

***Transition Programs for Individuals with Disabilities: A Post-Secondary College Experience
Leading to Greater Independence in Life and Work***

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Abstract

This mixed-methods study analyzed data collected from a higher education pilot program intended to foster preparation for greater independence with students with intellectual disabilities (ID). Pearson's Quality of Life Inventory (QOLI) (Frisch, 1994) was administered to five program participants with high functioning intellectual disabilities (ages 18-25 years). Students also responded to interview questions relative to outcome objectives of domain courses including social skills training, fine arts exploration, recreation orientation, life and work skills instruction, and self-advocacy coaching. Data analysis of QOLI and themes from interviews revealed implications of how students perceive their overall quality of life. Also analyzed were the students' perceptions of the following areas of their lives: personal growth and self-esteem, work skills and behaviors, social skills for group activities and significant relationships, skills for functioning independently, and skills for self-advocacy and making choices. The goal of sharing these findings is to assist others in the design of future transition programs for this population.

Keywords: post-secondary, transition, intellectual disabilities

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Rural Virginia residents with high-functioning intellectual disabilities (ID) receiving Virginia's Applied Studies Diploma have limited functional training opportunities for independent living with adult employment outcomes. The National Longitudinal Transition Study-2 (NLTS2, Newman et al., 2011) of post-secondary institutions shares that only 28% of individuals with ID are enrolled in transition programs. In addition, 90% of adults with ID are not employed, as reported by former Office of Special Education and Rehabilitation Director, Madeline Will (2010). Young adults with high-functioning ID need life experiences with age-appropriate peers in typical settings to foster development of social skills needed for all adult relationships, whether work or personal. A holistic education with emphasis on having control of and making independent choices in life which nurture personal happiness and a sense of accomplishment is needed for this population. As noted, few transition programs are available to high-functioning individuals with ID as part of the offerings of institutions of higher education. Many of these students express a desire to go to college; an option offered to all other high school students upon successful program completion.

A growing number of college-based transition programs for individuals with ID are emerging since the Think College initiative and The Higher Education Opportunity Act (HEOA) (PL 110-

315) of 2008. These programs received initial funds given to institutions of higher education entitled Transition and Post-Secondary Programs for Students with Intellectual Disabilities (TPSID). The goal of these grants was to provide institutions financial support to begin restructuring post-secondary opportunities which can be ideally provided in a higher education setting alongside same-aged peers. These include employment, leisure, social skills, mobility and transportation, community living, and self-determination (Leach, Helms, Foster, Martin-Delaney, & Everington, 2013). Half of these programs are staffed as high school dual enrollment transition programs with neighboring colleges (Grigal & Dwyre, 2010). Models of these program range from inclusive course auditing to completely separate courses housed on campus with peer involvement in tutoring and teaching (Hart, Grigal, Sax, Martinez, & Will, 2006). Outcomes of such programs show progress toward increased employment, living with greater independence, and increased social engagement (Zafft, Hart, & Zimbrich, 2004).

Models of post-secondary transition programs offered through the 27 TPSID grants receiving funding for educational areas of functional academics, social skills, independent living, and employment skills were examined. Goals of such programs included providing a college experience, appropriate course work, and employment within the program which leads to sustained employment after program completion (Ryan, 2014). A program of this nature is critical in the rural communities of south-central Virginia where few employment opportunities exist, and no post-secondary college opportunities for individuals with intellectual disabilities in the region are available. This preliminary research of existing transition programs in VA led to this pilot program study in the spring semester of 2018 at Longwood University. The study consisted of four courses and a seminar offered during two full days each week for six students with intellectual disabilities. Components included adapted courses in areas of social skills, fine arts, lifetime activities, as well as the preparation for adulthood through independence in life and work. The purpose of the study was to investigate the impact of the college experience on students with ID on their perceptions of quality of life, as well as developing greater independence in life and work in adulthood.

