attitudinal and architectural barriers” (p.1), and to offer “examples of successful mainstreaming” (p.2) through expansion of current 4-H programming. This guide also contained brief reports of 4-H programs involving handicapped youths from eighteen states. Activities in the identified programs were widely varied and included project work, various teaching styles, camping programs, life skill training, civic activities, and therapeutic riding programs. While all the states reported integration efforts, fourteen of the states reported that primary programming for the youths was conducted in institutional settings or one-on-one settings rather than the integrated programming encouraged in the workbook (Krall, 1982). Even with early well-intentioned efforts, the 4-H organization was not yet fully engaged in incorporating youth development strategies for youth with IDD.

## Contemporary Legislation for Involvement of Youths with IDD in 4-H Programs

The Americans with Disabilities Act (ADA) became law in 1992 and was perhaps the most well known federal civil rights statute offering the broadest protection of persons with disabilities. The ADA prohibited discrimination on the basis of disability in employment, state and local government, public accommodations, commercial facilities, transportation, and telecommunications (US Dept. of Justice, 2005). The intention of this act was primarily to define disability and provided that the determination of suitable accommodations rested with the courts to be decided on a case-by-case basis. The goal of the ADA was to create a civil rights law that protected people with disabilities from discrimination on the basis of their disabilities. The sweeping force was to open doors for all people with disabilities and to positively impact the level of acceptance and awareness of people with disabilities.

In an effort to return to the spirit of the law outlined in the ADA, Congress passed the ADA Amendments Act (ADAAA) in September 2008. This update focused on the discrimination at issue instead of the individual's disability. Additionally, the ADAAA redefined disability and hence removed the narrowing conditions imposed on disability definitions by the courts. The refocusing of the courts on the basis for the discrimination rather than the specific disability of the victim was working to restore the original intent of the ADA – to take a “sledgehammer to another wall, one which for too many generations separated Americans with disabilities from the freedoms they could glimpse, but not grasp” (Bush, 1990, para.15). The ADAAA served to eradicate that wall completely by removing the mitigating measures from consideration in court determinations thereby assuring people with disabilities full participation in society.

The response of 4-H programming to this legislation was to offer agents and volunteer leaders professional development through the availability of handbooks and guidelines for including youth with disabilities in their club activities. The common bond that linked these guides was an emphasis on raising awareness of disabilities and physical accommodations needed by disabled persons. Many states published Extension bulletins and fact sheets while a few states published more thorough programming guidelines. Following are highlights of some of the publications:

A Perfect Fit- published by Purdue University CES in 1994, this booklet touched on three areas: raising awareness of 4-H programs among parents of youths with disabilities and their right to participate, raising awareness of issues facing youths with disabilities among 4-H professionals and volunteers, and providing suggestions to accommodate full participation of the youths in 4-H (Tormoehlen & Field, 1994).

Youths With Special Needs Leaders Handbook- published by University of California 4-H State Ambassador Team in 2004, this handbook served as an information source on techniques for specific disabilities, procedural guide for gathering information from parents, mainstreaming suggestions, and physical accommodation requirements (Emerson & Wheeler, 2004).

Walk in Someone Else's Shoes- published by the University Of Wisconsin Extension Department Of Youths Development in 1999, this program was designed as a disability awareness program to increase non-disabled persons' understanding and acceptance of persons with disabilities. This program utilized workshop type settings for dissemination of disability education and the participants were offered the opportunity to participate in a service-learning type event to support local community disability programs by fundraising activities (Retzleff, 1999).

The Winning 4-H Plan- designed by Extension professionals from Ohio, this guide provided lessons on sensitivity training for disability awareness and possible intervention strategies (Goble & Eyre, 2008).

These examples were only a few of the guides that were available from the various state CES offices. In each case, virtually all of the focus in the guide was on accessibility, awareness,

and accommodations of youths with disabilities in 4-H programming. Little emphasis was given to adapting curricula or training 4-H leaders, volunteers, and support persons to encourage active engagement of youth with IDD in the kind of youth development for which the 4-H organization was known: “to empower youth to reach their full potential” (USDA, n.d.a, p.1).

#### 4-H and Positive Youth Development

The adoption of positive youth development philosophy by the 4-H organization served as a strong foundation for the advancement of 4-H programming into the special needs populations. It allowed 4-H programs to focus on youths’ strengths rather than the perceived deficits inherent in the youths’ disabilities (Lerner, Lerner, & Phelps, 2008). A philosophy of positive youth development unified youth with IDD and regularly developing youth through a positive orientation focused on asset-building.

The work done in 1999 by the National 4-H Impact Design Implementation Team to identify eight critical elements of positive youth development fundamental to 4-H was refined further and summarized into four key concepts commonly referred to as BIG-M: belonging, independence, generosity, and mastery (Brendtro, Brokenleg, & Van Bockern, 2002). Findings from the 4-H Study of Positive Youth Development revealed that youth involved in programs designed around these concepts develop attributes documented as the 5 C’s: competence, confidence, character, caring, and connections (Lerner et. al., 2005). These attributes were introduced as goals in early work in positive youth development and defined fully (Lerner, 2007) as:

Competence- the ability to perform adequately in the world; being able to accomplish what is needed so as to have effective interactions with other people and social institutions (p.47);

Confidence- the perception that one can achieve desired goals through one's actions; confidence is how we feel; what you believe you can do (p.76);

Character-respect for societal and cultural rules, standards for correct behaviors, a sense of right and wrong and integrity (p.139);

Caring- feeling empathy and sympathy and behaving morally based on those emotions (p.106); and

Connection- understanding relationships and the importance reveals that positive connections to others contribute to our personal well-being and the well-being of others (p.108).

In adopting these concepts related to positive youth development, the 4-H organization demonstrated a commitment to supplying all youth with the nourishing, supportive environments designed to maximize their full potential as healthy, contributing adults. In such environments, all youth knew they were cared about by others, believed they were capable and successful, knew they were able to influence people and events, and practiced helping others.

### Self-Determination

The era of disability rights and the legislative response detailed earlier was well established by the 1980's, in addition to the need to establish a definitional framework. The earlier movements of civil rights actions and the right to integration gave way to the disability rights advocate movement in the 1970's. The self-advocacy movement began to focus people's priorities on equal opportunity as opposed to equal access (Shapiro, 1993). It was during this period that self-advocacy groups began to take shape all over the country. The recognition of self-determination and its importance to disabled persons was evolving quickly for adults with disabilities.

The value of self-determination among youth with disabilities advanced with the Office of Special Education and Rehabilitative Services (OSERS) initiative to support model demonstration projects to teach skills necessary for self-determination development among youth (Ward, 1988). As a result of work performed in response to the OSERS initiative, three areas were identified: 1) self-determination needs to be addressed systematically through a specific curriculum, 2) youth with disabilities must receive training in school to develop related skills and have opportunities to practice those skills, and 3) this training needs to begin very early to circumvent unnecessary dependence and feelings of inability to define the youth (Ward & Kohler, 1996).

The U.S. Department of Education, recognizing the importance of supporting self-determination in youth with disabilities drove a stake firmly in the ground by declaring “self-determination is the ultimate goal for education” (Halloran & Simon, 1995, p.95). The National 4-H Impact Design Implementation Team–Critical Elements group, which comprised of land-grant university faculty including Stephen Carlson, University of Minnesota, chair; Kirk Astroth, Montana State University; Laura Marek, University of Connecticut; Ina Lynn McClain, University of Missouri; Anne Rumsey, University of Idaho; and Gary Gerhard, Kansas State University (K. Astroth, personal communication, March 9, 2011), were asked to determine the essential elements of positive youth development associated with 4-H programming. Additionally, the team was asked to identify the positive outcomes one would expect to see in youths as a result of exposure during 4-H programming to each of the essential elements. The essential element of interest in the present study was opportunity for self-determination, and regarding this, the team suggested the following as positive outcomes:

“Believing that you have impact over life’s events rather than passively submitting to the will and whims of others is self-determination. Youth must exercise a sense of influence over their lives, exercising their potential to become self-directing, autonomous adults” (Kress, 2004).

The 1990 reauthorization of the Individuals with Disabilities Education Act (IDEA; P.L. 101-476) provided a myriad of improvements for the education of youth with IDD. The emphasis placed on student input as to transition services gave youth with IDD the right to express their preferences and desires and be heard. This emphasis triggered the emphasis on self-determination instruction among youth with IDD in an effort to address the knowledge, skills, and attitudes needed to avail themselves of their rights.

Beyond the 1990 IDEA, federal legislation confirmed the value of promoting self-determination among youth with IDD in several acts, policies and funding initiatives, including IDEA, 2004; National Council on Disability, 2004; President’s Commission on Excellence in Special Education, 2002; and the Rehabilitation Act Amendments of 1998. The findings from the research spurred as a result of the high regard placed on self-determination supported the importance of self-determined behavior among youth with IDD. The indications from the research posited that enhanced self-determination improves student performances and post-school transitions in diverse areas: academics (Martin et al., 2003); independence (Sowers and Powers, 1995); quality of life (Wehmeyer & Schwartz, 1997); employment status (Wehmeyer & Palmer, 2003); and postsecondary participation (Field, Sarver, & Shaw, 2003). The necessity for continued emphasis on promoting self-determination among youth with IDD was evidenced by a “consistent trend characterized by self-determined youth doing better than their peers” (Wehmeyer & Schwartz, 1997, p.253). After exploring Wehmeyer’s definition of self-

determination, attention turns to the essential characteristics of the model derived from the guiding theory of this study and their application to 4-H.

In sum, the 4-H organization readily responded to early federal legislation with early consideration of methods to meet the needs of youth with disabilities. 4-H programming promoted the elements of positive youth development which coincided with the environment that Wehmeyer theorized was essential to the emergence of self-determination in youth with IDD. Along with promoting positive youth development, the 4-H organization identified the opportunity for self-determination as an essential element of positive youth development and a feature of 4-H programming. The 4-H organization was chosen as the organization for this study to be an effective youth development program in its promotion of positive adult-youth relationships, skill-building activities, and youth leadership in the program (Lerner, 2004).

Defining Self-Determination. Self-determination has been conceptualized in psychological and educational literature as an innate capacity or need, a form of self-regulation, a personality trait, a form of motivation, and/or a dispositional characteristic of individuals (Wehmeyer et al., 2003). Early work in the area of self-determination focused on psychological interests in human nature and the social environments that support or inhibit the natural tendencies for social development and personal well-being. According to self-determination theories, the elements of self-determination were learned most effectively through real-world experiences (Ryan & Deci, 2000), active participation (Brooks, 1992) and meaningful relationships (King, Law, King & Rosenbaum, 1998). These findings suggest that 4-H programming may provide an effective, natural environment for promoting opportunities for self-determination as one of the critical elements of positive youth development.

Wehmeyer (1996; 1998; 2001) focused his definition of self-determination on the person “acting as the causal agent in one’s life and making choices and decisions regarding one’s quality of life that are free from undue external influence” (p. 22). This definition revolved around the recognition of behaviors that people generally believe demonstrate self-determining attributes. As such, people that performed behaviors exhibiting these attributes were characterized as being self-determined people. Each of these self-determining attributes developed uniquely in humans and through specific learning experiences. This development was not meant to occur solely during an intervention, such as the programming offered in this study, but rather through the synchronization of one’s learning experiences into a lifelong process spanning the whole of one’s life. However, the purpose of a curricular intervention was to provide direct instruction and intentional experiences that exposed students to behaviors characterized as self-determined behaviors. The concept behind such an intervention was that actions that reflected self-determination also promoted it; therefore students had the opportunity to perform self-determined behaviors.

The notion of a person as a causal agent in his or her own life was an important aspect of Wehmeyer’s definition of self-determination. A causal agent makes things happen in his or her life (Deci & Ryan, 1985). The concept was understood as indicating the presence of control and empowerment, not necessarily the physical performance of the act itself. Wehmeyer’s definition embraced both process and outcome as it recognized self-determination as both an educational outcome while remaining a life-long process for the person. Wehmeyer (1998) was clear that self-determination should not be viewed as an independent performance, but rather a life process. Self-determination focused on taking control over one’s life to the fullest extent possible or desired by the individual. All people disabled or not, can achieve self-determination when

provided with direct instruction and opportunities to practice behaviors that evidenced self-determination (Wehmeyer, 2007).

Wehmeyer's Functional Model of Self-Determination operationalized his Functional Theory of Self-Determination (please refer again to Figure 1). Wehmeyer (et al., 2003; 2007) described capacity as the "individual's assessment of existing resources" (p.9), where it intersected with the individual's cognitive development and learning or access to direct instruction. Opportunity referred to "aspects of the existing situation that will allow [the individual] to achieve the desired goal" (p. 9). Opportunity was impacted by environments that supported the expression of self-determination (Wehmeyer & Field, 2007) and experience was the pragmatic component within the opportunity environment. Opportunity and capacity regulated through a "function of repeated interaction" (Wehmeyer et al., 2003, p.187) until there was an optimal match where the individual's perceptions and beliefs reached a level of confidence in his or her competence to perform the operational component elements of self-determined behavior. Wehmeyer et al. described the context for this "function of repeated interaction" (p.187) as one of supports facilitated by but not limited to mentors, teachers, 4-H agents, parents, peer support groups, or any similar person or group. The process served by performance of the operational component elements was to provide an opening for self-determination to emerge within a person through increases in actions identified by four essential characteristics of self-determination and the function served by those actions. These operational component elements were purposeful as functional behaviors characterized by the four essential characteristics of self-determination. As behaviors related to the four essential characteristics emerged, the youth moved along a continuum of relative self-determination. Wehmeyer's (2007) development of the Functional Model continued to be informed through an iterative process in

which researchers simultaneously validated and challenged his thinking, a fact acknowledged repeatedly in his writing (e.g., Doll, Sands, Wehmeyer, & Palmer, 1996; Mithaug, 1996, 1998; Field & Hoffman, 2002).

The focus of this study was to examine the four essential characteristics of self-determination, the functional behaviors related to the characteristics, the context for direct instruction, and opportunity to practice presented by 4-H activities. Wehmeyer (Wehmeyer & Field, 2007) suggested that a person's behavior was self-determined if the behavior reflected four essential characteristics:

- a) The person acts autonomously - the person acts according to his or her own preferences, interests and/or abilities, and independently, free from undue external influence or interference; (p.5)
- b) The behaviors of the person are self-regulated – the person makes decisions about which skills to use in a situation; examines the task at hand and their available repertoire; and formulates, enacts, and evaluates a plan of action with revisions when necessary; (p.5)
- c) The person initiates and responds to the action in a psychologically empowered manner - psychologically empowered people act based on the belief that they have the capacity to perform behaviors needed to influence outcomes in their environment and, if they perform such behaviors, anticipated outcomes will result. (p.5)
- d) The person acts in a self-realizing manner – a person's actions are self-realized if he or she uses a comprehensive, and reasonably accurate, knowledge of themselves and their strengths and limitations to act in such a manner as to capitalize on this knowledge in a beneficial way. (p.5)

Because the four essential characteristics of self-determination described above were the primary themes around which the data in this study were organized, each was examined in greater detail below.

Autonomy. The word autonomy is from the Greek *auto monos* meaning self rule (Haworth, 1986). Lewis and Taymans (1992) provided a definition for autonomy as “a complex concept which involves emotional separations from parents, the development of a sense of personal control over one’s life, the establishment of a personal value system, and the ability to execute behavioral tasks which are needed in the adult world” (p. 37). This definition framed autonomy resulting from either, but not necessarily both, of two constructs: a person’s actions and his/her state of mind. The actions, in order to reflect autonomy, were undertaken independently, free from “undue external influence” (Wehmeyer, 1992, p. 305). However, for persons unable literally to perform the actions, autonomy is reflected through their orchestration of actions in accord with their own preferences, interests, and abilities.

In Wehmeyer’s Functional Model of Self-Determination, the characteristics of autonomy were two-fold: individuation which was drawn from the developmental psychology literature and behavioral which was drawn from literature focused on intervention (Wehmeyer, 2007). Individuation, as related to developmental psychology, referred to the formation of a person’s individual identity (McLean, Breen, & Fournier, 2010). At a minimum, individuation was a development from dependency to self-care and self-reliance; being responsible and able to speak for oneself. Autonomy, as individuation, was different from independence (Deci & Ryan, 2000), in that independence may often be equated with performing actions by one’s self while reliance on others is equated with dependence. However, a person may depend on another person by choice and still practice individuation. Acting independently does not imply that one acts separately from all other people. By nature, humans are interdependent. Our lives intermingle with many others and autonomous acts often reflect this interdependence. Reliance and support may exemplify individuation provided the person directed the support (Christman, 1988).

Christman (2003) further postulated that autonomy and dependence did not conflict with each other “except when certain factors and influences disrupt or destroy one’s ability to function as a unique person” (p.386). For Wehmeyer’s Functional Model of Self-Determination, autonomy was summed up in the word volitional as “the power or will to make conscious choices free from undue external influence” (Wehmeyer, 2007, p.5). Healthy interdependence depended on the term undue remaining subjective as different people will experience varying levels of influence and only they themselves may determine if that level was acceptable or unacceptable.

The 4-H organization fostered individuation as preparation to see oneself in the future. 4-H programs encouraged youth to develop a long-term view of their lives by promoting project work in areas that were related to future careers and adult expectation. 4-H projects were designed to allow youth to project themselves into future aspirations. Within each project, 4-H presented youth with opportunities to try out adult roles in a safe environment. This promotion of life and career path skills has always been a fundamental component of 4-H. Individuation was promoted in 4-H as youth were assisted with age-appropriate understanding of the interconnectedness of the world agriculture, environment, people and other big picture concepts (Ferrari, 2003). For youth with IDD, this promotes cognitive maturity as they develop a more abstract view of their world.

Behavioral autonomy was the functional aspect, or outcome, of individuation. Wehmeyer’s Functional Model of Self-Determination was deemed functional as it represented actions as autonomous when people acted “according to their own preferences, interests, and/or abilities” and “free from undue external influence or interference” (Wehmeyer et. al., 2003, p.183). Wehmeyer’s Functional Model of Self-Determination built on the work of Sigafos, Feinstein, Damond, and Reiss (1988) and classified four behavioral categories that linked

autonomous theory and behavioral practice, thereby simplifying the identification of autonomous behaviors. These four categories were: (1) self-care and family activities, (2) self-management activities, (3) recreational and leisure activities, and (4) social and vocational activities (Wehmeyer et al., 2003).

Participation in 4-H training promoted the hands-on development of life and career exploration skills. These opportunities allowed for challenging activities that provided all youth with the chance to become proficient in new skill areas. With predictable consequences for failure, the hands-on component allowed youth with IDD an avenue for more effective learning as the concrete lessons were attached to abstract thinking. The repetition of behaviors in 4-H activities encouraged higher levels of performance of skills and the ability for youth with IDD to demonstrate skills that are necessary in post-school transitions. This practice, demonstration, and eventual mastery of life and vocational skills prepared youth for post-school transition directly, by providing youth with IDD hands-on practice of post-school outcomes, and indirectly, by providing communication skills, teamwork skills and higher cognitive abilities in problem-solving and decision-making (Ferrari, 2003).

Self-regulation of Behavior. Within Wehmeyer's model of self-determination, a relationship between self-regulation and self-governance was established. Wehmeyer (1996) suggested that the expression of self-regulation involved individuals "making decisions concerning what skills to use in which situation; examining the task at hand and their strategic repertoire; and formulating, enacting, and evaluating a plan of action, with revisions, if necessary" (p.118). Furthermore, he cited Whitman (1990) in differentiating self-regulation from automatic processing as noting that self-regulation required "focused attention and continuous decision making among alternative responses" (p.118). Behaviors that exhibited self-

regulation made use of self-management strategies (i.e., self-monitoring, self-instruction, and self-reinforcement). These strategies were most commonly displayed in goal-setting and attainment activities, problem-solving and decision-making behaviors, and observational learning strategies (Agran, 1997). In earlier work, Zimmerman (1989) suggested that self-regulation can be taught, learned and controlled. Wehmeyer (1996) indicated that these skills were demonstrated in self-regulated youth as self-management strategies, goal setting and attainment behaviors, and problem-solving behaviors. Each is discussed briefly subsequently.

Self-management strategies involved the use of a variety of skills such as self-monitoring, self-evaluation and self-reinforcement. Wehmeyer relied on Whitman (1990) to expand his definition of self-management: self-monitoring- the observation of one's social and physical environment; self-evaluation- making judgments about the acceptability of this behavior through comparing information about what one is doing with what one should be doing; and self-reinforcement- based on the result of the evaluation, the incorporation or rejection of the behavior by the student. 4-H programs encouraged self-management in the aspect of personal accountability in project work. 4-H project work was designed to be undertaken as a self-paced, student-centered learning experience. The exercise of record-keeping promoted self-monitoring and evaluation and self-reinforcement was solidified through successful project completion and fulfillment.

Goal setting and attainment was considered the cornerstone behavior exhibited by self-regulated persons. To be the causal agent that Wehmeyer posited in his definition of self-determination, a person must perform actions that were goal-directed (Wehmeyer, 1996) whereby the goal attainment was the result of purposeful, conscious actions (Latham & Locke,

1991). This was not to insinuate that the actions always reached the projected goal. Success in the goal was not to be used as a measure of goal directed actions performed by a person.

While completing 4-H projects, 4-H members have been encouraged to set short term and long term goals for the activities included within the project. Goal setting was structured to allow the youth to evaluate and reset the goal as the project developed. Using this strategy, failure was mitigated for the exercise while youth learned to be more realistic in their goal setting. For youth with IDD, the practice of setting and resetting goals to keep them realistic and attainable was valuable for post-school transition.