Literature Review

Traditional Post-Secondary Outcomes

Individuals with intellectual disabilities (ID) have limited opportunities to gain appropriate vocational training in their home communities. These individuals have more challenges in securing meaningful and competitive employment with fewer options for living on their own than their peers. Attending college is not an option in most localities for this population (Wagner, Newman, Cameto, Garza, & Levine, 2005). Many students with ID express the desire to attend college with age-appropriate peers to continue their education for employment. Without a standard diploma from high school and demonstration of skills necessary for academic rigor in higher education, students with ID are ineligible for entrance into traditional degree programs. Post-secondary education (PSE) is evolving in some universities with some options for inclusion; yet, participation is rare for individuals with ID as compared to other disabilities (Thoma et al., 2011; Raue & Lewis, 2011). Emphasis in these programs is being placed on how to implement students into social groups, how to approach integration into academic classes, and how to deal with cost efficiency for a population that often cannot make enough money to afford high tuition rates or qualify for student loans independently. Though, as a result of the Higher

Education Opportunities Act (HEOA) of 2008 (P.L. 110-315), students with ID who participate in a post-secondary transition program approved as a United States Department of Education Comprehensive Transition and Post-Secondary Program (CTP) may qualify for federal financial aid (Kleinert et al., 2012).

Without needed postsecondary education or vocational training, employment outcomes are limited upon exiting high school even with high school-based programs intended to provide students with job skills. Programs specific to job training for students with ID in transition are under-represented across public institutions of higher education and other vocational training centers. Social inclusion is vital to maintaining a positive self-image and greater confidence to venture into community organizations and seek acceptance (Kostikj-Ivanovikj & Chickevaska-Jovanova, 2016). Kleinert et al (2012) report attending college with age-appropriate peers is extremely valuable in that it offers individuals with ID exposure to a variety of educational experiences and exposure to different learning styles in the classroom. Outside of the classroom, inclusion in campus life is valuable for developing emotional maturity and life skills naturally acquired by typically developing peers embedded in college programs. Some exposure to post-secondary education (PSE) notably leads to greater employability with higher wages, greater independence and satisfaction in life and work, and greater likelihood of choosing a healthy lifestyle (Baum, Ma, & Payea, 2010; Grigal, Hart, & Migliore, 2011).

Independence in Life and Work

The ability to make choices independently from an array of opportunities for individuals with ID is dependent upon what is available for employment training and independent living in the individuals' home communities (Turnbull, 2014). Students in high school self-contained programs typically are still working on functional academic skills and need more instruction in work competency and independent living skills (Hartman, 2009). Students' wishes for adult career pathways and goals for independence, though included in their IEPs, may not be a part of the actual training program, leaving the student unprepared for options other than attending adult daycare programs (Certo & Luecking, 2011; Wehman, 2011). Many leave high school totally dependent on family members who discover there are no accessible options in home communities (McCollin & Obiakor, 2010). Many students in public high school special education programs take education for employment classes centered in self-contained classrooms that extend in school-based jobs, such as cleaning duties, making deliveries and performing routine tasks for office workers. Some may volunteer with children in the elementary schools. Few are placed in off campus jobs through these courses, especially in rural areas. With the lack of job internships included in high school transition programs for students seeking IEP diplomas, establishing independence in daily living skills becomes the focus of the transition curriculum. These usually lack applications applied in real-world experiences. Upon graduation the feasibility of living independently for many students is also dependent upon having stable employment.

Quality of Life Perceptions & Development of Transition Programs

Quality of Life is addressed in many dimensions and measured by individuals' reflections of positive life experiences and personal values (Schalock, Gardner, & Bradley, 2007). It incorporates making choices among options within dimensions as a part of self-determination training that is vital to the process of achieving quality of life (Brown & Brown, 2003). As a

social construct, quality of life is a discussion and driving motivation for programs that facilitate exploration of what makes a person happy in life. Providing equitable opportunities in life empowers people with ID and unleashes a sense of fulfillment. (Turnbull, Brown, & Turnbull, 2004). Of particular importance in this construct is to evaluate the immediate environment of the individual both within the social and cultural construct of the family. The community component in the quality of life process and participation in life skills training is to be open and diligent in discovering ways to support individual needs and being involved in evaluating what options are developmentally appropriate for each individual in life and work experiences. Parents, caregivers, and community members, including employers and job coaches, need to collaborate to find the balance between empowerment with scaffolding and overprotection to not inhibit continued growth in skills and natural development (Brown, 2012). Self-awareness of having control over personal choices promotes positive outcomes in life and work. Taking initiative to exercise choices with incentives and support offered in the environment significantly affect the individual's quality of life. High expectations and associated encouragement and support of the community and family members of individuals with disabilities leads to greater self-determination and productivity in adult living (Palmer, 2010).

When individuals demonstrate greater determination in making choices for life and work, they also perceive themselves as having a higher quality of life (Lachapelle et al, 2005)). Training individuals with ID in choice-making, self-advocacy, problem-solving, and self-determination skills can lead to positive outcomes when embedded into real-life applications on appropriate developmental learning levels (Vatland et al, 2014). Appropriate individualized life choice training can vary from specific job skills training and designing personal budgets to making clothing/meal choices and setting a daily activity schedule (Smith, 2014). Having a job that is fulfilling and meaningful to the individual can promote feelings of self-worth, security and confidence, increase independence and empowerment, and enable greater accessibility to life's opportunities with increased financial resources. Meeting people in the workplace under positive circumstances can foster relationships, socialization, and friendships. A focus on career stability can deepen a person's roots within a community and offer opportunities for making contributions to society (Zimmer-Gembeck & Mortimer, 2006).

Self Determination and Quality of Life

Fostering greater self-determination in individuals with ID correlates strongly with concurrent reports of higher quality of life from this population (12). Higher education and post-secondary training programs are essential for preparing students with disabilities for productivity and personal growth in adulthood. Of great importance is to link students, schools, and needed services to practical training experiences within home communities (Chapel & Somers, 2010). Coordination of vocational counselors, educators, job coaches, service providers, the individuals with disabilities and their families in a closely-knit network is key to the success of providing relevant employment experiences. Transportation, counseling, and portfolio development are secondary services that are vital to the sustenance of the network. Of particular concern to the vocational and life skills teachers are areas presenting barriers for putting students with disabilities in the work force. These barriers include students' deficits in socialization, having enough support to go with the students to scaffold work tasks with instruction on the job, and being able to find appropriate placements in internships that are aligned with the students' interests and personal goals (Lee & Carter, 2012).

Utilizing Strengths and Developing Problem-Solving Skills

Utilizing strengths and specific tailoring of vocational training to a student's unique needs, interests, and preferences holds great importance in ensuring the success in job preparation. For instance, understanding students' uniqueness and behavior patterns can promote success in delivery of job services, such as being attentive to details and accuracy in performing routines. If channeled correctly into specific job tasks, these qualities transfer into reliability, punctuality, consistency, and persistence in performing tasks on the job. Utilizing career interest assessments hand-in-hand with observation of work task behaviors customizes the job training program for each individual with a disability (Lee & Carter, 2012). Job skills training needs to focus on such skills as respectful behaviors, effective interaction in an interview, honesty and trustworthiness, as well as being able to solve daily problems related to time management, organizing supplies, and maintaining schedules including transportation (Hendricks, 2010). Ultimately, solving problems related to these daily work tasks and social connections required on the job are key to sustaining employment. Students themselves need to be actively involved in career options and focused on developing necessary skills to prepare for the workforce. They need to have access to programs facilitating greater self-awareness of career-related strengths and meaningful internships in order to develop and practice general work behaviors in both employment and social skills training.

Effective Interagency Collaboration for Person-Centered Transition Training

Person-centered transition transfers into quality outcomes for students with disabilities upon completion of high school, including entrance to post-secondary education, independent living, and employment, are coupled with the need to offer better preparation for adult living (Mazzotti, et al, 2016). Preparation includes programs that offer life and job skills training with internship placements in supported living and work environments. Such programs are scarce in rural communities and few existing ones address the changing needs of students, such as an emphasis on keeping pace with technology and career exploration with internship opportunities. Furthermore, existing programs cannot often lead to job opportunities due to the lack of support from interagency collaboration working toward this mutual goal. As an underserved population, students with ID are readily graduating without plans to enter post-secondary training programs, independent living facilities, and/or supported employment.

Better collaboration among service providers is needed to investigate needs of students and design programs to customize training for life and work (Riesen, Morgan, Schultz, and Kumpferman, 2014). Transition rehabilitation counselors need to work closely with educators and service providers to combine resources in programming to achieve mutual goals and improve outcomes (Test & Cook, 2012). Providing services in the home communities and incorporating greater flexibility in scheduling and sharing funding with agencies to meet fiscal requirements are among the strategies found effective within school districts reporting successful interagency collaborations for students with disabilities involved in transition programs (Noonan, 2008).