Problem-solving behaviors differed from choice making and decision making in that these behaviors were response-oriented in regard to a problem (Wehmeyer & Kelchner, 1994). These problems were categorized as either impersonal (e.g., puzzles, math problems, etc) and having only one solution, or interpersonal (i.e., social in nature) and having multiple solutions. It was the latter that was considered critical for the development of self-determined behavior (Wehmeyer & Kelchner, 1994). Instruction in problem solving must promote open inquiry and encourage generalization through problem identification, problem analysis and problem resolution (Izzo, Pritz & Ott, 1990). The support of a strong, caring social network was vital for program engagement. Within a caring network, youth with IDD learned problem-solving skills for social contexts and practiced them in a non-judgmental atmosphere. For youth with IDD, developing a sense of belonging through non-judgmental adult and peer acceptance taught these youth about trusted relationships outside the immediate family setting.

Psychological Empowerment. The third characteristic of self-determined behavior Wehmeyer identified in his model of self-determination was psychological empowerment,

whereas “the person initiates and responds to events in a psychologically empowered manner” (Wehmeyer, 1995, p.6). This emphasis was on a cognitive perception of the performance of the behavior, rather than the feat of the behavior itself. The failure of a person to exhibit self-determined behaviors did not always imply that he or she lacked the skills to do so. A person may possess the requisite skills for self-determined behaviors and fail to exhibit the behaviors due to either a lack of confidence in their ability to perform or a belief that the performance is futile (Wehmeyer et al., 2003).

Empowerment was a process that enabled increased control over one’s life, influence in the community, heightened consciousness of one’s environment, and skills for negotiating the demands of that environment (Perkins & Zimmerman, 1995). Ideally, empowerment increased over one’s lifespan as physical and cognitive capacities developed unless the person or the environment was somehow compromised or constrained, thereby limiting empowerment opportunities (Arnett, 2007).

For youths with IDD, it was important to view empowerment as an interactive process between the individual and collective levels (Zimmerman, 1995; 2000). As these levels interacted with the environment, youths with IDD dispelled the stereotype of helplessness and began to see themselves as assertive members of society. The outcome of such interaction was heightened self-acceptance and self-confidence, social understanding, and a personal ability to take greater control of one’s life through empowered decision making.

Empowerment within the individual takes place as internal shifts in personal beliefs. Internally, the youth moved beyond the physical act of making decisions and began to form the belief in their personal ability to solve their own problems through effective decision making

(Parsons, 1988). This internal shift in personal beliefs referred to cognitive changes in two psychological constructs: locus of control and self-efficacy (Wehmeyer et al., 2003; Zimmerman, 1995). Locus of control was the concept of internal reinforcement and motivation whereby a person recognized his or her achievements as under personal control rather than being controlled by chance, fate or others around him or her (Rotter, 1966). Self-efficacy was central to the internal change and defined as the person's perceived belief in his or her capacity to have control over life's events (Bandura, 1989). Note that all four elements of 4-H's BIG-M worked to enhance development in psychological empowerment. A strong sense of belonging contributed to the sense of connectedness and social engagement; subjective mastery in skill areas built confidence as youth asserted themselves as capable and accomplished. Opportunities for independence in 4-H programs supported social skills and community connections. Perhaps the most powerful of the four elements on youth with IDD was the opportunity to practice service to others as they learned generosity. As a population accustomed to receiving assistance, the chance to offer service to others allowed the youth with IDD to find purpose and meaning in his or her own life.

Psychological empowerment as a component of Wehmeyer's Functional Model of Self-Determination was a process of personal development in a social network. This process involved transitioning from a feeling of disability and powerlessness to an active life of real ability to act and take control of one's life. As youths exhibited participatory behavior, were motivated to exert control, and had feelings of efficacy and control through collective level empowerment they experienced true growth in individual level empowerment (Wehmeyer et al., 2003).

Self-realization. As with psychological empowerment, Wehmeyer's Functional Model of Self-Determination affirmed the value of individual cognition and perceptions to the behaviors, which was practiced as self-determining behaviors with the inclusion of self-realization as the fourth essential characteristic. Wehmeyer et al. (2003) relied on the Gestalt psychologists' frame of reference to self-realization as referring to "the intrinsic purpose in the life of a person" (p.185). Wehmeyer extended cognition into action as displayed when a person recognized and understood his or her personal strengths and acted accordingly. This recognition and understanding of one's strengths was a capacity that was built over time through life experiences. Wehmeyer et al. encapsulated this capacity as "experience with and interpretation of one's environment" and "influenced by evaluations of significant others, reinforcement, and attributions of one's own behavior" (p.185).

To know oneself with accuracy was recognized by psychologists as a developmental milestone as a person acquired a "categorical sense of self" (DeCasper & Spence, 1986). The sense of self referred to here went beyond an infant's physical awareness of him/herself to a person's accurate placement of him/herself along socially significant dimensions (DeCasper & Spence, 1986). As one developed this categorical sense of self, the person began to view him/herself as an entity with a mature self-definition; they knew where they were going in life and how they fit in society (DeCasper & Spence, 1986).

Wehmeyer et al. (2003) placed a substantial emphasis on the evaluations of significant others and the influence of that evaluation on the youth's sense of self. While all youth are subject to such influence, youth with IDD may be more vulnerable to these evaluations if they do not present accurate portraits (Durand & Hieneman, 2008). The multitude of reasons behind

inaccurate assessments from significant others, most often the parents, ranged from denial, fear, guilt, sympathy, and a desire to equate the child with non-disabled youth (Harland, 2002).

Among youth with IDD, an inaccurate sense of self is problematic as inaccuracy interfered with their ability to choose appropriate activities and work toward realistic goals (Baumeister, Campbell, Krueger, & Vohs, 2003). Inaccurate self-assessment, either inflated or diminished, may predispose a youth with IDD for failure in activities or goals or may lead youth with IDD to avoid the challenges associated with developing the operational component skills of self-determining behaviors (Schunk & Pajares, 2004).

The literature recognized three factors that positively impacted self-realization: previous performance (Marsh & Craven, 2006), behaviors of other individuals (Marsh & Hau, 2003), and the achievements of a larger group to which the youth belongs (Harter, 1999). A description of these factors and their presence in 4-H programming is outlined subsequently.

Youth judged their competence in social, academic and personal domains based on their successes and failures in previous activities (Marsh & Craven, 2006). Youth with IDD were not provided the range of opportunities in earlier development as their non-disabled peers due to a sense of protection from risk or a desire to circumvent what may be perceived by others as imminent failure for the youth (Hickman, 2000). As their opportunities for practice increased and combined with higher cognitive understanding of the skills, they developed a more realistic picture of themselves. Among youth with IDD, their desire to take on challenging activities was tempered by a poor self-image developed in earlier childhood by failure at various activities while attempting to keep up with same-age peers. By the time this youth reached 4-H age eligibility, this diminished self-image appeared as unwillingness to take on new activities. In 4-

H programming, the graduated structure of projects assisted leaders in matching a youth's developmental and cognitive capabilities with an appropriate level project. However, Bouchey & Harter (2005) noted that it was critical to be accurate in evaluating the youth's present capabilities and the prerequisite knowledge and skills required for the 4-H project under consideration in order to make an appropriate match. Very easy activities may produce the same, undesirable results as activities that are beyond a youth's abilities. 4-H projects provided the scaffolding necessary to accomplish projects successfully, even with occasional failures that ultimately led to a realistic and resilient sense of self that tolerated failures on the path to success (Bandura, 1989).

Along with promoting a realistic self-image, the opportunities to take on challenges impacts persons around the youth with IDD as they are presented with the opportunity to witness the youths' abilities firsthand. Siperstein and colleagues (2007; 2009) performed extensive research in conjunction with youth involved in Special Olympics and suggested that watching youth with disabilities perform influenced the attitudes of others toward the youths' abilities more so than mere contact with the youth. In this manner, previous performances of activities may directly impact the behavior of others towards youth with IDD.

Youth, with or without IDD, are very aware of the behavior of others, either as a comparison standard (Marsh & Hau, 2003) or in response to behavior toward them (Harter, 1996). For youth with IDD, the comparison of themselves to others may be detrimental if they always rate themselves as less capable. While 4-H programming has a strong competition component, the National 4-H Recognition Model (National 4-H Headquarters, n.d.) presented a new trend to de-emphasize competitions against another and encourage competition against a

standard through more cooperative activities. When evaluating behavior toward them, youth with IDD may be very intuitive and accurate in their perceptions and interpretations of other's words as well as body language. Too often, people patronized youth with IDD as a well-meaning gesture, but in doing so, conveyed to the youth with IDD a lack of confidence in their ability to complete an activity. Harris and Rosenthal (1985) suggested conveying high expectations toward youth with IDD and offering support and encouragement along the way to foster a more positive self-concept.

Youth with IDD may find themselves alienated from groups by personal choice, as a characteristic of their disability, or by the actions of others in the forms of exclusion or rejection. This alienation was reported as most prevalent in the area of making friends (Margalit, 1991). The risk for youth with IDD of social rejection was found to be greater than other youth groups, including youth with 'other' (e.g., physical) disabilities (Vaughn, 1985). Considering these factors that positively impacted self-realization, 4-H programming offered a valuable setting for youth with IDD to experience the power of belonging to a 'winning team'. Self-realization was impacted by any achievements of the group as a whole, not just in competitive activities. The achievement could have been as minor as successfully organizing a 4-H meeting program or hosting a 4-H community activity. Any activity a group engaged in where a goal is met successfully conveyed a sense of pride in every group member. Feeling like 'one of us' may break down the barriers of isolation reported among youth with IDD.

In summary, highly self-determined youth possessed a feeling of control over their lives and exhibited behaviors that demonstrated autonomy, self-regulation, psychological empowerment, and self-realization. For youth with IDD, the achievement of higher levels of

self-determination resulted in more positive adult outcomes as they transitioned into adulthood. The elements impacting positive youth development in 4-H programming paralleled the factors impacting self-determination development in youth with IDD. This parallel created an opportunity for a symbiotic relationship poised to support self-determination development in youth with IDD.

### Self-Determination Instructional Method for 4-H Programming

This study used a self-determination instructional method (SDIM) developed by one of Wehmeyer's co-authors Sharon Field and her colleague Alan Hoffman, The Steps to Self-Determination (STSD; Field & Hoffman, 1996; Hoffman & Field, 2006). Built in part on Wehmeyer's Functional Theory of Self-Determination and incorporating the special circumstances of youth with IDD that included delayed development, Field and Hoffman (1992; 1995) expanded on Wehmeyer's Functional Model of Self-Determination to address the communal relationship between capacity and opportunity as a function of "varying levels of reciprocity and support" (p. 136). Field and Hoffman (1994) suggested youth with IDD would not fully comprehend the operational component elements of self-determination identified by Wehmeyer until they understood their disability and appreciated their abilities. As knowledge and value of oneself developed, youth with IDD would benefit more fully from direct instruction and practice opportunities. Field and Hoffman's SDIM was fully developed after a three-year research effort involving a scan of the empirical literature, consultation with external experts, and over 150 interviews and observations of students in a variety of school settings (Field & Hoffman, 1994). Participants in these interviews were adults with and without disabilities and students with disabilities in secondary education programs.

The five components of Field and Hoffman's STSD curriculum were: (a) know yourself, (b) value yourself, (c) plan, (d) act, and (e) experience outcomes and learn (Field & Hoffman, 1996; Hoffman & Field, 2006). These components represented two types of variables that impacted the performance of self-determined behaviors: internal variables that were controlled by the individual (e.g., values, skills, and knowledge) and external variables impacting the individual that were, for the most part, out of their immediate control (e.g., resources, support of others, and opportunities). Internal variables, identified in STSD curriculum steps know yourself and value yourself, were within the individual's control. External variables identified in STSD curriculum steps plan, act, and experience outcomes and learn, were generally thought of as functions of the environment, somewhat outside the control of the individual.

Internal variables. Field and Hoffman (1994) offered personal awareness and recognition of one's strengths, weaknesses, needs and preferences as determinants to know yourself. It was imperative that this knowledge was accurate and realistic to be of use to an individual. Assessment of the knowledge was the basis of the pursuit of the life a person dreams about for him/herself. Along with personal knowledge of self, a youth must also accept and value yourself. All humans possessed imperfections and the ability to come to terms with those imperfections was to value one's self as a person capable of making valued contributions.

External variables. The external variables of plan, act, and experience outcomes and learn were the action stage of the STSD curriculum (Field & Hoffman, 1995, p. 136). The action stage of the SDIM provided a script for Wehmeyer's operational component elements and was comprised of behaviors such as:

- (a) awareness of personal preferences, interests, strengths, and limitations;

(b) ability to (i) differentiate between wants and needs, (ii) make choices based on preferences, interests, wants and needs, (iii) consider multiple options and anticipate consequences for decisions, (iv) initiate and take action when needed, (v) evaluate decisions based on the outcomes of the previous decision and revise future decisions accordingly, (vi) set and work toward goals, (vii) regulate behavior, (viii) use communications skills such as negotiation, compromise, and persuasion to reach goals, and (ix) assume responsibility for actions and decisions;

(c) skills for problem solving;

(d) a striving for independence with others;

(e) self-advocacy and self-evaluation skills;

(f) independent performance and adjustment skills;

(g) persistence;

(h) self-confidence;

(i) pride; and

(j) creativity (Field, Martin, Miller, Ward & Wehmeyer, 1998).

The achievement of these skills, as well as the ability to evaluate and generalize them, was indicative of self-determination. A person need not exhibit every skill within a category to demonstrate the particular action.

#### Application of SDIM with Youths with IDD in 4-H Programs

The foregoing literature, along with an understanding of the mission, goals, and essential elements of 4-H, provided the evidential context for the present study with its focus on 4-H as an appropriate setting for the delivery of self-determination instruction to youths with IDD. Using the SDIM described above as an intervention strategy in the 4-H club was a positive approach to empower youth with IDD in reaching their fullest potential. Youth were better equipped for the transition into adulthood and experienced better outcomes when they possessed higher self-

determination (Wehmeyer, 2007). The underlying goal of 4-H was the same: better outcomes for youths. Specific strategies of SDIM aligned with the 4-H mission, goals, and essential elements as outlined subsequently.

SDIM depended on a supportive environment. Youth must be allowed the “dignity of risk” (Ward, 2005, p. 109) and the opportunity to fail in a safe, supportive environment. Parents of youth with IDD may adopt an over-protective stance with these youths that assumed they, as parents, knew best and must guard them against failure more rigorously than they would non-disabled youths. This well-reasoned stance could be set aside, for the most part, in a strong 4-H program. Failures in project areas would be non-threatening and would become learning experiences through guided evaluation.

SDIM was applicable to all youth. The U.S. Department of Education adopted the position that “self-determination is the ultimate goal for education” (Halloran & Simon, 1995, p.95). There was no question that all youth might benefit from self-determination instruction. The 4-H organization has long been the forerunner in the efforts to integrate culturally diverse youth into programs and activities. This diversity focus has never stopped at racial and ethnic groups, but has extended into disadvantaged youths in the development of focused programs for youths at risk and under-served youths as well as with focused programs for military youths.

SDIM promoted student-centered learning. Experiential learning (i.e., learning by doing) was a fundamental aspect of both SDIM and 4-H programming. Youth with IDD may experience difficulty making the abstract leaps required in experiential learning and therefore required direct instruction on self-directed learning to fully incorporate the principles of experiential learning.

SDIM made use of this strategy by blending direct instruction with experiential methodology in an effort to enhance learning for youth with IDD.

SDIM promoted life-long learning. The promotion of self-determination reached across educational and life domains. Research on self-determined behavior provided strong evidence that youth who are more self-determined achieved more positive adult outcomes (Wehmeyer, 2007). As a process, people continued to move along the self-determination continuum as they performed behaviors characterized as self-determined behaviors. 4-H promoted the concept of life-long learning as a component of life-long personal development.

While a clear relationship was outlined above between SDIM and positive youth development in 4-H, it cannot be left to chance that 4-H participants, especially those with IDD, will put the pieces together and leave 4-H as self-determined adults. Systematic instruction and sound curriculum based on cognitive development must be provided. Research has provided evidence of a positive link between the degree to which students may be able to acquire knowledge, skills and beliefs leading to enhanced self-determination and the amount of direct instruction students receive (Wehmeyer & Field, 2007). Researchers have recognized the correlation of direct instruction with the presence of opportunities to practice for the development of self-determination (Grigal, Neubert, Moon, & Graham, 2003; Wehmeyer & Field, 2007). In Steps to Self-Determination, Field and Hoffman (1996) emphasized the use of direct instruction and opportunity for practice, coupled with teacher-directed methodology and cooperative learning groups, to enhance understanding and develop skills associated with self-determination. 4-H programming makes use of each of these strategies to enhance positive youth development and empower youth to reach their full potential.

## Chapter 2 Summary

Relevant literature pertaining to the emergence of self-determination among youth with IDD was reviewed in this chapter, viewed through the lens of Wehmeyer's Functional Theory of Self-Determination and the related Functional Model of Self-Determination. Special attention was given to the four essential characteristics of self-determined behavior, presented by Wehmeyer, because the present study focused on the dispositional characteristic aspects of self-determined behavior. Field and Hoffman's (1994) self-determination instructional method was presented, as this instructional method was utilized as the delivery vehicle for the 4-H curriculum as it related to positive youth development.

## Chapter 3

### Methodology

#### Introduction

The purpose of this study was to examine how 4-H programming may support positive youth development in youth with intellectual and developmental disabilities (IDD), using a qualitative methodology. The central question of this study was: how may 4-H programming support positive development of independence, primarily in the realm of self-determination, in youth with intellectual and developmental disabilities? The sub-questions for this study were: (1) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to autonomy?; (2) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-regulation?; (3) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to psychological empowerment?; and (4) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-realization? The intent of Chapter 3 was to give an overview of the methodology used in this research. The chapter was divided into several sections: research design, participants and setting, materials, procedure, and data analysis. The chapter began with an exercise that was important to qualitative research: the identification of personal interests and location of the researcher as a part of the methodology.

### Location of the Researcher in the Qualitative Method

For twenty plus years I have dedicated a great portion of my professional and personal life to 4-H programming. As a volunteer leader, I have encountered young people from all backgrounds and assisted them in navigating the 4-H course. The bulk of my 4-H involvement was in the North Carolina 4-H Horse Program. During this period, I recalled times when I was introduced to young people with various disabilities who wanted to participate in our 4-H horse club. Just as any 4-H leader would, I offered to work with them and invited them to our meetings. I did so while realizing that their participation in this club was going to be limited at best, due not only to the physical and mental challenges in the horse program, but also to my limited knowledge of how to deal with these members' disabilities. Sad to say, I now remember feelings of relief when the young person never took me up on my club invitation, or if they did, they did not return for a second meeting. However, during this period of my 4-H work, I was actively involved in chartering and operating an active therapeutic riding program at my farm because I just did not see how those young people could find meaningful experiences in the 4-H program.

During this time, I was blessed with the arrival of a daughter and began actively planning her future successes in the 4-H horse program. Within her first few years of life, however, I realized that she was going to be faced with developmental disabilities of her own. By the time she reached nine years old, the 4-H eligibility age, she was already in love with horses and was as active with them as she could physically manage. I involved her in our 4-H meetings, but realized that she was more a spectator than a participant. Her cognitive limitations made it very difficult for her to grasp the experiential learning style promoted in 4-H programming. I found

the curriculum material in the project book was written well above her cognitive levels and most of the activities within the project area were beyond her physical abilities. Her 4-H participation was not a meaningful experience for her. As a 4-H leader, I sought advice from my local 4-H agent with limited success. While the reception of youths with disabilities into 4-H was warm, what I personally encountered was limited knowledge of applicable modifications that would deepen my daughter's learning experience. The bulk of the advice offered was focused on ways she could participate in the 4-H competitions. I struggled to find a balance between competitive success and personal development in 4-H programming. I found myself critically reevaluating the purpose of the 4-H program. Was 4-H primarily about competitions? Certainly not: the mission of 4-H was stated much more broadly as an organization devoted to youth development. Does positive youth development extend to all youth? Certainly all young people benefit from opportunities for positive youths development. With these revelations, I refocused my goals for my daughter's participation in 4-H away from the desire for competitive success in favor of the goal of personal development. I began to work with her on a one-on-one basis as a 4-H member-at-large rather than as an organized club member. Individualization of her personal 4-H program allowed me to structure her project work in a way that she could experience true learning.

While an individualized method worked well for her, but both she and I missed the fellowship development aspect supported by the Extension service as necessary for youth development. I began to involve more youth with disabilities at my daughter's school in 4-H programming, but quickly found myself asking how I could make their 4-H experience meaningful when in all likelihood they would never be in a position to claim any of the 4-H prizes or participate fully in many of the 4-H activities. Would youth with disabilities become disillusioned and walk away from an organization that could offer them so much personal

benefit? What could 4-H offer to these youth that would engage them and move them along the path to personal development and life-long learning? My involvement with special needs youth as their 4-H leader set the course for choosing this area for my dissertation research.

In sum, the foregoing statement allowed me to establish myself as an insider in this research, an emic perspective. Compared to the outsider, or etic perspective, the emic researcher shares a degree of commonality with the study sample and stands to benefit from the relationship (Headland, Pike, & Harris, 1990). Perhaps the strongest of these benefits, which served my research as well, was the increased understanding of the study participants' frame of reference. While I was not in the ideal emic position - that of sharing the circumstances of intellectual and developmental disability – I had standing as the mother of a youth with IDD who had a long history participating in 4-H programming. My understanding of the frame of reference of youth with IDD certainly was increased over an etic researcher. My unique perspective increased my ability to formulate salient questions, capture and understand the importance of the perspectives of the participants, and communicate this understanding leading to increased honesty in reporting and interpreting findings (LaSala, 2003). Further increasing the research value of an emic view in this study was research suggesting the necessity of an emic perspective when dealing with stigmatized populations whose societal position placed them at increased risk for discrimination (Martin & Meezan, 2003). The findings and interpretations from studies among such populations conducted by an etic researcher could be “strikingly different” and “lead to markedly different conclusions being drawn from the same data” (LaSala, 2003, p.18). Furthermore, LaSala (2003) suggested that the etic perspective may result in “oversimplification and overgeneralization” (p.21) of findings thereby limiting the value of such studies to the body of work among stigmatized populations.