The focus of developing post-secondary education programs in colleges and universities needs to be on designing person-centered educational programs that utilize strengths and personal preferences of participating students with intellectual disabilities for preparing for adult life and

work. Courses focusing on students' developmental learning levels with scaffolds and supports in place to ensure successful learning of required course content and skills related to career placements is crucial. Of great importance is networking directly with private, state, and federal adult agencies to secure appropriate and person-centered support services for individuals transitioning to independent living and employment opportunities. Without post-secondary education in self-determination, many individuals with ID do not seek access to this information nor advocate for adult service options in education and training for work experiences through internships and supported employment (GAO, 2012). Stronger coordination among case managers in secondary and post-secondary placements will result in an effective continuum of transition planning utilization of federal programs and services available from the departments of Education, Labor, and Health and Human Services and the Social Security Administration (Folk et al., 2012).

Affordable Solutions to Post-Secondary Education for Individuals With ID

Participation in post-secondary education for individuals with intellectual disabilities leads to greater self-esteem and efficiency in life and work skills. A post-secondary program with adapted curriculum must focus on developing self-awareness, setting personal goals, and making positive choices for time investment, job training, and lifetime activities. Since many students with ID will not be able to make enough money in their future employment or work enough hours to pay back federal loans, adaptations need to be made to tuition rates with options to make the program affordable for the intended participants. To address areas of how to function in life and work through a customized program for each individual student will produce a higher quality of life with greater opportunities to be contributing adults in society (Thoma et al, 2011).

Methodology

Mixed Method Research

In this mixed method study, data collected from a college pilot program intended to foster personal growth and preparation for independent living was analyzed. Pearson's Quality of Life Inventory (Frisch, 1994) was administered to five program participants given at the completion of the program. The survey took approximately five minutes to complete. Students responded to interview questions relative to outcome objectives of domain courses. Domain course offerings included social skills training, fine arts exploration, lifetime recreation orientation, life and work skills instruction, and self-advocacy coaching.

Selection of Participants

Six students with high-functioning intellectual disabilities who are enrolled in high school transition programs and seeking an IEP/special education diploma or recent graduates from these programs (ages 18-25) participated in the ten-week transition pilot study, Longwood LIFE Transition Program, on the campus of Longwood University. Prior to the start date, all participants were mailed an adapted Longwood University consent form utilizing language that students with intellectual disabilities could comprehend easily. Parents of participants received the standard consent form approved by Longwood University with a request to sign both the student letter and an additional parent letter, as was requested by the IRB of Longwood University. All students were over 18 years of age and were their own legal guardians. Five students elected to take the survey and answer the interview questions for the study. One student

in the program elected not to participate in the survey or interview. The principal investigator accessed data sources without identifying factors collected from the study's five participants as a part of the program.

Procedures, Consent, & Setting

The principal investigator of the study had access to the inventory and interview data without identifying information to maintain confidentiality. A professor not connected to the pilot program arranged administration of the inventory and interviews. This professor coded the identities of the participants. Participants were informed of the voluntary and confidential nature of the research via instructions on the data collection instrument. Participants were also instructed not to put their name or any identifying information on the instrument. The IRB chair approved the study and exempted it from full review at Longwood University. The IRB at Gwynedd Mercy University also approved the study after receiving approval from Longwood University, the setting of the pilot research program and research study.

Instrumentation

Pearson's Quality of Life Inventory (QOLI) (Frisch, 1994) is a standardized measurement structured as an empirical measure of one's satisfaction in life and well-being based on the perception of the individual. Questions were asked about one's judgement of whether personal wants, needs, and goals have been fulfilled. The individual's level of satisfaction was determined by the level the individual feels these wants, needs, and goals are important in comparison with level of fulfillment. The survey asked the individual to describe how important areas of life are such as work and health and how satisfied the individual is with them. The individual was asked to indicate how the aspects of health, self-esteem, money, play, work, goal and values, love, helping others, and relationships within the home and community add to overall happiness by indicating "Not Important" (0), "Important" (1), or "Extremely Important" (2). The individual was also asked to indicate the level of satisfaction in how well his or her needs, wants, and goals are being met in that area of life by indicating one of six choices ranging from "Very Dissatisfied" (-3) to "Very Satisfied" (+3). Correlations were drawn between the individual's perceived level of importance placed on the aspiration for an indicating factor and level of satisfaction in the perceived achievement of the intended outcomes. When there were discrepancies between what is perceived as important and attained satisfaction, other affecting factors were investigated through asking the individuals to describe "Problems That Get In The Way Of Your Satisfaction." The interviewer used this information to further clarify students' understanding of the questions and to include as discussion points in data analysis.

The qualitative interview questions designed by the researcher investigated what the participants felt they have learned about their social skills, likes and dislikes in fine arts, and levels of independence as a result of being in pilot program courses. Questions about preferences for lifetime activities, importance of self-determination, and ability to self-advocate were included in the interview as well. The domain interview questions provided served to provide further details to support reasoning for the quantitative data provided by Pearson's QOLI and validation of the participants' perceived impact of the program on their overall quality of life and answers to the following pilot program study's research questions:

1. Will the Longwood LIFE transition pilot program student perceive an increased quality of life as a result in participation in the college pilot program?
2. What domain areas impact the personal growth of the transition pilot student?
3. What domain areas impact the preparation for independent living of the transition pilot program student?
4. What accomplishments have the transition pilot program students made as a result of participation in the college transition pilot program study?

Independent Variables, Dependent Variables, & Hypothesis

The independent variables, as measured by the Pearson's QOLI, were the aspects of life contributing to overall happiness and are included in the curriculum of the higher education transition pilot program called Longwood LIFE. These variables included money, self-esteem, health, goals-and-values, work, play, learning, creativity, helping, love, friends, children, relatives, home, and community. Other independent variables, as measured by the interview question and specific to the curriculum of domain classes, included appreciation for fine arts, social skills, independent living and vocational skills, preferences for lifetime activities, and self-determination and self-advocacy skills.

The dependent variables, as indicated on Pearson's QOLI, were the participants' perceptions of the level of importance of each independent variable to their lives as compared to their expressed self-awareness of their level of satisfaction with each aspect of their lives. Additional themes related to these aspects of life contributing to overall happiness were gathered from the interviews to draw stronger correlations to their levels of importance and satisfaction perceived by each participant. These responses revealed what specifically is important to each participant in the areas of social skills, in fine arts, and personal requirements for independence in daily living. In addition, the responses indicated job preferences, preferred lifetime activities for future enjoyment, and importance of being self-determined and a self-advocate to move forward in life. The researcher was confident the data would reflect support for the hypothesis that the Longwood LIFE pilot study program positively impacted the perceptions of the participants about their quality of life in these areas and provide key details specific to each person that could be used to further design the person-centered educational program for each individual participant. The researcher believed each participant would provide these details in the Quality of Life Inventory and personal interviews with clarity based on experiences, discussions, and exposure to opportunities provided in the Longwood LIFE pilot program.

Validity and Reliability

Pearson Clinical collected and provided data about life satisfaction in the QOLI in comparison with the Satisfaction With Life Scale to assess the convergent validity of the QOLI, which revealed statistical significant at .001. The Weighted Satisfaction range included the products of the Satisfaction ratings multiplied by the Levels of Importance ratings divided by the number of areas of life that were rated Important or Extremely Important. The Pearson Clinical QOLI used a test-retest reliability coefficient using 55 sample participants that generated a coefficient alpha of .79 for the Weighted Satisfaction rating. For our participant pool of 5 subjects, the coefficient alpha reliability was .58 (See Tables 1 and 2).