In my unique position as an emic researcher, I used caution in reporting my findings so as not to assume I shared common lived experiences and fully understood the perspectives of being intellectually and developmentally disabled. The emic position also called for me to be cautious not to “gloss over and fail to explore unique perceptions of individuals” (LaSala, 2003, p.18). Finally, I was consciously aware at all stages in this research not to allow my relationship with this population nor my passion for 4-H programming among this population to become a sounding board to “rectify societal wrongdoings”(LaSala, 2003, p.20) by guarding against potential social desirability effects in my own thoughts, observations and interpretations of the findings.

#### Research Design and Use of Qualitative Methodology

Qualitative research methodology (QRM) has been used when the goals of the study met any of several criteria outlined by Corbin and Strauss (1998). First, the researcher planned to work in the natural setting where the data occurred and where the researcher saw herself as the primary or an important instrument in the study. In this case, the researcher positioned herself as an expert instrument and her insights were the vital data analysis strategies. Second, the research was descriptive, and the words or behaviors were the data; or when collecting complex, quantitative data was not possible due to the limitations of the study participants. In this study, data were analyzed inductively, an approach typical to QRM. Meaning emerged from the data, even though Wehmeyer’s Functional Model framed the data analysis. Finally, QRM may be particularly useful when the researcher worked in a challenging environment such as was the case in this study – a 4-H program populated by youth with IDD and varying levels of cognitive ability.

Qualitative methods may be utilized with any of five specific traditions: biography, phenomenology, grounded theory, ethnography, or case study (Creswell, 1998). The descriptive case study approach was chosen for this study due to the purpose and goals of the research to understand how 4-H programming may support positive youth development, specifically self-determination, in youth with IDD. A case study has been described as “an exploration of a “bounded system” or a case over time through detailed, in-depth data collection involving multiple sources of information rich in context” (Creswell, 1998, pg.54). Considering the overall intent of this study, the design was further distinguished as a descriptive case study. This descriptive case study involved an innovative practice in informal education, contributed to a database for future comparison, and used a single theory as the lens for the data collection and interpretation (Merriam, 1998). Furthermore, the approach of a descriptive case study has as its focus the development of an in-depth analysis of a single case typically originated in the social sciences (Creswell, 1998). The data collection process utilizes multiple sources, including, but not limited to: interviews, observations, documents, journals, records, etc. The data analysis of a descriptive case study involves in-depth descriptions of the case and phenomena related to the theory, themes coded from the data, and assertions made by the researcher based on interpretations from the data (Creswell, 1998).

The descriptive case study approach was fitting for this study of a single case, that of a 4-H club bounded by the criteria of the presence of an intellectual or developmental disability within each member during the time boundary of one school semester. The innovative practice in this study was the intervention of a self-determination instructional method (SDIM) into 4-H programming as a pedagogical strategy, driven by a single theory, Wehmeyer’s Functional Theory of Self-Determination. The multiple sources of data used in the study are described next.

## Data Collection

Materials. The materials used in this study included: (1) a self-determination instructional method (SDIM); (2) a 4-H project book; (3) self-determination assessment instruments; and (4) a self-determination observation checklist. In several instances, I modified and adapted the materials, and such actions were noted in the discussion and Appendix. The Steps to Self-Determination (STSD) curriculum by Field and Hoffman (1996; see also Hoffman & Field, 2006) is a 16-lesson SDIM. The STSD curriculum was empirically validated and emphasized the use of modeling and experiential learning to teach knowledge and skills for self-determination (Field & Hoffman, 1994; 1996; Hoffman & Field, 2005). Each lesson and accompanying activities was related to one or more of Wehmeyer's eight operational component elements. The STSD curriculum delivery was based on ten cornerstones: (a) establishing a co-learner role for the teacher, (b) emphasizing modeling as an instructional strategy, (c) using cooperative learning, (d) promoting experiential learning, (e) using integrated environments, (f) accessing support from family and friends, (g) emphasizing the importance of listening, (h) incorporating interdisciplinary teaching, (i) appropriately using humor, and (j) capitalizing on teachable moments (Field & Hoffman, 1995, pp. 138-139).

The 4-H project book used by the club members during this was study was Get in the Act! A Workforce Readiness Curriculum developed in 2005 by the National 4-H Cooperative Curriculum System. This interactive experiential curriculum encouraged youth to develop and practice like skills important to the workplace. It was designed to promote cognitive, social and emotional growth as they relate to job success. This curriculum was chosen because of its obvious parallels with the focus of the vocational training offered in the participants' school

setting. During the course of the study, club members also engaged in typical 4-H activities, including hosting a pet fair, preparation for a cooking contest, and organizing a career fair day for their school.

Three self-determination assessment instruments were utilized for qualitative input both pre-program and post-program in this study. They were listed subsequently with a brief description of each.

The Arc's Self-Determination Scale. The Arc's Self-Determination Scale (ArcSDS) was a student self-report measure of self-determination designed for use by adolescents with disabilities, particularly students with mild cognitive and learning disabilities (Wehmeyer, 1995). The 72-item scale measured overall self-determination and the domain areas of autonomy, self-regulation, psychological empowerment, and self-realization. The scale included four-point Likert-type scale items, story completion items (i.e., the beginning and ending of a story were provided and the student wrote the middle section), items that required the student to identify goals and break the goals into smaller steps, and items that required students to make a choice between two options (Wehmeyer, 1995). Field testing was conducted to establish concurrent criterion-related validity and construct validity in the forms of discriminative validity and factorial validity. Internal consistency reliability was calculated using Chronbach alpha with an overall coefficient alpha of .90 (Wehmeyer, 1995).

AIR Self-Determination Scale and User Guide, Parent Form and Educator. The AIR Self-Determination Scale (AirSDS) and User Guide was used to (a) assess and develop a profile of a student's level of self-determination, (b) determine strengths and areas for improvement to increase self-determination (c) identify goals and objectives, and (d) develop strategies to

increase a student's capacities and opportunities (Wolman, Campeau, DuBois, Mithaug, & Stolarski, 1994). The scale measured capacity (i.e., ability, knowledge, and perceptions) and opportunity (at school and at home) related to three components of self-determination: thinking, doing, and adjusting (Wolman et al., 1994). The educator form corresponded to the five sections of capacity and opportunity with 6 Likert-type items each for a total of 30 items. The parent form used 6 Likert-type items in each of three sections and asked the parent to evaluate ability, opportunity at school, and opportunity at home for the youth to perform self-determined behaviors indicated on the form. Each form utilized three open-ended questions after the Likert-type items to allow the educator and the parent to use their own words to answer three profile-type questions about the student. The AIR educator and parent forms were field tested for reliability and validity estimates. Using an alternative-item correlation, a split-half test and test-retest measures the scales yielded correlations ranging from .91 to .98 (Wolman et al., 1994). Validity was assessed using factor analysis that indicated the presence of four factors with related correlations for an overall explanatory power of the four factors to be 74 percent (Wolman et al., 1994).

Self-Determination Observation Checklist. The Self-Determination Observation Checklist (SDOC) was a behavioral observation checklist with thirty-eight behaviors that have been found to be correlates of self-determination (Hoffman, Field, & Sawilowsky, 1995, 2004). The use of the SDOC provided the researcher a validated frame of reference during observations and analysis to more readily and accurately record findings. This scale was generated based on field tests and factor analyses from related scales by the same authors. Reliability was established using Chronbach alpha with an overall coefficient alpha of .94. Validity was assessed

for both content and construct validity using the blueprint approach to test construction and divergent/convergent correlations respectively (Hoffman, Field, & Sawilowsky, 1995, 2004).

### Participants and Setting

This research was conducted in an intact vocational training classroom of youths with IDD 14 to 21 years old. Purposive sampling was used to select this group based on the criteria of school administration approval, accessibility of the prospective participants and the willingness of the participants to participate in the 4-H program. There were sixteen students, six females and ten males, enrolled in this class located at an alternative school in [city, state] serving primarily a population of students with varying degrees of intellectual and developmental disabilities. Table 1 summarized relevant information about the participants.

Table 1. Study participant pseudonyms and demographic information

Name	Age	Gender		Name	Age	Gender		Name	Age	Gender
Diane	17	F		Jim	21	M		Mike	17	M
Hannah	15	F		Jamie	20	M		Sam	15	M
Lydia	14	F		Bob	19	M		David	20	M
Natalie	18	F		Frank	22	M		Mark	18	M
Millie	22	F		Lee	17	M				
Pam	18	F		Joe	16	M				

The school was accredited as a K-8 private school. The students in this class were on a non-traditional academic path that does not result in an academic diploma. Placement in this class was not mandatory for any student and the school administration made every effort to evaluate each student thoroughly to guarantee their placement in the least restrictive environment available (L. Stone, personal communication, February 12, 2011). For students at the school that were evaluated as unable to pursue a traditional path to a diploma, this class was the only option if they desired to remain at this school. Typically, students who were evaluated and determined as suited for this class that chose not to stay at this school either entered a similar vocational program at another school, entered the workforce, or ended their school attendance. The students were in a restricted class setting, meaning they remained together all day with one teacher and two to three para-professionals.

All 4-H club activities were conducted in the same classroom. The classroom was designed as a living center classroom with home components of a full-service training kitchen, home skills area and work skills area. The majority of the students in this class spent a percentage of their weekly time on a job site at various local businesses. The only placement requirement of the state department of education for this, and similar vocational classrooms operating in conjunction with elementary and middle school programming is an exit requirement (L. Stone, personal communication, February 12, 2011). All students must exit the program and school the May after their 22<sup>nd</sup> birthday. The 4-H club for this particular study was exclusive to this classroom: no other students from the school joined in the activities of this club. However, the researcher did not access the students' school files containing specificities of individual disabilities and educational levels, and no diagnoses or other clinical information was used in any way by the researcher. This was because this information was confidential and the

researcher was neither a school employee, nor a trained professional clinician. Participants were identified in the results chapter of this study by pseudonyms. All records containing identifying information were kept in a locked file cabinet used solely for this purpose to which only the researcher had access.

### Study Procedures

4-H project books are not written in teacher-directed lesson plan format; the books were designed to be student-directed activity guides used by 4-H members either solo or in a special interest club. For this study, the workforce readiness content found in the curriculum, Get in the Act! provided the concrete examples and activities (i.e., the vehicle) to accomplish lesson objectives from the STSD curriculum. According to Hoffman and Field's (2006) curriculum overview, the purpose of the STSD curriculum was "to help adolescents with and without disabilities become more self-determined" (p. 1). Each lesson had specific objectives taken from the STSD curriculum. Sample lesson plans are provided in the Appendix.

In an emic role as both researcher and volunteer 4-H leader, I prepared 16 club lessons by systematically overlaying the Field and Hoffman STSD curriculum onto the Get in the Act! workforce readiness 4-H project content. The research study was designed so that each week an adapted lesson lasting approximately 55 minutes was delivered after typical 4-H club program business of 15 to 20 minutes was conducted. All lessons and activity guides used in this study were the original work of the researcher. The lessons were the product of compiling, modifying and adapting the two curriculums (STSD and Get in the Act!) and original activities. Following a typical six-point lesson plan format, the lessons began with a three- to five-minute anticipatory set. This was typically similar to an object lesson designed to catch the attention of the students.

The objective of the anticipatory set was to give a hint as to the day's lesson and link the lesson to prior understanding from the past lesson. After the anticipatory set, the lesson objectives were presented to the students.

The heart of the lesson was presented in the direct instruction section generally lasting 12 to 15 minutes. The guided practice section, generally 25 to 30 minutes, was the activity, collaborative group learning portion of the lesson. This always consisted of primarily hands-on activities for the students. At the conclusion of the guided practice section, I guided the reflection, or closure, portion of the lesson, approximately eight to ten minutes. The reflection section gave me the opportunity to guide the students on how to reflect by modeling strategies related to reflective practice. Finally, an application section where students were encouraged to project the day's lesson into settings outside the classroom was presented. This short section, three to five minutes, always included an at-home project from the 4-H project book that often required the parents' input and facilitated completion of the 4-H project book for year-end credit from the parish 4-H program. This project task was typically a transfer activity that promoted generalization or transferability of the lesson topic into the student's environment.

Data Collection Procedures. Various data were collected at multiple points: during a pre-program phase when a qualitative assessment was established for each student before the STSD/Get in the Act! project commenced; an on-going program phase when data were collected from student journal entries and responses to activities in the STSD student activity guide at each club meeting, and from my personal journal where, as researcher after each club meeting, I reflected on my observations of the students during the activities using the SDOC as a framing guide; and during a post-program phase when, before the closing of school for summer break,

the students were re-administered the ArcSDS, and parents were re-administered the AirSDS, and the classroom teacher again completed assessment forms for each student. The post-program phase, and subsequently the data collection for the research, ended with semi-structured, in-depth interviews conducted with the parents and the students commencing six weeks after the 4-H club activities concluded and concluding two weeks into the following school year. The data collection and instrumentation for each period - pre-program, on-going program, and post-program - are described fully and in detail below.

Pre-program Phase. Qualitative pre-program assessments for each student were established using the 4-H and STSD program orientation meeting, STSD workshop with the 4-part Know Yourself self-awareness activities and pre-program use of the ArcSDS and AirSDS. The pre-program phase commenced with the beginning of the spring semester of the 2010 school year. The methods used to establish the qualitative pre-program assessments are outlined below.

Program Orientation. The STSD curriculum began with an orientation designed to familiarize participants and support persons to the purpose and structure of the STSD curriculum. Parents and students were invited to the school on a Saturday as a 4-H club activity. During this 4-H club activity, the attendees were oriented to 4-H programming, the 4-H activities planned for the semester and the unique programming designed for the 4-H club with the SDIM intervention. The STSD curriculum was presented as well as the plans to use the entire semester program as the setting for this dissertation research. At this time, the parents and students were presented with the research objectives and plan of work, their rights as study participants as outlined by the Institutional Review Board (IRB), and asked to participate. The appropriate IRB forms were read and signed by both parents and students. The IRB upholds the Belmont principle of respect for

persons providing special provisions for persons with diminished capacity involved in research by requiring legally authorized representatives to provide voluntary informed consent for the participants (45 CFR 46. 116). The IRB recognized these persons as persons with “diminished autonomy” and while allowing for substituted consent, encouraged researchers to obtain consent from the participants to the extent possible. To support the IRB position and provide an exercise in self-determination, all the students over 18 years of age agreed to and signed IRB-approved informed consent forms. In addition, the classroom teacher also agreed to and signed an IRB-approved informed consent form. Any questions on the program and/or research were answered and with the orientation portion completed, attendees were provided lunch and afterwards, the workshop portion began.

Program Workshop. Designed as a SDIM to be used in a wide variety of settings, the STSD curriculum did not designate the parent or intimate family member to serve as support person. Therefore, recognizing some support persons (i.e., school classroom assistant, a personal care attendant, etc.) may be less familiar with the student than a family member, the STSD workshop section was designed with question and answer type worksheets to serve as “team-building guides” to more fully acquaint participants and support persons. However, in this research, these four worksheets also (found in Appendix) were utilized as research instruments, a decision fully supported by STSD authors as an alternative use of the curriculum (Hoffman & Field, 2006).

At the onset of the workshop portion, the attendees were separated and the students were provided a recreational activity while the parents continued with the researcher. This division provided a more focused setting for the parents. The objectives and STSD procedures of the

workshop were explained. However, to assure personal authenticity and respect the somewhat private nature of responding to these worksheets, the parents were asked to complete the forms in the home environment as part of a ‘personal interview’ with their youth. All of the parents fully supported this idea and agreed that the completion of this activity in a private setting would be helpful in providing full and detailed responses. The parents were provided a mock illustration of how such an interview could be conducted that would facilitate the completion of the four worksheets, but were asked to use their expertise with their youth to conduct their interview in the best suited method.

ArcSDS and AirSDS Pre-program. The open response style and personal standpoint of self-reporting items on the ArcSDS allowed the ArcSDS to be utilized from a qualitative perspective and interpreted as such. As with the ArcSDS, the open response, self-reporting style of the AirSDS from persons with intimate relationships with the study participants allowed for triangulation and increased credibility in the qualitative assessments of the participants.

At the workshop, once the interview/worksheet completion details were done, the parents were introduced to the ArcSDS and the AirSDS. The objectives of these two scales were presented and their intended use as qualitative evaluation tools for this research explained. Parents were told that the ArcSDS would be administered the following week to the students by the researcher. The parents were given instructions on completing the AirSDS and it was suggested to the parents to complete this evaluation privately after the completion of their personal interview with their youth. This timing, it was explained to them, would allow them to benefit from the interview by providing them focus for the AirSDS completion. Any questions were addressed and the workshop was completed. The parents were asked to conduct these

interviews over the same weekend and return all forms (four worksheets and AirSDS evaluation) sealed in envelopes provided by the researcher to the classroom teacher the following Monday morning. Fourteen packets were returned to the school on Monday and the remaining two were received on Tuesday. The classroom teacher was provided sufficient copies of the AirSDS educator form to complete for each student. All sixteen educator forms were returned by the classroom teacher within one week.

In sum, the qualitative pre-program assessments for each of the sixteen study participants were established by careful review of the four-part workshop interview worksheets, the AirSDS parent evaluation, the AirSDS educator evaluation, and the ArcSDS student evaluation. These pre-program assessments provided the researcher with a beginning frame of reference for each participant in the research, and enabled the researcher to provide developmentally appropriate programming for them during the course of the 4-H semester.

On-going Program Phase. Data were collected from student journal entries and responses to activities in the STSD student activity guide at each club meeting. In addition, as researcher, I maintained a personal journal with weekly reflections made after each club meeting on my observations of the students during the activities using the SDOC as a behavior identification guide. The program delivery methods and lesson plan generation methods for this program were fully detailed above in the section on Procedures. The specific data points collected during this phase are discussed below.

As an emic researcher in the position as the instrument in this research, I fully acquainted myself with examples of the operational component characteristics of self-determined behaviors as put forth by Wehmeyer and colleagues (Doll, Sands, Wehmeyer, & Palmer, 1996; Wehmeyer,

Sands, Doll, & Palmer, 1997). Furthermore, I utilized the SDOC as a behavior framing guide, based on the validation of the thirty-eight specific behaviors comprising the list and their exemplary link to the operational component characteristics, to ensure uniformity in my observations and focus my personal journal entries.

Each week at the conclusion of the 4-H club activity, I collected the students' activity guide books, which included their journaling entries. Immediately following the conclusion of each activity, I personally logged any observations of or anecdotes spoken by the students during the club meeting as to not lose the uniqueness and settings for any of those incidences. Over the next few days, I evaluated the students' work and responses in their activity guides and completed my lesson reflections in my personal journal. This journal provided me with a topically-oriented transcript based on the STSD curriculum 16-lesson format. At the conclusion of the program, this transcript was qualitatively evaluated and coded thematically along with the post-program interview transcripts.

In sum, data were collected during the on-going phase of the program from student journal entries and responses to activities in the STSD student activity guide, as well as the researcher's personal journal with weekly reflections made after each club meeting on observations of the students during the activities using the SDOC as a behavior identification guide. These data points elucidated the experiences of the participants during the on-going phase of the 4-H program delivery and assisted in establishing the role of their 4-H involvement as support for the positive development of self-determination.

Post-Program Phase. After the last 4-H meeting and before the closing of school for summer break, the students were re-administered the ArcSDS, and parents and classroom teacher

were re-administered the AirSDS. The post-program phase, and subsequently the data collection for the research, ended with semi-structured, in-depth interviews conducted with the parents and the students commencing six weeks after the 4-H club activities concluded and concluding two weeks into the following school year. This data collection was summarized subsequently.

ArcSDS and AirSDS. In the same fashion as the pre-program phase, the students were administered the ArcSDS in the classroom setting by the researcher and the AirSDS was sent home to the parents, completed, and returned to the classroom teacher before the close of school. All sixteen forms were received back from the parents. The classroom teacher was provided with the AirSDS forms and, considering her additional end-of-school work-load and a desire for her to be able to reflect on each student thoroughly, asked to complete and return them at her convenience. She returned all sixteen forms to me completed three weeks after the conclusion of school. As with the pre-program use, the ArcSDS and AirSDS forms were reviewed using qualitative methods to gain a post-program assessment of each student.

Semi-structured, In-depth Interviews. Questions for these semi-structured interviews were generated using the ArcSDS and the AirSDS as guidelines. Using these forms as guides, the questions were written to identify developmental changes of the essential characteristics associated with relative self-determination in the youth. By interviewing the parent and the child together and separately, the researcher amassed examples of behaviors related to the operational component elements and perceptions related to the exhibition of the four essential characteristics of self-determination as outlined in Wehmeyer's Functional Model of Self-Determination. Additionally, the interview questions were written to explore the parents' perspectives of the role

served by 4-H and the support, if any, they perceived 4-H provided as related to the positive development of self-determination in their youth.

Interviews were scheduled no earlier than six weeks after school released for summer. Nine of the interviews took place in the homes of the youth and three were conducted in local coffee shops. Four of the interviews were done at the school during the first week of the following fall semester due to scheduling difficulties during the summer. All sixteen interviews were completed by the start of the second week of school, Fall 2010 semester. All interviews were tape-recorded with permission and transcribed word for word for qualitative analysis.

In sum, data were collected post-program from the re-administration of the ArcSDS to the students, and the re-administration of the AirSDS to both parents and classroom teacher. Additional data were collected from semi-structured, in-depth interviews conducted with the parents and the students commencing six weeks after the 4-H club activities concluded and concluding two weeks into the following school year. These data elucidated the post-program dispositional characteristics of the youth as demonstrated by the four essential characteristics of self-determined behaviors. Finally, the data collected encapsulated the perspectives of both the student and the parent as to the role served by 4-H and the support, if any, they perceived 4-H provided as related to the positive development of self-determination in their youth.

### Data Analysis

In applying the QRM approach to this research, the first factor addressed was the identification of the dependent and independent variable. The dependent variable analyzed in this research was movement along the continuum of relative self-determination as modeled by

Wehmeyer's Functional Model of Self-Determination by youth with IDD as impacted by the independent variable, the intervention in 4-H programming described in this study. The dependent variable was operationalized by the functional aspect of behaviors performed and characterized by four essential elements: (1) the person acted autonomously; (2) the behavior was self-regulated; (3) the person initiated and responded to the event in a "psychologically empowered" manner; and (4) the person acted in a self-realizing manner (originally presented in Wehmeyer, 1992, p. 304).

The practice of characteristic behaviors of self-determination was directly proportionate to one's movement along the continuum of relative self-determination. Behaviors that served the function of facilitating movement along the continuum were operationalized as component elements of self-determined behavior offered by Wehmeyer and colleagues as: choice-making skills, decision-making skills, problem-solving skills, goal-setting and attainment skills, independence, risk-taking and safety skills, self-observation, evaluation and reinforcement skills, self-instruction skills, self-advocacy and leadership skills, internal locus of control, positive attributions of efficacy and outcome expectancy, self-awareness, self-knowledge (Doll, Sands, Wehmeyer, & Palmer, 1996; Wehmeyer, Sands, Doll, & Palmer, 1997). In an individual, self-determination emerged and movement occurred on the continuum of relative self-determination through the increased knowledge resulting from direct instruction and the increased confidence resulting from opportunities for practice and application or transfer of these interrelated, operational component elements (Doll, Sands, Wehmeyer, & Palmer, 1996; Wehmeyer, Sands, Doll, & Palmer, 1997).

Self-determination may be a construct that was personally internalized and cannot be directly measured (Wehmeyer et al., 2003). As the dependent variable in this study, movement along the continuum of relative self-determination was inferred by observations of characteristic behaviors theorized to impact the emergence of self-determination. The qualitative analysis of the participants' pre-program assessments and the data coding of the on-going and post-program data provided the researcher with empirical evidence as to change in the dependent variable. At the conclusion of the 4-H program and subsequent data collection, the results from the collected data were analyzed as a whole. Denzin and Lincoln (1994) posited that qualitative research should establish trustworthiness to address the soundness or rigor of the research performed. The four factors they suggested for consideration to establish trustworthiness are credibility, transferability, dependability, and confirmability.

Credibility in this study was established by use of five strategies posited by Padgett (1998) for enhancing credibility in qualitative research: prolonged engagement, triangulation, member checking, peer debriefing/support, and auditing. The time frame of this study, an entire semester, provided sufficient time for adequate collection of the data points used in this study. Additionally, the researcher benefited from a prolonged period of time before the study commenced to get to know the study participants in the role of a parent of a student in the school. This prior relationship with the study participants provided an environment of confidence and trust that allowed for honest exchanges and adequate study of the phenomena in this research.

With regard to triangulation, the study benefited from source triangulation of three recorded perceptions of the participants as self-determined individuals; the pre-program assessments, the post-program evaluations, and the post-program semi-structured interviews.

Additionally, there were multiple sources of data generated through multiple methods to analyze the participants' performances of behaviors that exhibited the characteristics of self-determination. Member checking involved use of the interviews with the parents and classroom teacher as a source of crosschecking researcher impressions and evaluations of the individual subjects. This crosschecking helped me maintain reflexivity by encouraging self-awareness and self-correction, thereby supporting credibility in my study. In addition, the parents and classroom teacher were asked to comment on the accuracy of my observations as well as my interpretations. Peer debriefing and auditing were accomplished in this study by sharing observations and interpretations of data made by the researcher with a qualified outside researcher for critical evaluation. The members of my graduate committee also served in a similar capacity for this study.

Transferability was enhanced through the use of thick, detailed descriptions of the phenomena investigated, the movement along the continuum of relative self-determination by youth with IDD, and the perceptions of the support afforded this movement by participation in 4-H programming. Additionally, the emic perspective in this study afforded the in-depth description of the research context thereby providing sufficient detail to allow the reader to make their own decisions as to the suitability of the transfer of results from this study to their own contexts.

Dependability was established through notes and reflections by the researcher that addressed any changes in the conditions of the dependent variable as well as the design of the study. Dependability was enhanced by overlapping methods such as multiple data collection procedures and multiple occasions for data collection. Inquiry audits were performed by

identifying any differences in perspectives on the data and resolved through verification and agreement of the analysis was reached, thereby presenting this study as sound with respect to the findings and conclusions.

Finally, as sole researcher in this study, I fully revealed the methods for data collection verbally to committee members, the classroom teacher and parents. The methods upon which the interpretations are based and properly stored all the raw data obtained during the conduct of research for this dissertation. Confirmability in this research was enhanced by multiple audit trails including the researcher's personal journal, interview transcripts with coding strategies and all assessments conducted in this study. Examples of the content in these data sources were included in this report of findings in this study as direct quotations preserved verbatim as not to slant the intention of the source and provide the reader ample opportunity to make judgments and personal conclusions about the results presented, and the potential for bias within these results.

### Chapter 3 Summary

The goal of this research was to understand the experiences of youths with IDD as they moved along the continuum of relative self-determination and to examine what support, if any, participation in 4-H programming had on the movement they were able to achieve. The implementation of a qualitative approach is appropriate because it allowed for a story to be told and gave the ability to generate an understanding of the meaning of an experience (Creswell, 1998). The researcher acknowledged and responded to any ethical considerations in the research process, as well as followed appropriate methods of data collection and analysis to gain a deeper understanding of the impact of the 4-H experience on the journey to self-determination of these participants.

## Chapter 4

### Results and Discussion

#### Introduction

The purpose of this study was to examine how 4-H programming may support positive youth development in youth with intellectual and developmental disabilities (IDD), using a qualitative methodology. The central question of this study was: how may 4-H programming support positive development of independence, primarily in the realm of self-determination, in youth with intellectual and developmental disabilities? The sub-questions for this study were: (1) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to autonomy?; (2) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-regulation?; (3) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to psychological empowerment?; and (4) how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-realization? The intent of Chapter 4 was to present findings from the data collected and analyzed by the methods presented in Chapter 3. The chapter was divided into four sections each aligned with a single sub-question for the study relevant to the essential characteristics of self-determined behavior as outlined by Wehmeyer's Functional Model of Self-Determination: "the person acted autonomously", "the behavior was self-regulated", "the person initiated and responded to the event in a psychologically empowered manner", and "the person acts in a self-realizing manner" (Wehmeyer, 1992, p.304).

### Self-Determination: “The Person Acted Autonomously”

Wehmeyer (1992; 1996; 1999) recognized that self-determination cannot be defined as a set of behaviors, as any behavior may be viewed as self-determined behavior and that both the performance and non-performance of such behavior could be defined as self-determined action. Instead, Wehmeyer (1996; 1999) theorized that any act or event reflecting the four essential characteristics could be defined as a self-determined behavior and the degree of consistency with which a person exhibited actions thusly defined as self-determined adduced that person as being self-determined. Representing a set of abilities, the first of these four essential characteristics was present when “the person acted autonomously” (Wehmeyer, 1992, p.304).

4-H programming in this study facilitated the emergence of behavioral autonomy among youths with IDD by providing a safe environment for the youths to develop and practice operational component elements related to skill development. By emphasizing learning objectives through experiential activities with a graduated design the 4-H program in this study provided youth with IDD the opportunity to perform tasks that Wehmeyer (1992) deemed beneficial for their transition to the adult world. As described in detail below, the researcher planned 4-H activities with youth with IDD in mind, allowing the youths to act autonomously, that is to say, independently and according to his or her personal preferences, interests, and abilities. In addition, based on the behavioral aspect of this characteristic, the researcher adapted lesson objectives from the STSD curriculum and the 4-H project guide specifically related to the four behavioral categories that operationalized behavioral autonomy: self and family care activities; self-management activities; recreational activities; and social and vocational activities

(Sigafoos et al., 1989). Examples of these objectives included but were not limited to the following:

- Students will identify personal preferences and interests as a functional basis for decision-making and choice-making.
- Students will demonstrate autonomous functioning through increased participation in self- and family care activities on a daily basis; including routine personal care, meal preparation, care of possessions, performing household chores, shopping and home repairs.
- Students will demonstrate awareness of the concepts of barriers and obstacles and investigate strategies to identify and circumvent both.
- Students will increase the degree with which they use personal preferences and interests to choose to engage in recreational activities.
- Students will increase the degree with which they apply personal preferences and interests to choose to engage in social and vocational activities.
- Students will increase the degree with which they independently handle interactions with the environment; including, but not limited to, the use of community resources and fulfillment of personal obligations and responsibilities.
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Examples of the objectives focused directly on workforce readiness included but were not limited to the following:

- Students will demonstrate the ability to work independently and productively on 4-H activities
- Students will demonstrate the ability to work cooperatively with others as a team member
- Students will apply decision-making and choice-making skills to career planning based on personal preferences and interests.
- Students will identify personal preferences and interests influencing career choice and success.

Through direct instruction related to these objectives the 4-H members were taught specific steps for skill development in choice-making, decision-making, and problem-solving. Direct instruction was followed by guided practice activities planned to offer the 4-H members opportunities to practice the operational component elements related to behavioral autonomy. An example of a set of guided practice activities follows; other examples were available as each lesson included a guided practice activity.

The specific lesson objective linked to this guided activity asked the student to demonstrate awareness of the concepts of barriers and obstacles. The general goal of the lesson was to increase conceptual understanding of barriers and obstacles in our lives and understand how they impact our abilities to act independently. Additionally, students were told to creatively consider strategies to circumvent the barrier. This lesson highlighted autonomous functioning as the student was required to make decisions about which skills to use in a situation; examine the task at hand and their available repertoire; and formulate, enact, and evaluate a plan of action with revisions when necessary.

To conduct the anticipatory set for creative barrier breaking I set up a concrete experience of circumventing a physical barrier for the students. The students were placed in pairs and each student given a drinking straw and one marble per pair. I placed ‘bricks’ (i.e., empty boxes of various sizes) in between each pair. The instructions for the activity were to pass the marble from one student to the other and only the straw could touch the marble. After a few attempts, all the teams were able to move the marble around the box.

Continuing the same lesson on creative barrier breaking, once the direct instruction was delivered the students were asked to participate in a guided practice activity that was an

extension of the anticipatory set described above. During the direct instruction portion of the lesson on creative barrier breaking the students were taught sequential steps in decision making (see Appendix for complete lesson plan). The students were taught how to evaluate each step of decision making as to workability and feasibility. The students previously received instruction in setting goals, both short-term and long-term, creative barrier breaking, and problem-solving. For the guided practice activity the students were organized in three groups of five. There were two 'goal' teams and one 'barrier' team. Before moving outside for the activity the goal teams were instructed to name a simple long-term goal and four simple short-term goals that would accomplish the long-term goal. The barrier team was allowed to hear these goals and instructed to brainstorm within their group to come up with a few logical barriers. The teams were supplied lanyards and pieces of paper and instructed to print each goal on an individual paper and each student wore one sign. The barrier team also received lanyards and paper, but were told not to reveal the barriers. The teams moved outside on the parking lot in two straight lines of 5 students each, with each student standing on a parking space line to ensure uniform distances between them.

The students were reminded of the decision-making steps they were to use and cautioned that one never knows when or what barriers may come up as we try to reach our goals. At this point, the first student in each line was given a beach ball and instructed to announce their goal step by reading their sign then 'accomplish' that goal step by successfully passing the ball to the next student in line; students had to keep one foot on the parking space line at all time. They were to repeat this step passing the ball along the line until they 'reached' their long-term goal. If the ball was dropped, that was an indication of a short term goal that did not work and as a team, they had to state a new short term goal for that step and try again to accomplish the new

short term goal. The barrier team was instructed they could ‘block’ a short term goal whenever they desired by ‘planting’ a student in between two goal teammates, turning his paper over and revealing the ‘barrier’ intended to impede the pair from making the short term goal connection. The rules of the barrier included that once planted he could not move his feet. He could use his hands to try and block the passage of the ball, but that was all. In addition, the barrier(s) inserted into the line had to be a logical barrier. Once the barrier took place, the goal team had to (1) name two or three action alternatives to circumvent the barrier; (2) identify one possible consequences of each action alternative; (3) assess the probability of each consequence occurring; (4) decide upon the ‘best’ action alternative; and (5) act upon the decision by attempting to pass the ball. This activity continued until one of the two goal teams accomplished their goal by successfully passing the ball from one end of the line to the other.

In summary, the guided practice activities described above were used to make concrete and allow for practice of the skill development aspect of the operational component elements related to lesson objectives in autonomous functioning. The first research sub-question of this study – how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to autonomy – was addressed with the observational data collected throughout these activities by the researcher and analyzed here for evidence of behavioral autonomy. Data also were collected via the students’ STSD activity guides as the students completed the guided practice activity and returned to the classroom to engage in the closure portion of the lesson plan (i.e., experience outcomes and learn). Data described above as well as data collected at pre- and post-program phases included: pre-program phase qualitative assessments with the ArcSDS student form, the AirSDS parent and educator form, and the four-part Know Yourself self-awareness activities; and post-program phase

qualitative assessments with the ArcSDS student form, the AirSDS parent and educator form, and in-depth parent/student interviews. Qualitative analyses of data were interpreted as yielding five outcome themes related to behavioral autonomy in youth with IDD as supported by the 4-H program: (1) personal development of behavioral autonomy by the youth; (2) the youth-parent interactions related to developments in behavioral autonomy; (3) achievement of increased behavioral autonomy by the youth within the family unit; (4) achievement of increased behavioral autonomy outside the family unit (community, school, etc); and (5) changes in parental attitudes toward the youths' increased behavioral autonomy.

Personal Development of Behavioral Autonomy by the Youth. Data collected across the entire program and coded with this theme provided multiple evidences linking participation in the 4-H program with personal developmental changes in behavioral autonomy in the youths with IDD. Evidence existed primarily around an increase in personal control over one's life as indicated by behavior changes in two areas: choice-making skills and a willingness to voice personal preferences.

From the qualitative pre-program assessment data, my early notes on Jim indicated he was knowledgeable about choice-making skills but was not involved in making any choices in his home environment. At the post-program interview, Jim's mother confirmed my initial assessment made during the pre-program phase when she used the term "passivity" to describe Jim's level of personal control in his life. She continued her comments during the post-program interview by taking responsibility for Jim's passivity in saying "I just find that so much of the time, it is just faster to tell him [what the choice is] rather than wait for him to choose." On the pre-program AirSDS educator assessment, Jim's classroom teacher noted that Jim "moves at a

snail's pace" around the classroom and during activities. Data recorded in my personal journal during the early 4-H lessons indicated increased levels of engagement and motivation whenever Jim was able to steer the activity towards his passion: race cars. I began to use this topic as a hook with Jim during the anticipatory set portion of the lesson, often just as a quick sidebar comment on some detail of the previous week's NASCAR race, as a means to spark his attention. By mid-program I observed that Jim often had a tidbit of information to tell me within minutes of my arrival in the class. When viewing Jim's journal entries in his STSD activity guide book I began to detect more in-depth comments from Jim consisting of greater detail and longer passages after I began the practice of making a comment to him each week concerning the previous week's NASCAR race results. I interpreted this change in behavior as a change in personal control over one's life as Jim became more motivated to initiate conversation with me based on his perception that we shared a common interest.

The qualitative pre-program assessment of Hannah contained a record of statements made by her mother at the workshop and written on her four-part Know Yourself activity. Her mother had recorded "needs to speak up" as a personal limitation of Hannah's and in discussion after the pre-program workshop clarified this comment by saying, "She is just an easy child to get along with and she basically likes everything." Similar to Jim's family, Hannah's mother indicated to me in the same conversation that the family often would "skip over" asking for Hannah's opinion and she honestly thought Hannah was truly satisfied with others making choices for her. By the post-program interview Hannah's mother described Hannah as "coming out of her shell" and being willing not only to express her choice, but also being "able to tell you why." She communicated that her earlier definition of Hannah as "an easy child" meant she honestly felt that Hannah simply did not have a preference as to the activity or choice being

made. Armed with new awareness she pointed to Hannah's empathetic side as a more likely cause for her lack of expression. "She was simply trying to get along and not have anyone get their feelings hurt," her mother explained and continued, "Looking back now, I can see where her sisters and even her friends have taken advantage of her willingness to just go along. I am very happy to see her being more assertive" as a result of her participation in the 4-H program.

The change in Hannah's behavior as described by her mother was interpreted as similar to Jim and other youth with IDD in the 4-H program. These youth indeed had personal preferences, interests and abilities, but perhaps were reluctant to express themselves either as a result of lowered motivation accompanying a less assertive personality or being submissive to other, more dominant personalities within their family or circle. Whatever the reason for the reluctance, interpretation of the findings suggested that, when the youth with IDD detected an opening with willing and supportive persons they demonstrated independence in their readiness to reveal their personal preferences and interests.

At the pre-program workshop, students in the class 18 years old and over were asked to sign an IRB-approved informed consent form for participants both because it was appropriate from a human subjects perspective and as a potential opportunity to express self-determination as suggested by the IRB. As a result of this exercise a number of parents reported in statements made to me during the pre-program workshop how they recognized the youths' decision to participate in the 4-H program, and subsequently this study as a developmental end in and of itself. An example of this was from the on-going program phase after a 4-H meeting when Jamie's mother described her conversation with Jamie about how she used his decision to sign the IRB form as an opening to discuss adult transitional outcomes with him:

I told him that I was not always going to be there for him and there would come a time when he alone would be held responsible for his decisions. We talked about how signing documents and such made such decisions official and that he could be held to that decision and not allowed to change his mind.....I remember this taking him aback a little and it gave me a great opportunity to discuss the necessity of having someone close to him read anything and everything that he is ever asked to sign if he feels he does not fully understand it.

At a later 4-H meeting I asked Jamie how he felt signing the consent form and recorded his response in my journal. He quickly responded, “I felt very important. My mom asked me if I wanted to be in 4-H. She said signing the paper made it final and no one could make me do different.” Jamie’s mother, as did other parents, saw making this decision official by signing a consent form as an important developmental opportunity for her son. This type of communication was interpreted as proper use of an opportunity afforded to them through the 4-H program intervention to buttress a lesson on ultimate personal responsibility to the student thereby allowing the student to practice increased control over his or her life and positively supporting the emergence of autonomous functioning.

In sum, findings from data collected across the entire 4-H program provided multiple evidences supporting the link between opportunities to practice component elements associated with behavioral autonomy via participation in the 4-H program and exposure to direct instruction related to component element skills to the emergence of personal developmental changes in behavioral autonomy in the youths with IDD. Youth with IDD demonstrated increased control over their lives through behavior changes in choice-making skills and a willingness to voice personal preferences in situations where they might previously have been silent or overlooked by persons around them.

The Youth-Parent Interactions Related to Developments in Behavioral Autonomy. Data collected and analyzed during this study, primarily from the post-program phase, revealed three sub-themes in the area of youth-parent interactions: (1) scaffolding support provided by the parent; (2) negotiations; and (3) granting new freedoms to the youths. As the youths participated in the 4-H club their parents supported their participation as a domain for the youths' exercise of autonomy.

Scaffolding Support by the Parent. Data collected during the post-program interviews provided evidence of scaffolding supports offered by the parents to support the youths' practices in behavioral autonomy. Diane's mother reported at the post-program interview that prior to the 4-H cooking contest Diane had very little experience in the family kitchen. She described Diane's level of desire for cooking since the 4-H cooking contest as "all gung-ho.... ready to cook a Christmas dinner!" In an effort to facilitate Diane's new desire, her mother described the scaffolding support she provided as follows:

We started fairly slow with me allowing her to stir items on the stove. I saw pretty quick that she was more capable than I had given her credit for. I felt comfortable telling her to go stir something and not stand beside her. I can also trust her to tell her to go turn a burner off and am confident that she will turn it off and not on hi or something. I did the same thing with her taking things out of the oven. I don't feel like I have to stand beside her now to do that. I don't ask her to take heavy, sloshy things out of the oven, but things like a biscuit pan or brownie pan I feel ok with those. I don't know that I would ever be ready to let her do things in the kitchen when I am not at home, but as long as I am in the house, she is being quite capable of doing a lot in there.

The type of scaffolding support Diane's mother provided was related to task performance whereas Bob's dad described scaffolding he provided in terms of food items. Bob was already doing some non-cooking things in the kitchen such as making a snack or sandwich but wanted to be able to make macaroni and cheese for himself. His dad responded to this desire:

I started off by buying those individual mac-n-cheese things for the microwave. I made them with him a time or two so he wouldn't burn it up. It didn't take long until he wasn't happy with that because he doesn't like how they taste. He wanted the Kraft kind from the box. So, I started off letting him set the water on the stove and pouring the noodles in. I would strain the noodles, then he would mix in the milk and cheese. He has gotten good enough now that I don't even help him at all. He always tells me when he is going to make a box and sometimes he will still ask me to come dump the noodles, but if he uses the right pot, he will dump them himself. He has never had a single accident with that. I am very proud of that. Lately he has begun to want to cook his own bacon and eggs, so I have to be in the kitchen with him to do that. Hot water is one thing, but hot grease is another.

Another example of scaffolding support provided by parents for some of the students was interpreted as extending the 4-H lesson even beyond the home. Following steps for independent shopping suggested in a 4-H lesson application/transfer activity, Lydia's mother reported that she began purposefully following the suggested steps and sent Lydia for specific items while they were shopping together. This eventually led to Lydia's mother pulling up to the door of the grocery store and staying in the car while Lydia went inside with a five dollar bill to buy a loaf of bread. Lydia's mother waited outside realizing that anything that went wrong, such as not paying for the bread or forgetting her change, could easily be remedied. The outcome was the family ate whole wheat bread that week as that was the bread Lydia selected on the first independent shopping trip. Lydia's mother reported that Lydia decided after eating the whole wheat bread all week that she did not really like it and would not choose that bread again. The following week Lydia "readily" asked a woman on the bread aisle to "help her not get the brown bread." Lydia successfully came out with the bread she desired. At the post-program interview, her mother reported that Lydia is still shopping independently with a longer list (up to 10 items) and they always eat whatever she brings out in her bag. However, her mother also reported that Lydia rarely made mistakes on the list as she wrote the specific brand name or type she prefers

on her list and told her mother that she asked other shoppers or store staff for assistance if she could not find any items.

A final example of scaffolding was offered by Natalie's mother during the post-program interview. This example is apropos as it was interpreted as evidence of increased capacity due to lesson retention around the workforce readiness skills taught in the 4-H lessons. In response to the 4-H career fair Natalie pursued a job at a local thrift store. In order to accommodate her working Natalie's mother explained the arrangement she made with the store management and described her support as one that caused her to move outside of the usual parent-child dynamic:

The store manager was willing to give Natalie a job, but explained to me that she would not be under constant one-on-one supervision. We worked out an arrangement where I could come with her initially and watch her work. I told Natalie that while she was at work that I was her boss and I even had her call me Mrs. Smith! For the first couple of days, I stayed right beside her and literally helped her do her work..... By the second week, I would sit in the furniture section of the store and just watch her. Every now and then I would go to her and say something to her that a boss might say. One time I scolded her for putting a pair of shoes in the wrong section and it hurt her feelings. I told her that she would have to be thicker skinned and take criticism on the job..... It was a great experience for her to have me help ease her in to working and answering to a supervisor. By the end of the June, I was just dropping her off to work. She is still doing very well there and is working 15-20 hours a week.

The scaffolding assistance provided by the parents was interpreted as facilitating the youths' behavioral autonomous functioning in that it moved the parent-child dynamic into a less dependent nature. By scaffolding component element skills associated with behavioral autonomy in a safe and caring environment, youths with IDD grew more confident in projecting their personal preferences, interests and abilities outside the home thereby better preparing them for transition into the adult world.

Negotiation Skills. The art of negotiation was an assertive communication skill valued in the STSD curriculum as the parents and youths reconfigured the youths' personal jurisdiction (Smetana, 2002) in response to increased autonomous functioning. Frank's mother described the best example of this reconfiguration during her post-program interview. She initially reported Frank's effort to negotiate as "beneficial, but sometimes exasperating." She admitted that while Frank was honestly making an attempt to follow the steps for negotiating he learned in the 4-H lesson on assertive communication (See Appendix for complete lesson plan on communication skills) she initially was guilty of viewing these interactions between them more as a game rather than a structured opportunity for intentional practice designed to positively support behavioral autonomy. She expounded on her revelation:

Here I was trying to encourage him to become an independent adult and yet I was still playing a game with him (during negotiations). I had to step back and realize that for him to really learn from this that I had to treat him more as an equal instead of a child while we were negotiating. It defeated his efforts for me to end a negotiation with him by getting tired and just saying 'because I said so'.

The perpetuation of the parental view of the youth in a submissive, child-like position rather than a more equivalent adult position was apparent in data analyses of additional post-program interviews with accounts of difficult negotiation skill practice. Mark's dad reported he believed that Mark had simply renamed his whining and nagging as negotiating. A few of the parents also reported in post-program interviews that while their youth would instigate a negotiation, the youth did not grasp the concept of losing a negotiation. These parents believed their youth simply assumed that since they used the technique learned in the 4-H lesson to open the negotiation they would win the negotiation and benefit from the object of the negotiation. These parents were reminded of the negotiation steps their youth had been exposed to from the

STSD curriculum and encouraged to refocus their perspective in the negotiation, as Frank's mother had done. The words of Frank's mother were used to sum up the real purpose of teaching the youth negotiating skills: "I had to be reminded that it's not about one winning and one losing. When we both find a place where we can win, then we are negotiating as adults." This post-program interview conclusion statement from Frank's mother served as the interpretive point for this theme: the object of the direct instruction on component skills offered in the 4-H lessons was not solely to promote skill mastery but rather to provide positive support for the emergence of an essential characteristic of self-determined behavior, as in this case, that of autonomous functioning.

Granting New Freedoms to the Youths. During the pre-program orientation and workshop, the parents were told that for their youth to fully benefit from the direct instruction and practice opportunities they would be afforded in this 4-H program the parents might consider adjusting their rules regarding their youths' activities and behaviors outside the school and 4-H environment to accommodate newly-learned skills. While multiple parents used the word 'trust' in post-program interviews as a descriptive term for the increased independence they identified in their youth, Natalie's mother and Lee's dad relayed similar concerns as they identified external variables that could potentially be a negative impact of granting increased freedoms to their youth. Natalie's mother referred to these external impacts during her post-program interview as an additional reason she had used scaffolding support of Natalie at the onset of her job: "I knew the day would come when I would have to let her interact independently with strangers." She viewed scaffolding her support not only as a means to facilitate Natalie's job but also to grant Natalie's new freedoms gradually rather than abruptly, thereby allowing her to





asserting that “Millie is more able to hold her own with us now.” I asked Millie directly during her interview what her mother meant by that phrase and she quickly described to me a series of events that epitomized a shift in authority from parental control to her own self-control. She stated, “I don’t always want to eat when my family eats. Sometimes I’m just not hungry when they are. I told my mom that I would clean up my own dishes if I could eat when I wanted to.” Millie’s mother also spoke about the negotiation around this arrangement and the shift in the sense of authority within the home:

It was an easy area to give over to her. We still love to have her join us at the table when we eat, but it’s just the three of us at home and she often either does not want to eat what I have fixed for me and my husband or she is hungry earlier than we are..... I know this sounds funny, but my husband and I are trying to look at our living arrangement now sort of as having a boarder in the house.

This notion of the youth as an individual adult in the home rather than a child was further facilitated by operationalized component element skills written in the lesson objectives and practiced in the 4-H program lessons. Data collected during post-program interviews from primarily the parents of the older students noted behavior changes in their youth pertaining to their personal property, specifically their laundry and self-care items. While most of the parents indicated no issues with allowing the youth with IDD to take over control of these areas, the idea of allowing Natalie to be in charge of her own laundry duty was “not going to happen [because] Natalie would be willing to wear dirty clothes and I just can’t have that,” her mother said. However, Natalie’s mom spoke of Natalie’s attitude towards her appearance beginning to change for Natalie when she began to work. Her mother reported that Natalie suddenly took a greater interest in the clothes she wore outside of school and the home. The emphasis the 4-H activities

had placed on dressing appropriately for work had transferred home for Natalie, and her mother summed it up by saying:

I guess it's more important to let her take charge of her wash, even if she ruins an item or two.... than to keep doing it for her. I am really excited to see how conscious she has become about how she looks in public. She may still show up here at school in a dirty uniform, and I am trying to let go of that, but at least I will know that she won't lose a job for wearing dirty clothes.

Sam's mom reported during her post-program interview that she recognized the need to present opportunities for choice and control at home to supplement the lessons he was receiving in the 4-H club. It was during the 4-H lessons on defining personal value that Sam began to express a desire to decorate his room for himself. His mother spoke directly about Sam's desire:

I never even stopped to consider that he might want to choose the way his room looked. Not only did I decorate his room for him, I also organized the furniture in it and clean it for him. He wanted to create a zoo in his room, so I decided to let him go with it. However, I told him I would let him completely redo his room like he wanted it provided that he took over cleaning it up on a regular basis. He was super excited. It took a couple of weeks to get it done, but I have to admit, it came out pretty good..... yes, he is still holding up his end of the bargain to keep it clean, well, by his standards anyway. He actually seems to have a greater interest in keeping his room straight since it is now full of stuff he picked.... Ownership is the word you would use.

In sum, Sam's mother is right that these accounts could be interpreted with the word, ownership. For the youth on a more traditional path the act of moving out of the family home establishes ownership for the youth as their property and self-care would now be physically separate from the family home. However for youth with IDD, without the landmark of moving out on one's own or the delay of it, remaining in the home forced the youth with IDD and their parents to find ways to express ownership within the home and provide opportunities to practice

within the home thereby positively supporting the emergence of behavioral autonomy. Through the direct instruction and practice in component elements within the 4-H club setting, the parents of the youth in the 4-H club provided evidence directly linked to 4-H lesson objectives and reported several areas of increased behavioral autonomy of the youth within the family unit.

Increased Autonomy Outside the Family Unit (Community, School, etc). Data collected during the post-program interviews with the parents and the youth with IDD revealed varied responses related to workforce readiness and workforce placement that described support of behavioral autonomy in environments outside the family home. The ability to identify personal preferences and interests within the work setting, anticipated or current, was evident in several personal accounts beginning with Mark's father who stated:

He [Mark] talks about a job all the time now... he wants to come with me to [my job]... recently, that talk has expanded into bugs... he talks about being an exterminator.. or the dog catcher... he likes dogs... we have conversations about it... I explain to him that there is more to being an exterminator than just walking around people's houses with a flyswatter... Mark loves flyswatters...

When asked if Mark had taken any further steps, Mark's father noted that this was basically the extent of Mark's efforts but that Mark did bring the subject up with a greater frequency now than he had prior to his 4-H program participation.

Regarding Joe, his mother described his earlier comments concerning work as "dream-like." Over the summer after participation in the 4-H program Joe's conversations evolved into actually formulating a plan, determining his resources, and vocalizing his plans for his pay. At her post-program interview, Joe's mother described his change:

I think he is on the threshold of being able to pull in resources to support himself having a job. His idea is that he needs to make money in order to be able to buy the electronics he wants. It's a means to an end. So, we haven't put any limits on any desires he vocalizes. He sees some of his friends having jobs and he says "I can do that" or "I can do that job". I say, yes you can... you can clean tables, you can put silverware together, and such ... .... he understands that money is a resource and the way to get that money is to have a job....Now, he certainly doesn't mind asking me for money, but I think he is really reaching the point where he wants the money to be "his" money so he can have complete control over it.

Joe's response was interpreted as evidence of a higher level of autonomous functioning than that of Mark as Joe was identifying personal abilities and linking them to jobs.

Sam's experience took on a slightly different aspect as he ran into a barrier that his mother reported he was able to work around. She said, "He decided through 4-H that he wants to work at the zoo... he was looking for a summer job, but all they had was a summer camp, so he decided to sign up for that..." I asked Sam to tell me about the experience. He enthusiastically began outlining the activities when I asked him to tell me about what they did in camp:

Work in zoo.... I went to zoo camp... feeding the animals... went in their cages... with the rhinos....[What part of working in the zoo would you most want to do?] Being in the African zoo... building their houses and feeding them..... the elephants mostly need cleaning up after.... They eat a lot of food also.... I just want to be a worker.... Don't want to be a guide... I want to care for the animals... I like training the animals to do stuff...

I continued questioning him as to what he could be doing now to prepare for such a job. He replied, "Practice taking care of my dog... making my book [references a pet 4-H project book] to tell me what to feed the animals.... Learn how to keep the dog house clean and neat...."

Sam's presentation of multiple steps towards his long-term goal of pursuing a job in the zoo was evidence of a higher level of understanding of component elements associated with behavioral

autonomy. Note that Sam also referenced ideas and lessons from the 4-H program in his plans for attaining a job that supported his greater autonomy in the community.

For six of the students, increased behavioral autonomy was evidenced by the application of decision-making and choice-making skills to base their summer employment on personal preferences and interests. David's grandmother was excited to report at her post-program interview that he "used all the steps he learned in 4-H in getting this job... he filled out an application and went on an interview..." Once he secured the job, she described to me how they handled their concern for him potentially having a seizure at work:

This is his first summer job.... He has been a whole year with no seizures, so we were willing to let him go... of course, we know [the store owner] and that made it more comfortable for us to let him go there.... He does realize that having seizures is a part of his life and it has to be considered when he takes on activities.... He can tell you that with this job at [the store], there is nothing he will have to do there that will make him dizzy, that's how he refers to having a seizure....for the most part, he can identify a couple of things that will he feels before a seizure, like a hot flash or racy feeling in his head.... This was the biggest hurdle for us to get over in order to let him take a job.

As for data supporting the interpretation that David's increased independence and behavioral autonomy skills related to his increased autonomy outside the home, his grandmother continued:

He knows what he has to do to do a good job at [the store].... he knows he has to be on time and dressed with an apron on... he knows he has to line up the cans on the shelf all the way to the line.... But more than that, I have heard him talking about personal traits... he knows he has to be honest on the job. He knows he has to work diligently.. not loaf around and play when he is working...

Pam's story of putting her experiences in 4-H to practice outside the home was a particularly complete example. Her mother narrated Pam's experiences to me:

I see her making more efforts to plan things. She picked up a lot of ideas thru preparing for the 4-H pet fair. She had a leadership role in that, I believe... I know she said she was in charge of the dog biscuits. I remember her first being amazed that you could actually make those things!....She has taken this idea (hosting a pet fair) to the day care where she is working this summer.... The owner loved the idea and they are currently planning to have one, sort of like a show and tell time, at the day care in July. Pam has been working on making flyers to go home with the kids with all the details on it. She is planning on making dog biscuits for that too and the owner has told her she could sell them to the parents and guests. She is very excited about that.

Pam's mother continued:

Probably the biggest contribution I saw from the 4-H program was allowing Pam to take on new tasks. She is typically not the kind of person that is willing to step out and try something new by herself. I guess there is just security in numbers! Once she tries something new in a group setting, she is more than willing to take off and run with it... Just like the pet fair idea... had she not experienced helping plan the one at school, she would have never initiated the one at the day care. It wasn't the pet fair itself that was new... she has been to those kind of events before... it was being involved hands on with the planning.... Involved to the point where she was in charge of the final decision.... I remember her considering several items to make before going with the biscuits... she considered dog bows and clothes, but ultimately decided the biscuits because she said not all dogs would wear bows and all dogs would eat treats. Frankly, I remember being amazed that you all were letting them take such a decision making role in the event. I asked her at one point who was giving the final ok and she told me quickly that it was up to her. You remember that is when I called you to be sure that she was not being held responsible if the whole thing flopped! I was very impressed with your confidence in her and the way you explained it to me that there was virtually no way for any of their choices to fail in this event.

In response to this narration, I asked her what she perceived to be Pam's greatest challenge in being independent outside the home in a workplace setting. She quickly supplied an answer:

I'd have to say the expectations of others.... Pam presents to other people as a very normal 18 year old. Her disability is not easily realized by people that do not know her. That leads to people expecting things from her that are beyond her capabilities. Like in the job she has now... we personally know the day care owner and all the staff there is familiar with her abilities. They would never overload her with a responsibility they did not feel she could handle safely. Like, she would never be left alone in the room with the smaller babies. They do allow her short periods of supervision with the older groups, like the 4-5's, but she is ok

with that. Now, take that same scenario to a different day care where they did not know her personally... if she was asked to watch the babies by herself, she would not speak up and tell them why she was not capable of doing that... she would just follow directions and watch the babies. She would not recognize her own limitations in that regard so she would not verbalize it to the staff. That could potentially lead to a situation of risk for those children. Another example in this area would be in her very limited reading and comprehension abilities. If an employer or someone else just handed her something and asked her to read and sign it... she would be unwilling to tell them that she doesn't read well... she would just sign the paper and that could expose her to problems.... I wish I could help her understand how important it is to let people know these things, but I also can understand where it is embarrassing for her. She would never go into a job and say I can do these things, but not these things... she believes she can do anything she wants to do as that is how we have raised her. We do not discuss her abilities in terms of her disabilities.... We want her to believe that she can be or do anything she wants.

To this I asked at what point would Pam likely back off and say "I need to get help or support to do this?" Her mom answered:

I'm not sure... I think she does realize some of her limitations, but she would also feel that if someone asked her to do something, that they must feel confident that she could do it, so she would go after it. An example would be like in the daycare... if someone asked her to change a baby's diaper, she would go try to do it... she would not tell them that she had never done it or that she doesn't feel comfortable picking up a smaller baby. She would wait until there is a problem to ask for help.... And of course, in that example, the problems that could happen could have serious consequences..... people around her have to know her so they don't put her in dangerous situations....

Pam's mother was not alone in reporting concerns for supporting behavioral autonomy in her child. A concern noted by a few parents in similar statements at post-program interviews was summed up best by Mark's father when he was asked to describe any negative aspects he believed there to be in providing instruction in autonomous functioning as related to workforce readiness:

The realization that he couldn't actually do that job... his limitations would prevent it. I would like to encourage him, but I don't want to set him up for

something that I know will never happen.... At the same time, I don't want to just shoot him down and say oh well you'll never be a dog catcher... but we are encouraging him to think about the future and what might be out there... but I don't know.. I mean, how much do you let them dream and talk about things they want when you know the realization is that that will never be out there for them? ... I mean, he'll never drive a car so that really limits him... every now and then, he will make a comment about something, like driving, that I know he'll never do... and I just let it go... I don't engage him in it... it's just something you do every day.... You want them to do as much as they can and grow and be the person they are, but there are just things he'll never do and we have to be prepared at some point to just say no... you can't do that...

In sum, the emphasis on workforce preparation during direct instruction in operational component elements related to skill development in behavioral autonomy in the 4-H program set the stage for many of the youth to express desires to explore the possibility of employment. Students demonstrated increased autonomy in activities ranging from job exploration and planning to actually seeking and securing employment. For the majority of the students, this was a completely new area as only two students reported previously having jobs. For a few of the students, this area was somewhat undeveloped, presented by the students as more of a dreaming exercise. For these youth, the parents seemed uncertain as to the value of providing instruction in an area they believed their youth might never develop mastery.

Changes in Parental Attitudes Toward the Youths' Increased Autonomy. As noted with the previous theme, a similar concern was noted in parent comments from the pre-program data collected during the orientation and workshop. This concern addressed presenting a realistic picture to youth with IDD about the limitations they might ultimately need to accept as a condition of their personal disability. The parents who expressed the strongest concerns in this area at the pre-program orientation were asked to re-visit these statements during the post-program interview by comparing their earlier beliefs with where their beliefs were now after the

4-H program ended. For Hannah's mother, I recalled our pre-program exchange for her where she had spoken:

I had always hoped for her to be more independent, but I realize that she will not be like her peers. I have resigned myself to the fact that Hannah will live with me for the rest of her life. There is nothing to be gained by shoving her out into a world that is going to reject and belittle her. It is unrealistic of me to spend time preparing her for things that will just never happen in her life. It just seems more logical to make her surroundings as safe and comfortable as possible. Why add heartbreak in her current environment of love and support?

The post-program summation as spoken by Hannah's mother at her post-program interview revealed quite a different stance concerning Hannah:

I have figured out that I have to find ways to let her go. Even though she will have to have some level of assistance her whole life, I understand now that I can let her go even while she is physically with me. I want her to have an independent spirit and realize that her choices and goals in life matter to me. For me not to do that would be to completely fail her as a mother.

Lydia's mother provided similar statements about Lydia in her pre-program assessment. I reminded her of a couple of her statements: "I have never really discussed her disability with her, but I know where her limitations are. She has never even heard me say the word autistic in reference to her." I asked her if there had been any changes since the program concluded. Her remarks included: "Who knew that she could do so much? I am so embarrassed to admit that I have never pushed her to stretch her abilities."

Finally, Jim's mother was prompted with remarks she provided at the pre-program orientation as follows: "I want to help him do everything instead of just leaving it up to him...I don't really like making him do things... its faster for me to do it and get it over with.... It's

working me instead of me teaching him how to do it...” Her post-program interview response to those earlier statements described quite a different student who had taken on a small internship at a friend’s auto shop:

Before this I felt like he wouldn’t really commit to a task because he knew in a few minutes that I’d take over and finish it for him... in 4-H he quickly learned that he had to pull his own weight regardless of how long it took.... That pressure, and encouragement, for him was really incentive instead of a deterrent. He has carried that over to this job as well... instead of puddling along waiting on someone to take over a task, he has been more focused and deliberate about working at a quicker pace because he wants to do a good job.

Additional responses from post-program interviews described the parents’ desire to protect the youth and knowing what is best for their youth balanced against the new-found autonomy developed during the 4-H program. These responses and others like them were interpreted to suggest that not only had the youth with IDD gained autonomy during the on-going phase of the 4-H program, they had challenged how others now viewed them thereby creating a “demand” for an altered response from the significant adults in their environment. The comments by Diane’s mother enriched this interpretation when she said about her interaction with Diane prior to the 4-H program, “I guess by shielding her, I have become her greater disability.”

#### Self-Determination: “The Behavior was Self-Regulated”

Wehmeyer (2007) posited that measures of self-regulation, coupled with measures of behavioral autonomy, were “particularly potent predictors of self-determination status” (p.8). As with behavioral autonomy, self-regulation is a construct that is not directly measureable as a stand-alone construct. As such, any measurement of self-regulation is dependent upon the

identification of observable, measureable behaviors performed in association with attitudes and abilities related with causal agency in a person's life. From an earlier established set of behaviors identified as operationalized component elements, Wehmeyer coalesced three- self-management strategies, goal setting and attainment, and problem-solving- as a set of abilities representing the second of four essential characteristics of self-determination when "the behavior was self-regulated" (Wehmeyer, 1992, p.304).

4-H programming in this study facilitated the emergence of self-regulation among youths with IDD by providing a combination of cognitive strategies and behavioral opportunities to equip the youths with abilities to perform self-regulating behaviors. Cognitive strategies emphasized learning objectives adapted from the STSD curriculum and 4-H project guide and focused on increasing understanding specifically related to the three behavioral categories Wehmeyer set apart as operationalizing self-regulation in youth with IDD: self-management strategies, goal setting and attainment, and problem solving. Examples of these learning objectives included but were not limited to the following:

- Students will demonstrate appropriate decision making skills concerning what skills to use in which situations.
- Students will develop and demonstrate skills related to self-management strategies.
- Students will develop effective communication skills involving speaking, listening and non-verbal behavior.
- Students will learn appropriate steps in goal-setting as a function of self-regulation.
- Students will demonstrate the ability to write SOME goals that are sequenced and logical steps to long term goals.
- Students will apply self-knowledge to goal setting.

- Students will demonstrate the ability to use scripts and questions as a method to plan actions related to goals.
- Students will recognize success and accept mistakes as essential to goal setting and attainment activities.
- Students will recognize personal boundaries, rights and privacy needs.
- Students will understand the need for self-control and how to practice it.

Examples of the objectives focused directly on workforce readiness included but were not limited to the following:

- Students will understand the importance of responsibility, dependability, integrity, and effort in the workplace.
- Students will explore what is acceptable dress and appearance for workplace.
- Students will understand what personal appearance communicates to others.
- Students will learn to use conflict management skills and negotiation skills with classmates, teachers and family as a function of work-related skills.
- Students will investigate work-related documents and prepare materials to market one's self in the workforce community.
- Student will demonstrate appropriate work interview skills for 4-H career fair.

Through direct instruction related to these objectives, the 4-H members were taught specific steps for skill development in self-management, goal setting and attainment, and problem-solving. Direct instruction was followed by guided practice activities planned to offer the 4-H members opportunities to practice the operational component elements related to self-regulation. An example of a guided practice activity follows; other examples were available as each lesson included a guided practice activity.

The specific lesson objective linked to this guided activity asked the student to use problem-solving skills to analyze a particular job environment and decide what type of clothing was appropriate. The general goal of the lesson was to increase conceptual understanding of non-verbal communication skills as students examined how personal presentation in the workplace sends messages to our employers, co-workers and customers. Additionally, students were told to consider personal presentation in the workplace in a way that makes sense for the type of job and safety considerations for that job. This lesson highlighted self-regulation as the student was required to make decisions about which skills to use in a situation; examine the task at hand and their available repertoire; and formulate, enact, and evaluate a plan of action with revisions when necessary.

To conduct the guided practice activity, I instructed the students to choose one or two items from the pile of clothes that could be worn on a particular job. They could choose the job as either their dream job identified earlier in the semester or any job. They were told that they were going to model the clothing items in such a way as would be appropriate for the job. Students were allowed to come to front of class one at a time and tell what their job was and how the clothing decision was appropriate for the job. Students also were asked to address anything about their health or hygiene that was job-appropriate. Students were prompted to answer the question “what is the message the clothing item is saying about me?” Once all the students had modeled and talked about their items, I prompted their critical thinking skills by introducing the idea that it is not only what we wear that sends non-verbal messages, but also how we wear that clothing. An example here was to show picture of boy from today’s media who was wearing an appropriate school uniform, but had the pants drooping below his bottom. When I did this lesson, as I showed this picture I sang a few bars of the “Pants on the Ground” song from

American Idol to add humor to the lesson. Students were asked quickly to alter the clothing item they had put on to demonstrate an appropriate item worn inappropriately; a good example was a necktie, first tied around the neck correctly, then altered to be untied, sloppily tied, even worn as a headband. The students could also alter their grooming or tell of an inappropriate grooming case (i.e., bad breath, too much makeup, etc.). The students had a great deal of fun with this guided practice activity but as each student modeled the inappropriate use of the item, I kept focusing the students back on what non-verbal message the clothing item was conveying?

In summary, the guided practice activity described above was used to make tangible and allow for practice of the skill development aspect of the operational component elements related to lesson objectives in self-regulating behaviors. The second research sub-question of this study – how may 4-H programming provide a context for youth with IDD that enhances their understanding and performance of behaviors related to self-regulation – was addressed with the observational data that were collected throughout these activities by the researcher and analyzed here for evidence of self-regulation. Data also were collected via the students’ STSD activity guides as the students completed the guided practice activity and returned to the classroom setting to engage in the closure portion of the lesson plan (i.e., experience outcomes and learn). Data described above as well as data collected at pre- and post-program phases included: pre-program phase qualitative assessments with the ArcSDS student form, the AirSDS parent and educator form, and the four-part Know Yourself self-awareness activities; and post-program phase qualitative assessments with the ArcSDS student form, the AirSDS parent and educator form, and in-depth parent/student interviews. Qualitative analyses of data were conducted in two distinct areas: (1) changes in youths’ cognitive understanding of self-regulating behaviors, and (2) changes in youths’ ability to perform self-regulating behaviors. Findings provided evidence

regarding the role of 4-H programming for youth with IDD and support of understanding and performance of behaviors related to self-regulation.

Changes in Youths' Cognitive Understanding of Self-regulating Behaviors. Cognitive understanding of self-regulating behaviors, specifically problem solving skills, was assessed pre- and post-program using the ArcSDS as a qualitative assessment in two sections: (1) the means-ends problem solving technique (Platt & Spivack, 1989); and (2) the goal-setting/task performance section. Open ended responses on the ArcSDS presented the researcher with the option of scoring the assessment and using the scores quantitatively or, as was the case in this study, evaluating the open-ended responses conceptually and qualitatively as to reveal effective, logical actions for problem solving and relevant multi-step sequencing for goal setting and attainment. The ArcSDS scoring guidelines allowed for this type of qualitative assessment and presented general guidelines for assessing a person's interpersonal cognitive skills for problem solving and goal setting. Use of the ArcSDS in a qualitative manner provided the researcher written, in-depth answers as opposed to answers where the youth was asked only to check a box. When using self-report check off box assessments with youth with IDD, the researcher has to trust that the youth understood the question, understood the answer choices, and understood how to answer the question. It is difficult to ascertain when a youth with IDD completes a check off box assessment whether that youth actually answered the question or was simply checking boxes. Despite suggestions for improving the validity of students' self-reports, one may never know the honest intention behind each check off box answer provided by youth with IDD. However, the use of written (or spoken) responses provided the researcher with a substantive answer that could be compared or contrasted between students or between multiple assessments of the same student.

For this study, evidence of interpersonal cognitive understanding of self-regulation was assessed on the ArcSDS means-ends problem solving section by a student's ability to generate multiple-sentence responses that were evaluated by the researcher for relevance and effectiveness to produce the ending to the scenarios presented in the measure. On the ArcSDS, six means-end problem scenarios were presented along with instructions for the student to tell what happened in the middle of the story, then to connect the beginning and the end. An actual item from the ArcSDS is scripted below:

**Beginning:** Your friends are acting like they are mad at you. You are upset about this.

**Middle:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Ending:** The story ends with you and your friends getting along just fine.

Each item was qualitatively evaluated similar to the quantitative method, however no numerical scores were assigned. An evaluation of low, medium, or high interpersonal cognitive understanding was equivalent to the quantitative scoring in that an evaluation of low (or zero score) indicates the solution provided by the student would fail to achieve the indicated ending; an evaluation of medium (or score of one) indicated that the solution provided, while related to the ending, would have limited utility to achieve the indicated ending; and an evaluation of high (or score of two) indicated that the solution provided would be an acceptable, adequate way to achieve the indicated ending. Additionally, qualitative use of this section allowed the researcher to compare the student's pre-program and post-program responses and not only record any changes in evaluation level but analyze and thematically code the responses for conceptual content.

On the ArcSDS problem-solving pre-program evaluation the majority of students in this study generated only one-sentence responses with limited relevance and incremental progress toward an ends scenario. When presented with the sample item from above, pre-program responses for this particular item included: “Hug them”(Sam); “I talk things over”(Joe); “I’m sorry”(Lydia); “You walk away from your friends”(Hannah); “I would cry”(Mike); “Your friends should always be here for you when you are mad”(Natalie); “to apologize”(Diane); “I tried to grab the ball but failed”(Bob); “they tell me why they are upset”(Jamie); and “I love you following”(David). According to the ArcSDS guidelines, unrelated, single-sentence responses such as these were interpreted as demonstrating a low level of cognitive understanding of problem-solving skills from students in the pre-program phase. As such, the students providing the above responses were assessed as generally lacking interpersonal cognitive understanding of problem solving skills.

On the ArcSDS problem-solving post-program evaluation administered at the end of the 4-H programming intervention designed to improve self-determination, specifically problem-solving skills, among youths with IDD students’ post-program responses improved in relevancy and complexity. According to the ArcSDS guidelines, these changes were interpreted as reflecting gains in cognitive understanding of problem-solving skills. Using the same ArcSDS item as presented above, the following post-program responses were examples of narratives by the students:

“I say I’m sorry for getting you mad. I make sure this won’t happen again. Then they would hug me” (Sam).

“This would make me very sad. I would talk to them to see they are mad. Then I would forgive them or apologize and make up. Then we could get along again” (Joe).

“I would ask them to go to the movies. My friends like watching movies. Going to a movie would make them like me again” (Lydia).

“First I would ask somebody else why my friends are mad. If they don’t know, I would ask [the teacher]. She always knows. I would fix whatever [the teacher] tell me to. I would tell my friends that I fixed it” (Mike).

“I ask them why the heck you are mad at me. I didn’t do anything. The explained their problem. I helped solved their problem” (Natalie).

“I would sit with them at lunch and ask them to talk to me. After school I would invite them to the mall. Friends love to shop together” (Diane).

“I think it would be very nice to invite them to my house to see my new puppy. She is a very sweet puppy and everyone loves puppies. When they come over to my house, we will take the puppy for a walk. Who could be mad at anybody when you are walking a puppy? We would all be nice after they meet my puppy” (Bob).

“Talk to them. Why are you mad at me? You need to stop. Then we would talk about this when we get home” (Jamie).

“I would tell my dad. She can call them and see what is bugging them. She will tell me what they say and tell me how to fix it” (David).

These post-program responses evidenced the gain in cognitive understanding as they demonstrated sequencing skills and a greater relevance to address the problem. Several of the responses indicated effective, logical actions to initiate discussion with some aspect of working out a resolution and getting along afterward. Although only this one item from the ArcSDS was presented, students demonstrated similar gains on all six items after the 4-H program intervention.

The goal setting and task performance section of the ArcSDS was used as the second section to evaluate the interpersonal cognitive understanding of the students. Similar to the previous means-end problem solving section, the goal section also utilized open-ended questions to be evaluated qualitatively or scored quantitatively. The ArcSDS measured cognitive

understanding by asking students to identify a goal in each of three major transition areas - living, working, and transportation - and list four things they should do to meet this goal. An actual item from the ArcSDS is scripted below:

**Where do you plan to work after you graduate?**

☐ **I have not planned for that yet.**

☐ **I want to work** \_\_\_\_\_.

**List four things you should do to meet this goal:**

- 1) \_\_\_\_\_.
- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.
- 4) \_\_\_\_\_.

The student also had a place to indicate if they had not yet planned anything for that goal. A student indicating they had not yet planned anything was not evaluated or marked neutral, as the lack of a response did not necessarily indicate that the student had a low level of cognitive understanding about goal setting and task performance. As with the problem-solving section, interpersonal cognitive understanding was assessed based on the presence of a goal and the number of steps identified to reach that goal. The goal indicated by the student was not judged on the probability that the student could achieve the goal, but simply the identification of a goal. Also, the goal identified by the student was not evaluated as to its suitability to answer the stem question on the ArcSDS. However, the steps to reach the goal were evaluated as to whether or not they were viable steps or if they were unrelated to the goal.

On the ArcSDS goal-setting pre-program evaluation, the majority of students in this study generated only one or two steps with limited relevance and incremental progress toward the goal. When presented with the sample item from above, Millie indicated a goal of working “at the zoo.” She listed only one step of “feed the amales,” indicating a job task, not a step towards employment. Sam also had a goal of working “at zoo.” His steps to this goal were also related to job tasks, instead of steps to gain employment. He listed three items: “clean up poop, go to the lions camp, water animals.” Joe listed a goal of working “at Walmart” but offered no steps to achieve the goal. Pam’s goal was also to work “at Walmart,” and while listing four responses, they were all unrelated to obtaining employment: “I love to help people out, put stuff where they go, work in the nail place, and clean up after people.” These responses were indicative of students with low levels of cognitive understanding related to goal setting and task performance. Diane’s response indicated a mid-range level of cognitive understanding as she wrote a goal of working at the Baton Rouge Clinic. While a goal of working as a medical professional was most likely out of Diane’s grasp, the ArcSDS guidelines were clear that the evaluation focused on whether or not a goal was listed, not the suitability of the goal for the individual student. Diane’s goal steps were to “wear scrubs, I need to make good grades, I need to learn to be a doctor, and I need to do the career fair.” Although not sequential, three of the four steps Diane listed were considered as relevant to her stated goal. Mike provided a pre-program response that indicated a higher cognitive level of understanding of goal setting. He listed his goal to work “at a school” and the accompanying steps for meeting this goal were: “get educated, go visit schools, apply for jobs, go on interviews.”

During the on-going program phase, the youth received direct instruction on goal-setting in multiple lessons along with a myriad of opportunities for practicing the multiple elements

involved in effective goal-setting and attainment. Evidence of evolving self-regulation was not equated with successful attainment of the goal, but rather the demonstration of higher order cognition in the elements of goal-setting. The complexity involved in merging and applying multiple elemental skills, such as is required for effective goal-setting, required the researcher to reflect upon prior knowledge and experience with each student when evaluating the student responses. It required me to strike a fine balance between inserting myself into the process and deflecting a student's pursuit of a goal that I might not agree with or find to be realistic vs. stepping aside and allowing the student to use a goal as a work in progress or exemplar for the purposes of the 4-H lesson. Constant self-monitoring on my part and journal reflections helped me consciously maintain this balance.

On the ArcSDS goal-setting and attainment post-program evaluation administered after the completion of the 4-H programming intervention designed to improve self-determination among youths with IDD, students' post-program responses improved overall in the mechanical elements of goal-setting, such as writing goals and sequencing steps, and sporadically in higher level cognitive processing such as relevancy and workability of steps to produce the intended goal. According to the ArcSDS guidelines, these changes reflected gains in cognitive understanding of goal-setting and attainment skills. Regarding this essential characteristic (i.e., self-determination), it was not possible to track specific students' responses from pre-program to post-program as was done in the previous section. In the previous section on problem-solving, the ArcSDS was identical for pre- and post-program evaluation presenting the identical scenarios to students for both assessments, which allowed direct comparison of each student's responses to an identical scenario before and after direct instruction and practice opportunities and permitted an evaluation of each student as to gains in cognitive understanding. For the ArcSDS items for

goal-setting and attainment, the students were asked to generate their own goal for each transition area or they were given the opportunity to indicate the lack of a goal. Therefore, the ability to perform side by side comparisons to evaluate for relevancy and workability towards a specific goal was not possible. The findings for this operational component element of self-determination are presented as to mechanical aspects of goal-setting and as to relevance and workability of the steps outlined in the student answers, both of which were identified as indicators of cognitive understanding of goal-setting in the ArcSDS guide.

Mechanical Aspects: First and most noticeable in changes in the mechanical aspects was definitive increases in the students' ability to write their goals on the post-program assessment. Fourteen of the students responded to this section with a goal, as opposed to checking off that plans had not yet been made. All students offering a goal were able to write their goal with at least one detail of specificity where on the pre-program assessment; only four students had stated their written goal with any additional specificity. For example, Natalie was among students evaluated on the pre-program assessment as demonstrating low levels of cognitive understanding in goal-setting. Her pre-assessment indicated no goal for the living area and only "to be an artist" on the working area. Natalie wrote a post-program living area goal of "living in Arkansas with my boyfriend" as well as a working area goal of "at a full time job in an art studio while studying to be an artist." Bob also indicated no goal for the living area on pre-assessment and specified "in Japan" on the post-assessment. Diane's response for a work-area goal remained in the same general field, but changed types and added specificity from "at the zoo" during pre-program assessment to "as a dog groomer at PetLand" in the post-program assessment. Sam changed his work-area goal from "at zoo" to a more specific goal in a different career area of "in a band playing music." Millie's pre-program response was interpreted as an example of a mid-range

cognitive understanding with her goal of working at “Baton Rouge Clinic.” She indicated no pre-program goal for living and transportation areas. In the post-program assessment, Millie changed her work area goal to “work at [local named] Hair Salon” and added goals for living with “my mom and dad” and using “my mom for transportation.” Pre-program responses from Mike were interpreted as indicating a higher level of cognitive understanding in relation to his classmates by listing related, sequential steps to his work-area goal to work “at a school.” His post-program goal, while still in education, clarified “at a school” to “[specific Baton Rouge school] and added “as a Special Education aide.”

Writing a specific goal is one aspect of mechanics in goal-setting that provided an indication of cognitive understanding along with the ability to sequence steps in order to reach the goal. Providing no pre-program goals, Bob added low-level sequencing to his post-program living area goal of “in Japan” by listing “save a lot of money, buy tickets to the airplane, pack clothes up, and get on the plane” as four things to do to meet the goal. He had also added a post-program goal for transportation to use “a car” and to meet the goal he sequenced the steps of “get myself prepared, go outside to the car, start it and then drive to explore.” Both answers were interpreted as providing properly ordered steps as an indicator of cognitive understanding of sequencing. Millie’s pre-program steps to working at “Baton Rouge Clinic,” while related to that goal, lacked any sequencing. In her post-program responses, she was able to provide sequencing to her new work-area goal to “work at [local named] Hair Salon” with her steps of “work on reading and math in school, get all A’s to graduate, do intern work at the salon, and learn how to fix hair.” A final example of increased use of mechanics in goal-setting skills was from Mike who had provided sequenced steps for one pre-program goal. In his post-program responses, Mike was able to provide sequenced steps to all three goal areas as follows: for living area goal

of “an apartment in BR,” he sequenced the following steps: “find an apartment that I like, ask how much is rent, get a job to pay rent, and find a personal care person to live with me.” With similar use of cognitive understanding in his post-program response, Mike sequenced several steps to reach his transportation area goal to “use a new handicapped van”, as “Mom pays for van, find a driver for van, State will assist me and pay for driver, change van over to my name, and pay insurance.”

The abundance of examples from which the above responses were drawn in the mechanics aspects of goal-setting, including writing specific goals and sequencing steps to meet the goal, were interpreted as providing strong evidence as to the increased cognitive understanding in a concrete aspect of an operational component skill taught with direct instruction. The provision of weekly opportunities to use this skill as the students set goals and ordered steps on various 4-H projects provided strong evidence of increased cognitive understanding as the students were able to retain and replicate this mechanical aspect of goal-setting and attainment on the post-program assessments.

Relevance and Workability: Higher order cognitive understanding was indicated in goal-setting and attainment by the degree of relevance the goal steps shared with the stated goal as well as the probability that actualizing the steps would accomplish the stated goal (i.e., workability). As indicated earlier, the findings on this more abstract aspect of goal-setting and attainment were sparser than for the concrete aspect but the few examples found bear discussion.

Both Mike and Millie were presented earlier as examples of students with high levels of cognitive understanding based on the post-program assessments. Mike and Millie exhibited increased cognitive understanding between pre-program assessments and post-program

assessments, and a review of their goals and the steps they planned to meet the goal demonstrated a high degree of relevance as well as a greater workability in that the steps listed could potentially accomplish the goal. The most advanced commonality shared between these two students was the addition of another self-determination essential characteristic in their responses: self-realization, as operationalized by the operational component element of self-knowledge and self-awareness. Millie's post-program goals and steps indicated her increased self-awareness as she added goals of living with "my mom and dad" and using "my mom for transportation" where on the pre-program assessment she had indicated no goals for both the living and transportation areas. Both of these goals indicated that Millie was sufficiently self-aware of her own disability as she indicated that some degree of continued dependency on her parents for adult transition assistance would be part of her future goals. These two goal statements were accompanied by related, workable steps, such as to "get a job to help my mom and dad with the bills, get my own telephone, and make a schedule with my mom" for living with "my mom and dad" and "check her schedule to be sure she is available, help her pay for the gas, and ask her to teach me to drive" for using "my mom for transportation" goal. Mike's goals also indicated an increase in self-knowledge that was accompanied by recognition of the need to access outside resources in order to meet his goals. His post-program responses of "find a personal care person to live with me," "find a driver for van," and "State will assist me and pay for driver" indicated that not only is Mike self-aware in recognizing that he will need outside assistance to pursue an independent life, he is aware of one resource that will provide him with such assistance (i.e., the "State").

Wehmeyer et al. (2003) was consistent in stating that self-determined behaviors will exhibit all four of the essential elements being explored in this study. By purposefully using a

reasonably accurate knowledge of themselves to direct their goal planning for the future, both Mike and Millie demonstrated gains in self-realization along with cognitive gains in self-regulating behaviors.

Changes in Youths' Ability to Perform Self-regulating Behaviors. During the on-going phase of the intervention, the students received direct instruction and practice opportunity in goal-setting techniques with emphasis on three components of self-regulation: self-monitoring, self-evaluation, and self-reinforcement. During the post-program interview with the parents and students, goals established by the student during the on-going phase were revisited. The purpose was to examine the youths' ability to perform these three self-regulation components and their transfer into the home and community environment as evidence of the youths' development in self-regulation. Guiding the interviews as such allowed the data to yield themes related to each element. Examples from the interview transcripts related to each component follow.

Self-monitoring. Throughout the 4-H program, the students were introduced to and had modeled for them the self-monitoring strategy of self-talk. The type of self-talk modeled for the youth ranged from spoken, verbal questioning to mental checks not spoken out loud, and charting progress during the self-monitoring. During the on-going phase of the program, the students were taught goal-setting as a concrete strategy by using goals from the 4-H project guide that were career related and easily recognizable to the students. The 4-H project book provided an excellent resource for charting the goals in the records portion of each project. Each student wrote a work-related personal goal that would yield several short-term goals and taught to self-monitor the goals. Examples of goals set involved counting money, computer skills, dress and hygiene goals, and communication skills.

Findings from data collected during the post-program interviews revealed various strategies for self-monitoring developed during the 4-H program that the students had transferred into their academic and home life. During the self-discovery activity, Bob reported being easily distracted as a personal weakness. He recognized that being distracted made school work and playing video games difficult. The goal he identified was “try not to get distracted while I’m doing something else. Try to be more focus on what I’m doing first before doing the other things.” The short-term goal he listed for reaching this goal was to “remember to take his pill.” To self-monitor this daily goal, he made a chart for his refrigerator at home to record the time each day he had taken his pill. During the interview, Bob’s dad reported this self-monitoring strategy allowed Bob to become fairly independent with his medication and how the chart provided him a method each day to quick-check that he had indeed taken his pill. During the on-going phase of the 4-H program, Bob began to work on self-talk as a self-monitoring strategy for checking his focus. From the modeling of self-talk from the 4-H leader, he adopted a self-talk strategy to help with focusing his attention. He outlined this simplistic strategy for me: “I just ask myself what am I doing now and be sure that the answer is the right one. Like when I am taking my spelling test, every couple of minutes, I just ask and be sure that I answer “taking my test”. If the answer is “daydreaming”, I tell myself to get back to my test and it works for me.”

For Bob, this simple verbal self-check assisted him with staying on task. When I interviewed Bob’s dad following the 4-H program conclusion, I asked him about current goals Bob was working on and progress on the goals. Bob’s dad laughed as he explained to me how Bob was working on focusing during weekly Mass and how “he had taken it [the self-talk] to an extreme”:

The problem was that he was asking how he was doing out loud. We would be in mass and every few minutes Bob would pop out with “what am I doing!” He wasn’t really loud, just a speaking voice, but it was almost comical when someone sitting near us would actually turn to him and respond.... Like they would say “you’re taking communion” or something similar.... So we have now mastered asking his question silently in his head. I used to could tell by his expression when he was asking his question because you could see that he would take a mental pause. It seems like now I don’t see him doing it near as much. His focus is better too.....but there are times when I see him drifting and I will nudge him a little by asking him “what am I doing”. It always reins him right back in.

Not only had Bob transferred the self-monitoring skill of self-talk into his home and community life, he had also advanced his use of the skill by being able to internalize his self-talk rather than speaking out loud and still have the same effect on his focusing behavior. An added benefit of developing and sharing this strategy with his family was that Bob’s dad found that he could use the simple question and prompt Bob back on task.

Another student, Pam, recorded in her journal the self-monitoring steps she had adopted to help her with an extra-curricular goal to improve her bowling score. Her goal was to “break one hundred in bowling” and during the school’s weekly bowling activity, she began to record and monitor her progress. She reported to me that her form was an issue in her game and she viewed her poor form as a barrier to reaching her goal. In her journal, she listed these form corrections: “take a bigger step, keep arm straight and don’t throw ball.” She revealed to me a simple statement that she says each time she starts her approach. “I say ‘big step, straight arm, soft ball’ each time.” She demonstrated her ball swing as she said the words. Each week, she recorded how many times she had used her words and also her weekly scores from bowling. She continued, “I say it right out loud and it really helps me. I am going to reach my goal by the end

of the summer!” Unlike Bob’s strategy of a question that required an answer, Pam’s strategy was checklist in style and had become part of her routine each time she bowled.

On the AirSDS parent assessment during the pre-program phase, Hannah’s mother reported a goal Hannah was currently working on as “to learn how to ride a bike” but reported that she was very fearful of falling and this fear kept her from trying. Her mother admitted little success in helping her overcome this fear. She would become frustrated with her while running along behind her and her frustration only served to cause Hannah to tense even more. She recorded in the AirSDS that to help her child reach her goal “Hannah is taking a bike-riding class that will teach her how to ride at her pace with friends around her.” This class was scheduled to take place during the semester spring break. She reported on the AirSDS how she was trying to prepare Hannah for the up-coming class: “We are talking about our fears of not trying in the past and what it will do to conquer this goal.” At the post-program interview, Hannah’s mother described to me the bond Hannah formed with the police officer who was assigned to her as a side-runner. As he jogged beside her, he encouraged her by repeating “you’re ok.... You’re ok.” Without even being aware, this police officer was modeling self-monitoring for Hannah and Hannah completely trusted his reassurances. Her mother said Hannah continued to use “you’re ok” as self-talk every time she rode her bike. Hannah’s post-program interview was conducted at her home, so I asked Hannah if she would show me how she was riding her bike. She readily dashed off to get her bike. As I watched her peddle independently back and forth in the street, I described her in my notes as still a beginning biker, a bit shaky at times, but not letting her fear overtake her. As she peddled past me several times, I heard her proclaim a quick “you’re ok... you’re ok” each time her bike wavered. Her use of self-talk was an aid that was strong enough to

overcome the immediate fear she felt with every wobble of her bike. This self-monitoring strategy helped Hannah accomplish a goal that fear had previously defeated for her.

These findings, along with data collected from other student accounts, suggested that the use of self-talk - almost always verbal, spoken self-talk - learned and modeled during the 4-H programming had promoted positive progress on goals in the home and community environment. The students' ability to recognize when they had done something well and make a record of it provided them a clear picture of their progress along with immediate feedback on reaching their goals. The indicator of successful transfer of this strategy was the repeated reporting of persistent use of the self-talk by the youth weeks after 4-H program completion.

Self-evaluation. The primary difference in evaluation used in self-determination instruction and academic settings is that, as is typically used, evaluation tends to suggest an end-product (i.e., a grade on a test). However, when used as a component of self-regulation it is best taught and modeled as an on-going process. Kirschenbaum (1984) referred to this as detecting discrepancies between ideal behavior and current behavior according to goal objectives. When done on a frequent basis it is combined with the constant opportunity to either modify one's plan or to alter one's goal altogether. Such evaluation can be especially difficult for youth with IDD as they may struggle with the ability to compare their work against a standard, recognize accomplishment, and realize when and if it is time to modify, alter, or terminate a goal completely.

The initial self-evaluation strategy used in the 4-H program was to assist the students in learning to compare their current state with the ideal state, or standard, they desired. The students received direct instruction during the 4-H program on writing goals that met the criteria

of being observable and measureable. The practice of operationalizing goals provided the students with a direct concrete source for comparison, rather than an abstract ideal that was too vague for comparison. This proved to be challenging as several of the students were very sensitive to any possibility of falling short of a measureable goal. The students were more at ease with indefinite goals of “to do better” or “to go quicker.” The strategy used to reduce anxiety about measurable goals was to pare their goals down to reasonable numbers that could be reached on a daily basis if necessary while still moving them towards a longer-term goal.

Mike provided a quality example of self-evaluation and operationalization. At the pre-program phase Mike’s mother indicated on the AirSDS his goal to “read better.” At the first 4-H lesson on setting goals, we re-defined this goal to a measurable goal for Mike to “increase reading to level 4.” However, this goal still failed to identify to Mike what tasks needed to be done each day. To help generate appropriate short term goals, we brainstormed with his classroom teacher as to what would be daily, ideal behavior to reach this goal in order to compare that to his current behavior. His classroom teacher offered that daily participation in reading group definitely would facilitate that goal. When the ideal behavior was compared with Mike’s current behavior, both Mike and the teacher noted that many mornings Mike missed reading period with his class as he was habitually tardy and reading was the first subject each day. Mike has a physical disability that requires extra time in the mornings to prepare for school. We discussed the obstacle of tardiness with his personal attendant, and together they identified ways to shorten their morning routine to facilitate an earlier arrival at school. After two weeks, the teacher’s log revealed that Mike had been punctual every day the first week and only three days the second week. Mike set out to identify ways to remove the obstacle of tardiness as it affected his long term reading goal. His care provider let us in on this process:

What we discovered that just to streamline our morning activities and set a time limit for each one was too ambiguous a plan for us. We refined the time limits by also assigning them an actual time. He sets his alarm clock for 6:30, meds at 7:00, breakfast at 7:05, morning therapy at 7:30, final restroom at 7:50, then leave house at 8. We have figured out that we can do this if he will do a couple of things at night, like packing his book bag. Frankly, I'm loving it because it causes me a lot less stress in the morning to not be continually rushing him.

Mike recorded daily from this self-evaluation in areas beyond his reading goal. At his post-program interview, his mother revealed that Mike still used the practice of setting specific times for daily activities with his personal care provider. She reported that when they took a few minutes each week to frame out their calendar that "there is a lot less stress as they work together each week. Mike seems much less frustrated and feels things are more in his control."

Experiencing benefits beyond the immediate goal into non-goal related areas was heard from more than one student. Jamie set a career-related goal to operate the cash register at work by the start of summer. He set short-term goals of counting money daily for fifteen minutes and playing money bingo three times a week. Over spring break Jamie asked his boss to allow him to operate the register during a slow period for the store. By comparing his performance in checking customers out to that of the clerks who regularly checked out the customers, Jamie discovered that the discrepancy lay in his scanning ability. While Jamie had become better at counting change through his short term goals, he had not identified the correct obstacle to achieving his goal. Jamie made an arrangement to come in early once a week and have access to an unused lane to practice scanning for fifteen minutes. Jamie's mother reported at their post-program interview that Jamie was currently operating a register for one hour each shift he works. Moreover, Jamie's teacher reported that his math skills had improved she believed due to the increased practice with numbers.

Millie also set a career-related goal: to get a summer job at the library shelving books. Her short-term goals included a weekly trip to the library to volunteer for one hour shelving books. Comparing herself to the librarians, she identified a gap involving how quickly the librarians could find the spots the books belonged. Millie's mother said that she recommended what Millie needed was simply practice and she would get faster. An obstacle to practice was the difficulty in being consistent with volunteering at the library as the library required a particular employee to be present on the day she volunteered. Millie decided a better way to practice was to affix labels to the binders of all her home books and create a library in her room. I recognized this strategy as one we had used to organize items for the store during the 4-H pet fair that had provided a means of inventory. Millie's mom reported that she had extended her home library from just her bedroom to all the bookshelves in their home. Added benefits reported at Millie's post-program interview from her self-evaluation solution were that Millie's room was staying neater and easier to clean up, and it was now much easier to find books in her home for everyone. Perhaps the larger bonus of Millie's response to her self-evaluation was the demonstration of her ability to organize and work. Her mother explained:

Every Sunday morning in Sunday school, I was bragging about Millie's 'remodeling' job in our home. The ladies just loved the updates. Well, two weeks before school let out, the pastor called and asked if Millie was interested in a job! The church has a small library that has operated on an honor basis for years and too many books were not getting returned. She started that very week and is now working 5-6 hours per week. She has organized all the books in there and has printed off little reminders that she hands to folks at church if they have an overdue book! As wonderful as that is alone, she has also started helping the church secretary do odd office tasks, so she is getting some on-the-job training for office skills.

The data collected from self-evaluation strategies taught to the students in the 4-H program revealed transfer into the home and community as indicated by the accounts of the

youth as well as their parents. The theme of benefits beyond the intended goal was reflected in several stories that served to encourage the continued use of self-evaluation. For youth with IDD, the ability to identify discrepancies as they compared themselves to a standard not only afforded them the opportunity to identify strategies to close the gap, but also the opportunity to reveal their personal abilities as being capable workers.

The post-program interview with Lee offered a unique finding from the self-evaluation instruction and practice that was unique for this study. According to his dad, “Lee is undergoing something of a growth spurt as far as his ability to participate with people and his sense of connection to community.” He continued to relay a story of how Lee’s self-evaluation on a personal issue, the desire to look handsome, had uncovered a discrepancy between Lee’s behavior while shaving and the standard for appropriate shaving behavior as demonstrated to Lee by his dad. The resolution to removing or diminishing this discrepancy was hampered by an obstacle associated with Lee’s disability. This story was best told in the words of Lee’s dad:

Lee has decided on a new goal... he would like to look handsome... for his classmates. He is willing to shave, but is completely unwilling to look in the mirror. This relates to the autistic unwillingness to be aware of one’s self in context. So, for him, looking in the mirror is something that he is unwilling to entertain and I have developed a strategy that we are implementing now... I used to shave him and he had always been resistant... but now that he is expressing a desire to look good for his peers, I am not going to be doing any of his shaving for him... I will however, tell him that he needs to shave and will point to the areas of his face where he needs to focus on, then I will just leave... and he will generally do a bad job as he is not looking in the mirror... so, in that respect, he is asserting his need to be with himself in a way that is atypical in respect to his autism.. this is something that he is dealing with the decision he has made , the goal that he has for himself... to look good. Now I imagine that in a couple of weeks when school resumes, he will begin to feel some pressure on his decision to not look in the mirror because he will begin to look kind of raggedy as he will not be able to properly shave himself...he recognizes not looking in the mirror is an obstacle to the goal he has in shaving... just this morning, I told him as he stood there with his shaver in his hand, that he had missed some on his chin and to look in the

mirror so he could get them and he replied no... he's very direct and explicit about not being willing to look in the mirror... we are going to begin to work a strategy with him to try to allow his pressure to socialize to overtake his autistic sense of not affirming his presence by looking in the mirror....

For Lee, the discrepancy he discovered as he used self-evaluation to compare his actions with that of a standard was not simple to overcome. The strategy and work that his dad outlined may not only serve his immediate goal to look handsome, but may actually prove to be therapeutic for his autism. For Lee and the other youth in the 4-H program, real progress towards concrete goals was recognized as they learned to compare their performances with standards of time, scores, skills, etc. of others in their environment. When the youth viewed the level of actions of these others as desirable when compared to their own current levels of action, the youth experienced not only the benefit of closing the gap between others and themselves, but the benefits such as described in these narratives that extended beyond the goals the youth originally set.

Self-reinforcement. Self-reinforcement is attached to goal attainment and should be incorporated at the final step of the self-evaluation process. Self-reinforcement was most often viewed as some level of self-reward for completion of a task associated with a goal, or the goal itself. This differs from the extended benefits discussed above as those were, as a whole, external benefits for the youth. Self-reinforcement implies a self-reward system, either tangible or intangible, that may serve as a motivator to promote persistence in the behavior the student was rewarding him or herself for.

Lee's story carries us naturally into this third component of self-regulation, that of self-reinforcement. While the bulk of instruction and exercise in self-reinforcement focused on positive reinforcement, there were negative reinforcements that served as behavior motivators as

well. Lee's story was exemplary of this scenario. Lee's refusal to look in the mirror affected his ability to shave well. While he may not see his facial hair he was aware of the facial hair when his dad told him of it or he touched his own face. Lee's realization that he had done an inferior job shaving clashed with what his dad coined as his "pressure to socialize." The potential negative reinforcement for Lee may be an inner feeling of dissatisfaction or a heightened awareness that others may be noticing his gaffe. Lee's dad expressed that rather than come to Lee's aid and shave him he is willing to test the natural consequences of Lee being made slightly uncomfortable to spur the necessity of looking in the mirror.

For most students however, the focus of the self-reinforcement component was typically a reward, and although the example of Lee is a case in which the negative consequences were a more efficient reinforcement, the bulk of the findings from the data collected during the post-program interviews supported the use of self-reinforcement as a reward. For many of the goals set by the students in this 4-H club, achieving the goal was inherently a reward. Landing a job, a new work skill, or a higher report card grade represented an adequate reward to motivate the students on to their next goal. More beneficial to enhanced self-regulation was a tangible short-term reward, such as stickers or certificates used commonly in 4-H programs, as the self-reinforcement for the students. The data from this study revealed numerous examples of this type of reinforcement schedule.

Cooking activities in 4-H are sources of self-reinforcements for students. For many recipes, the reward for a correctly assembled dish was consuming the food. Several parents reported their student increased their interest for being in the kitchen due to the fact they were allowed to prepare a favorite item. Lydia reported spending more time in the kitchen making

brownies: “I really like making brownies to bring to school for my friends!” Her mom interjected, “But she knows that she is not allowed to cut those brownies until she has washed her dishes and she just loves a warm brownie... so she will get right on the dishes as soon as she puts them in the oven so she is done and ready for that warm corner brownie!” For Lydia, the immediacy of the reward served to bolster the work involved in the behavior associated with making the brownie. In addition, Lydia’s attentiveness to details in properly preparing the brownies was immediately rewarded, or was subject to potentially negative consequences, by a favorable or unfavorable tasting brownie. Lydia’s ability to prepare food that was appealing for her as well as her friends may benefit her further as she may persist in this self-rewarded behavior by developing additional cooking skills.

In summary, the skills associated with self-regulation – self-management strategies, goal setting and attainment, and problem-solving – are essential skills as youth with IDD become causal agents in their lives through enhanced self-determination. The combination of cognitive understanding and behavioral performance of these skills promoted self-determination within youth with IDD as evidenced in these findings. These examples lent support to the interpretation that 4-H programming supported behavior that was self-regulated by providing instruction in the operational component elements associated with skill development. As an ability-related characteristic of self-determination, self-regulation was further supported by 4-H programming by the supportive environment and opportunities to practice provided for the youth with IDD involved in this study. These data supported an interpretation that the development of these skills within the context of 4-H programming supported strong transfer of related skills into the home and community life of youth with IDD. Self-regulation was indeed possible for youth with IDD and appropriate as a goal for positive youth development in 4-H programming.

### Self-Determination: “The Person Initiated and Responded to the Event in a Psychologically Empowered Manner”

Wehmeyer referred to a person who acts with intent to shape his or her future as a “causal agent,” that is to say, someone who “makes or causes things to happen in his or her life” (Wehmeyer et al., 2003, p. 178). The emphasis on a perception of control was suggested by Wehmeyer as a quintessentially human feature. Recognizing that control was multi-faceted, Wehmeyer honed in on three aspects of control: (1) cognitive- the belief that you have the skills to achieve your goals; (2) attitudinal- the belief that you can take control when it is important to you to do so; and, (3) motivation- the attitude that if you choose to apply your skills you can reasonably expect certain outcomes (Wehmeyer et al., 2003). Psychological empowerment as a component of Wehmeyer’s Functional Model of Self-Determination was a process of cognitive development in a social network. This process involved transitioning from a feeling of disability and powerlessness to an active life of real ability to act and take control of one’s life. Wehmeyer (2007) posited that assessment of a construct such as self-determination could not rely solely on observable traits, or abilities; the consideration of attitudes was equally important. As such, the first two characteristics (i.e., autonomy and self-regulation) examined in this study revealed self-determination primarily from a standpoint of abilities. Representing a set of attitudes, the third of the four essential characteristics was present when “the person initiated and responded to the event(s) in a psychologically empowered manner” (Wehmeyer, 1992, p.304).

4-H programming in this study facilitated the emergence of psychological empowerment among youths with IDD by providing a combination of cognitive strategies and behavioral opportunities to support youths’ development of enhanced attitudes related to psychological empowerment. As an attitudinal aspect of self-determination such behaviors were not readily

















































































































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## Appendix

### Sample Lesson Plans and Activity Guides

Lesson 1: What's important to me?

Lesson 2: Whatever shall I wear?

Lesson 3: Dream! Dream!! Dream!!!

Lesson 4: Going once... Going twice... SOLD! Value Auction

Unit Plan: Now we're cooking! 4-H cooking contest activity guide

**Lesson Plan Title:** What's important to me?

**Self-Determination Component Element:** self-awareness; self-knowledge

**Self-Determination Essential Characteristic:** The person acts in a self-realizing manner

**Workforce Readiness Skill:** Developing personal strengths; understanding how to market yourself.

**Secondary Skills:** Vocabulary enrichment; math skills: ranking, ordering (numerical order), and addition.

**General Goal(s):** Youth develop personal strengths when they discover personal traits about themselves. By discovering personal traits, youth will be more capable of making suitable job choices. Self-realizing: A person's actions are self-realized if he or she uses a comprehensive, and reasonably accurate, knowledge of themselves and their strengths and limitations to act in such a manner as to capitalize on this knowledge in a beneficial way.

**Specific Objectives:** The student will identify and organize personal traits in order of importance for them. The student will generate a personal statement suitable for answering questions on a job application related to self-knowledge.

**Required Materials:** a tray with a variety of cookies; tray should offer a range of cookies from plain to fancy and broken pieces to whole cookies. Four sets of paper slips with personal traits pre-written on them and organized in assigned sets. (see "What's important to me?" student

worksheet) One sheet of construction paper and Elmer's glue sticks. "What's important to me?" student activity sheet.

**Anticipatory Set (Focus):** Open lesson by asking students to recall their "dream job" from the previous lesson. Call on a few students and ask them to answer out loud: "What about that job is appealing to you? What makes that job important to you?" Once the last student chosen answers the questions, pass around the tray of cookies and instruct each student to choose only one item off the tray and hold it. Once all students have chosen, call on a student and ask them what made them choose the one they did. Write the 'theme' of their answer on the board. Try to call on one student for each of the various types of cookies you had on tray (if all types were chosen). Most likely, the broken pieces will not be chosen, so keep the tray nearby as you question students. Expect to hear answers like "it is my favorite kind", "it was pretty", "those cookies taste good", etc. If the theme is not readily obvious to you, ask student to elaborate. Don't substitute words for them. If no one chose a broken cookie (or if any other type went unchosen), ask the class to identify one or two reasons why and write those on the board. After a brief few minutes of this, hold up one type of cookie and speak the following sentence first person as if you are the cookie. "Hi! I'm a \_\_\_\_\_ (type, name of cookie, e.g. 'sugar') cookie! Choose me because I \_\_\_\_\_! (use word from board used to describe this cookie). Example: "Hi! I'm a chocolate chip cookie! Choose me because I taste really good!). Conclude this focus set by telling students how we chose a cookie based on a "trait" of the cookie that was important to us. Similarly, employers will hire people for job openings if they possess a "trait" the employer believes is important to the particular job. Allow students to eat their cookies!!

**Direct instruction: KNOW YOURSELF/VALUE YOURSELF:** From the STSD curriculum, emphasize how knowing oneself refers to knowing your preferences. Valuing oneself means that we have the right and responsibility to decide what is right and wrong for us personally.

**PLAN:** Remind the students of the assignment from the previous week: to ask someone they know, preferably a business owner or manager, to identify what personal trait they believe is the most important when they are considering hiring someone. Allow a few of them to reveal the answers they have. As you are getting answers, ask these questions to probe for details (if relevant): What type of business was this? Did the person tell you why they believed that trait to be most important? Once you have received several answers, wrap this up by recalling a few answers and noting to the students that different jobs may value different personal traits. From the 4-H project book, explore the personal traits identified by employers as valuable in any job setting.

In discussion, bring out the following points:

- 1) For people to be the happy and satisfied in their job, it helps if the personal trait they feel is most important to them is also a personal trait valued by the employer.
- 2) When making a choice, it is important to consider all the options before making a choice. With choice-making, the options are often decided by another person, setting, or condition. The person making the choice is not always involved in the selection of options from which to choose. When possible, it is helpful to physically lay out the options (i.e., written on slips of paper, actual cookies, etc.) in front of you so you can visualize them.

- 3) Much like choosing a cookie, we will be the most satisfied if the cookie possesses a “trait” that is important to us as “cookie consumers”.
- 4) Unlike the cookie where we could visually “see” the “trait” (i.e., the chocolate chips), an employer will most likely not be able to visually see a personal trait, such as honesty, in a potential employee. Considering that, it is important for us to be able to verbalize to an employer what personal traits are important to us.

**Guided Practice: ACT:** Pass out the one set of paper with the personal traits pre-written on them, a piece of construction paper and glue stick to each student. Ask the students to open the set and ask a student (or two) to read out loud the words on the slips. If you feel there is a word in the set the group as a whole may not understand, briefly and simply define it (try not to use a synonym from the other sets!). Instruct the students to lay the words out in order on their desk from most important (at top) to least important (at bottom). They should number the slips beside the word and then glue them in order on their construction paper. Walk around the room observing and randomly verifying that each youth understands each word, checking by asking, “I see you put (blank) as less important than (blank). Why?”, or something similar. An answer to such a question will allow you a quick assessment that the student is completing the activity correctly and understands a particular word. Upon completion of set one, pass out sets two, three, and four individually and repeat procedure.

Once set four is complete, pass out the “What’s important to me?” student activity sheet. For each set, instruct them to record the number they put beside the word (the ranking of the word) on the activity sheet beside the word. Next, they should copy the numbers in that order at the bottom of the page and add the numbers across from left to right with the total on the far right.

Instruct them to now rearrange the words on this list in numerical order of these sums from LOWEST to HIGHEST. (See completed sample activity sheet attached).

**Closure: EXPERIENCE OUTCOMES AND LEARN:** Explain to the students that by ranking and ordering synonyms of personal traits, they were able to identify what personal traits are the most important to them. Ask if any of the students would like to comment on their final list and tell the class if the results match up to what is important to them. By learning this about themselves, they will be able to promote that trait to an employer as valuable to the job.

**Application (Transfer) of lesson:** Encourage students to think of other areas they could use this method to help them determine what is important to them. Help them out, if necessary, with an example, such as what movie they want to see or book they would like to buy. By writing down as many types of movies or books (i.e., comedy, horror, love story, etc) as they can, then ranking them, they can determine what is important to them.

**Adaptations (For Students with Learning Disabilities):** The exercise of cutting slips of paper and pre-writing words on them to be glued down may not be necessary. If you believe your students can skip this step and simply use the student activity sheet to write down their rankings, that is fine. However, I have found that the students like the hands on portion of sliding the slips of paper around and gluing the final order down as they are then provided with a visual order of their words that aids their assessment of themselves.

**Assignment:** Instruct the students to take their activity sheet home and discuss it with a parent. See if the parent agrees that the list accurately describes them. They should then construct a

personal statement sentence they could use in an interview or on a job application to accurately state what is important to them.

Note to teacher: While you could use less than four sets of synonyms, the degree of utility and accuracy of this exercise actually increases with every set of synonyms the students are asked to order.

# What's Important to Me??

## Student Activity Sheet

Rank each set in order, from the most important to the least important, with 1 being the most important and 8 being the least important.

Set 1		Set 2		Set 3		Set 4	
Recognition	8	Approval	8	Courtesy	1	Admiration	4
Ability	5	Talent	4	Ingenuity	2	Capability	2
Knowledge	1	Intelligence	3	Wisdom	8	Understanding	1
Leadership	3	Authority	7	Influence	7	Prestige	6
Money	4	Property	6	Income	6	Possessions	8
Honesty	7	Justice	5	Trust	5	Fair Play	5
Loyal	6	Reliable	2	Faithful	4	Stable	7
Diligent	2	Attentive	1	Industrious	3	Hard-working	3

Write the numbers for each set in order below. Add the columns across left to right and write the total.

Set 1		Set 2		Set 3		Set 4		Total	
<u>  8  </u>	+	<u>  8  </u>	+	<u>  1  </u>	+	<u>  4  </u>	=	<u> 21 </u>	= <b>RESPECT</b>
<u>  5  </u>	+	<u>  4  </u>	+	<u>  2  </u>	+	<u>  2  </u>	=	<u> 13 </u>	= <b>SKILL</b>
<u>  1  </u>	+	<u>  3  </u>	+	<u>  8  </u>	+	<u>  1  </u>	=	<u> 13 </u>	= <b>EDUCATION</b>
<u>  3  </u>	+	<u>  7  </u>	+	<u>  7  </u>	+	<u>  6  </u>	=	<u> 23 </u>	= <b>POWER</b>
<u>  4  </u>	+	<u>  6  </u>	+	<u>  6  </u>	+	<u>  8  </u>	=	<u> 24 </u>	= <b>WEALTH</b>
<u>  7  </u>	+	<u>  5  </u>	+	<u>  5  </u>	+	<u>  5  </u>	=	<u> 22 </u>	= <b>HONOR</b>
<u>  6  </u>	+	<u>  2  </u>	+	<u>  4  </u>	+	<u>  7  </u>	=	<u> 19 </u>	= <b>DEPENDABILITY</b>
<u>  2  </u>	+	<u>  1  </u>	+	<u>  3  </u>	+	<u>  3  </u>	=	<u>  9  </u>	= <b>WORK ETHIC</b>

Rearrange the words beside the TOTAL column in the order of the TOTAL from LOWEST to HIGHEST.

1	<u>  Work Ethic  </u>	2(tie)	<u>  Skill  </u>	3(tie)	<u>  Education  </u>	4	<u>  Dependability  </u>
5	<u>  Respect  </u>	6	<u>  Honor  </u>	7	<u>  Power  </u>	8	<u>  Wealth  </u>

**Lesson Plan Title:** Whatever Shall I Wear?

**Self-Determination Component Element:** decision-making skills; problem-solving skills

**Self-Determination Essential Characteristic:** The behaviors of the person are self-regulated

**Workforce Readiness Skill:** understanding personal presentation in the workplace in a way that makes sense for the type of job and for safety reasons.

**Secondary Skills:** Health and hygiene; non-verbal communication; life skills- considering environment (weather, activity) to choose appropriate clothing.

**General Goal(s):** Every day, people are faced with the decision of choosing the appropriate clothing for the day's activities. How we present ourselves, (clothing, grooming, etc) communicates non-verbally to others. Self-regulation: The person makes decisions about which skills to use in a situation; examines the task at hand and their available repertoire; and formulates, enacts, and evaluates a plan of action with revisions when necessary;

**Specific Objectives:** The student will use problem-solving skills to analyze a particular job environment and decide what type of clothing is appropriate. The student will use decision-making skills to identify appropriate articles of clothing and demonstrate appropriate and non-appropriate applications of the article of clothing. The student will generate a picture collage of samples of both appropriate and inappropriate appearances for a variety of job environments.

**Required Materials:** Large pictures of people dressed appropriately for jobs that are easily identifiable by their clothing (fireman, chef, etc.). A large pile of clothing items and accessories-

make this pile mostly top-half clothing items that can be pulled directly over school clothes. Any lower-half items should be skirts as pants would not readily pull on over school clothes.

**Anticipatory Set (Focus):** For this 4-H lesson, the leader should enter the classroom dressed completely inappropriate for a 4-H club meeting. Inappropriate should be not be risqué, but rather demonstrate a mis-match. Adding humor to the lesson is not a bad thing! Consider showing up in a pair of flannel pajamas with curlers in hair, or dressed athletically for a ball game, etc. Feed off the student's reactions to your dress and act surprised by using a similar statement; "What? You mean we are not having a sleep-over today?" Stay in character while you reveal to the class how you failed to problem-solve and make sound decisions as to your dress. Remind the students of last week's lesson on appropriate verbal communication, and ask them to identify the non-verbal "message" they are getting from my clothes choice for the day. Anticipate answers like, "you didn't know what the activity of the day was", "you don't care about how you look", etc.

**Direct instruction: KNOW YOURSELF/VALUE YOURSELF:** From STSD curriculum, emphasize first how knowing oneself also refers to knowing your environment and the expectations of the environment. Tie this opening to relating how valuing oneself extends to taking care of oneself health and hygiene.

**PLAN:** From the 4-H project book and using the large pictures, point out the attire in the picture that satisfies the criteria of: job appropriateness, job safety, and wearing the clothes in the manner they are designed to be worn. Also, if opportunity is present, point out in picture any personal hygiene points that apply to job appropriateness (i.e. for chef, hair is restrained, nails

are short and not fakes, etc.). After you walk the students through one picture, allow them as a group to identify these elements in other pictures. In discussion, bring out the following points:

- 1) For people to be the successful and safe in their job, it is imperative that they dress appropriately for the job environment.
- 2) When making a decision, it is important to identify exactly what you are trying to decide and personally select your options by gathering information and data about each alternative.
- 3) Evaluate the options you have selected as to which will solve the problem at hand (whatever shall I wear?). Consider the pros and cons of each alternative. Select the best option, but recognize other variables that may impact the decision that are not job-related, such as weather, comfort, etc.
- 4) Reflect on your decision by checking appearance in mirror and asking self “what is the message my appearance says about me?” Ask someone else to look at you and answer the same question and see if your answers match!
- 5) When we are on a job, we become an extension of the business owner in that our appearance sends a non-verbal message to the customer as to the type and quality of service he may receive.

**Guided Practice: ACT:** Instruct students to consider the topics we have discussed and how they are going to all choose one or two items from the pile of clothes that could be worn on a particular job. They can choose the job as either their dream job identified earlier in the semester or any job. Tell them they are going to model the clothing items in such a way as would be appropriate for the job. Allow them to come to front of class one at a time and tell what their job

is and how the clothing decision is appropriate for the job. Ask them to also address anything about their health or hygiene that is also job-appropriate. Prompt the students to answer the question “what is the non-verbal message the clothing item is conveying?” Once all the students have modeled and talked about their items, you can prompt their critical thinking skills, by introducing the idea that it is not only what we wear that sends non-verbal messages, but also how we wear that clothing. Perfect example here is to show picture of boy from today’s media that is wearing an appropriate school uniform, but has the pants drooping below his bottom! Hint: when I do this lesson, as I show this picture I sing a few bars of the “pants on the ground” song from American Idol to add humor to the lesson! Ask the students to quickly alter the clothing item they have put on to demonstrate an appropriate item worn inappropriately (good example is a tie, first it is tied around neck correctly, then it is altered to be untied, sloppily tied, even worn as a headband!). They can also alter their grooming or tell of a inappropriate grooming case, i.e. bad breath, too much makeup, etc. The students will have a lot of fun with this portion, but as the instructor, as each student models the inappropriate use of the item, keep focusing the students back on ‘what is the non-verbal message the clothing item is conveying?’

**Closure: EXPERIENCE OUTCOMES AND LEARN:** Summarize to the students that while on the job, our non-verbal messages may speak louder than our words. Inappropriate dress or hygiene may not only hurt business, but could also be unsafe for us as workers. How we address the problem of what to wear and make the decision as to what is appropriate speaks volumes about our character as well. Encourage the students to identify help resources that can be used to help them make the right decision as to “whatever shall I wear today?”

**Application (Transfer) of lesson:** Encourage students to think of other times when their appearance may send out the right and wrong non-verbal messages. Examples might be church, a school dance, a job interview, even hanging out at the mall with friends. Extend this application to not only clothes and hygiene, but posture and good facial non-verbal communication. Encourage the students to use the steps learned in this lesson each time they get dressed for an activity: identify the activity or setting, select their options for dress and gather information about each option (clean or dirty, too hot or too cold, etc), evaluate pros and cons about each alternative and select the best option. Evaluate your decision by checking appearance in mirror and asking yourself “what is the non-verbal message my appearance is sending?” or asking a parent to answer the same question for you.

**Adaptations (For Students with Learning Disabilities):** The concept of ‘appropriate’ may be difficult for some students. If necessary, this lesson can be made more concrete conceptually by starting off with something as simple as dirty, torn or ill-fitting clothes versus clean, crisp, well-fitting clothes, or the lesson could revolve around on the job safety issues such as shoes versus flip-flops, protective clothing versus t-shirts/shorts, hard-hat versus ball cap (or no hat), clothing that is too baggy or too tight as safety issues, etc.

**Assignment:** Instruct the students to discuss with a parent the appropriate clothing for the parent’s job. Students are to use magazines or newspaper to create a collage of pictures to paste in their 4-H activity book identifying appropriate and non-appropriate use of clothing/hygiene for the environment identified in the picture.









**Assignment:** Encourage students to complete the 4-H activities in lesson 3 at home and involve their parents in answering the chart on “what does it take to do this job”. In addition to researching their potential job #1 and job #2, they should add their dream job to this chart (if not identified as #1 or #2). Finally, encourage them to ask their parent what their dream job was when they were their age. If they are not doing that job now, ask why not?





















be assigned within each group. Examples of job titles and descriptions they may suggest: lead chef- responsible for organizing group and leading the cooking of the dish; safety manager- responsible for maintaining a safe cooking area and overseeing safe food handling techniques; equipment manager- responsible for gathering all the tools necessary to prepare recipe and returning tools to proper locations after clean-up; recorder- responsible for documenting the cooking experience and making the final report to be presented with food contest entry.

Each student was asked to choose the one job they thought they would be best at and list personal strengths they possessed that would support their choice; also they were asked to choose the one job they thought they would have the most difficulty with and list the personal weaknesses they possessed that would support that choice. Based on these lists, each group was left with the task of assigning roles and choosing a team name that best represented their group.

**PLAN: Anticipatory set (Focus):** To focus the lesson, offer examples of things one might plan (e.g., a party, a trip, a schedule for the day, etc.) and choose one the students seem enthusiastic about. Ask them to help you plan the event. Begin by writing on the board, “We are going to have a \_\_\_\_\_!” with whatever event you chose filling in the blank. Walk them through the planning steps and record results. (This is not meant to be a full blown planning, just enough to re-orient them to the steps they learned previously in the planning lesson from the STSD. Remember the steps can be any number as long as they are Specific, Observable, Measurable and End in success (SOME), thereby providing reinforcements toward the final event. As the students are doing this, you should interject with any obstacles you think of that might come up with any of the steps. You don’t need to elaborate on it, just introduce the thought, “what would

you do if (blank) happened?” You don’t even need to elicit a method for getting past the barrier at this point, just acknowledge that a barrier could exist at whatever step.

**Activity:** At this point, the cooking teams need to plan their activities that will lead up to a prepared dish for the 4-H cooking contest. Recognize that this event will be comprised of several steps that will each need to have SOME activities developed. It might be best to not allow students to ‘overthink’ each of the SOME activities to the point of exhaustion before the actual contest. To facilitate planning, the cooking teams will act as collaborative learning groups. Based on the principles of collaborative learning, guide the students through the creation of SOME activities for the cooking contest.

**Objectives:** Participants work together to reach a specific, stated objective. The objective for each group will be to prepare a dish to enter in the 4-H cooking contest.

**Type of representation:** Textual or oral representations of explicit instructions are presented to participants. The type of representation to use for the cooking contest will be the textual 4-H cooking contest rules and regulations for each food category.

**Describe roles:** Clarify the roles individuals will perform for the SOME activities as decided on in the VALUE YOURSELF lesson.

**Activities:** Identify the various steps and the SOME activities, as well as possible obstacles for completing the SOME activities. Steps specified might include (1) preliminary contest, (2) shopping, (3) cooking day and (4) contest day. SOME activities for each step should be generated by each team, and might include items such as: (1) preliminary contest- (a) choosing

the contest recipe based on criteria that initially formed the group, (b) matching that choice with a food category from the contest, and (c) making out a timeline to follow. For (2) shopping, SOME activities might be: (a) generation of funds to purchase recipe items (location of recipe items), and (b) actual shopping for recipe items. For (3) cooking day, SOME activities might be (a) set-up of necessary implements for cooking, (b) recipe preparation, and (c) clean-up. SOME activities for (4) contest day might include: (a) making final presentation arrangements for dish at contest, and (b) entering and setting up entry at contest. Be sure to take opportunity at any time to step into a group and alert them to a potential obstacle they may not be addressing. Important note: be sure the groups are not allowed to overload themselves in their plans. If they have very little cooking experience, moussaka may not be the best choice for a contest recipe. Steer them a little towards a recipe that will not break their bank, matches, but challenges a little, their present cooking level, and a recipe that is readily “fixable” if disaster strikes. Remember the objective is to have a dish for the contest, not a story for what went wrong!

Sequencing: Once the various steps and the associated SOME activities have been identified, it is important for the students to check for sequencing of the steps. Specify which activities should be performed and write them up in order.

**ACT: Anticipatory set (Focus):** Cooking, as with most 4-H activities, is an example of a prudent risk for youth with IDD. It presents itself as a risk as it is not known beforehand to the student whether he can succeed in preparing a dish suitable for a contest. At the same time, it is an appropriate risk as failure only results in a botched dish and the opportunity to evaluate and act correctively is simple. On the day of this lesson, you may want to come prepared with a recipe item that you have purposefully messed up. Personally, I love the clip from the movie,

Coal Miner's Daughter, where Sissy Spacek has inadvertently used salt in her pie instead of sugar, to which she remarks, "they are both white!". An easy recipe to mess up is a cake, using self-rising flour in place of plain flour, causing it to fall. Explain to the students what went wrong and ask them how you could have prevented this. Listen closely for any suggestions that you can lead to the two items promoted in the STSD curriculum; predict the outcomes of our actions and rehearse our actions.

Predicting outcomes and rehearsing actions are important skills for all youth as young people in general tend to jump into activities without much forethought. When predicting the outcomes of our actions, it is vital at this point to consider the actual ability levels of the youth that will participate in the activities planned in the previous lesson. Realize that some of these youth may think they can do something in the kitchen because they have seen it done a million times, yet the truth is that they may have never performed it first-hand. As you review their chosen recipes for the contest, you may want to encourage their parent(s) to rehearse a particular skill at home (e.g., cracking eggs, sautéing, etc.). It is not a bad idea to send home copies of the recipes chosen by the student's team and encourage their parent to make the dish for a meal as a rehearsal before the contest date.

Activities: Depending on the activities planned during the planning lesson, the "acting" portion of these lessons may occur on one or two days. For the example steps listed above (preliminary contest, shopping, cooking day and contest day), the first step could be completed as the closure activity during the PLAN lesson. On the day before the contest, both shopping and cooking day activities could be completed. It may however, be necessary to shop and cook on separate days. Be careful not to defeat the purposes of the lessons by giving into temptation and 'helping them

out’ by doing the shopping or cooking. Remember the overall purpose of the cooking activity is to support self-determined behaviors, not win a cooking contest! Allow the students to perform the activities as independently as possible with only oversight guidance from you.

Beyond walking the students through predicting the outcomes of their actions and rehearsing related actions, this ACT lesson will conclude with each group completing their planned activities. Be aware at all times as the students are performing their activities to prompt critical thinking by asking questions related to any aspect of these lessons. Any questions that begin with “what might happen if...”, or related phrasing would spawn critical thinking skills.

**EXPERIENCE OUTCOMES AND LEARN: Anticipatory set (Focus):** To focus this lesson, recall whatever object you used for the ACT lesson. Example: if you used the movie clip suggested, you could ask the students what outcome Tommy Lee Jones experienced and what did both he and Sissy Spacek learn from the outcome. This is a great example where visual appraisal of the outcome, i.e. the pie, did nothing to alert Jones of the impending foul taste. Some outcomes can be assessed visually and detect a fault, but need further discovery to pinpoint the cause of the fault (e.g., the fallen cake is visually faulty, but one may need to taste it, or other action, to realize the cause). The step in experiential learning most often left out of the learning experience is perhaps the most important one – the reflection. Reflection takes the activity from being a task to being a true learning experience. It is not likely that after experiences such as these, that one would mistake salt for sugar again, or not check the label on the flour to ensure you have plain instead of self-rising.