Table 1
Weighted Satisfaction
Reliability Statistics

Cronbach's Alpha	N of Items
.584	16

Table 2
Descriptions of QOLI Indicators in Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
W_Health	58.2000	122.700	.654	.499
W_Self_esteem	59.2000	191.700	-.701	.716
W_Goals	57.6000	104.300	.724	.441
W_Money	58.0000	144.500	.025	.607
W_Work	56.2000	135.200	.490	.540
W_Play	58.8000	160.200	-.715	.612
W_Learning	59.2000	113.200	.582	.484
W_Creativity	56.2000	139.700	.341	.557
W_Helping	57.2000	111.700	.725	.461
W_Love	57.4000	134.300	.174	.579
W_Friends	56.2000	135.200	.490	.540
W_Children	59.8000	191.700	-.579	.738
W_Relatives	57.8000	109.700	.894	.440
W_Home	57.8000	132.700	.596	.529
W_Neighborhood	57.4000	116.300	.940	.462
W_Community	57.0000	158.000	-.194	.630

The coefficient alpha would have been increased if either of two indicators had been deleted: weighted self-esteem or children. However, these items were not deleted because of their importance to the students' quality of life, as discussed in the curriculum of the domain courses. Students' self-esteem was a valued indicator for developing independence in life and work, self-expression, and self-determination in setting current and future goals.

Data Collection

During the last week of the pilot program, the five students were individually read the statements in the QOLI in a setting free of distraction by a graduate assistant in the Special Education Department who was knowledgeable about the Longwood LIFE program, the students' individual learning needs, and accommodations required by their individualized education programs for testing (read aloud). The response continuum was enlarged and separated in a clearer visual display in close proximity to assist each student in indicating their answers. Students were provided breaks as needed. Anonymity of the study participants was provided by the graduate assistant to the statistician who coded data responses of the test administration. The data was collected from the survey asking each participant's level of satisfaction with his/her domains of life such as his/her work and health. It asks how important these things are to your happiness. The survey asked the participant to describe the importance of certain parts of life and how satisfied the participant is with them. Answers include the following responses: not important-0, important-1, and extremely important-2, which was the portion of the test that was enlarged for greater visual acuity.

In a second setting on another day, the five students were individually interviewed by the same graduate assistant in a separate room. Each session was audio recorded to collect all details of explanations of question asked or follow up questions to responses and complete student answers. In the interviews, students were asked how they felt about their domain courses in the transition program and what they learned that will help them be independent as an adult. When the students needed clarification or explanation of what the question was asking, it was provided by the interviewer as recorded in the transcription. The interviews of each of the five students were transcribed and provided to the principal investigator. The professor not involved in the program pilot arranged for the coded responses with the graduate student before providing the transcriptions to the principal investigator.

A few days after the qualitative interviews, the students gathered with their portfolios, products, and other presentation materials to set up presentation areas and prepare to be interviewed on presentation night by their families, Longwood faculty, and community members. Students were interviewed individually again by other special education graduate students who had volunteered in the program using the same qualitative interview questions. In a "round robin" fashion, the Longwood LIFE students were asked questions by a revolving team while answers were recorded on paper by the graduate students. This documentation provided extensions to the students' interviews for the researcher in data analysis, which provided further clarification and validation of the students' perceptions of the program's impact on what they considered meaningful from their experiences.

Data Analysis

The data from the Quality of Life Inventories (QOLI) and the qualitative interviews was analyzed for the purpose of revealing if students in the Longwood LIFE pilot program indicated they felt more prepared to transition to greater independence, self-advocate in decisions related to career training opportunities and how they perceived the importance and satisfaction of their overall health, happiness, personal growth, independence, and relationships with others. Research of data collected from these sources was completed to reveal if students in the pilot

program have greater awareness of their transition to greater independence, self-advocate in decisions related to career training opportunities, and prioritize their overall health, happiness, personal growth, independence, and relationships with others with some level of importance or satisfaction. Within these constructs, the researcher deems valuable the rich collective details gathered from rich discussions with individual participants about their own specific preferences and goals that will provide guidance for the future person-centered curriculum for each participant in Longwood LIFE. A convergent mixed methods design was used to concurrently collect quantitative and qualitative data for the purpose of evaluating the data separately before merging the results (Creswell, 2015). The convergent model is designed to better explain and interpret the influence of the domain courses in the Longwood LIFE program on the students' perceptions of areas important to their quality of life and their satisfaction with their lives. Variable clusters relative to independence in life and work were analyzed using SPSS and included variable clusters included self-esteem, learning, work, helping, goals and values, money, and home. Social skills were clustered in relative variables including friends, relatives, love, children, neighborhood, and community. Lifetime activities variables included health and play. Aesthetic variables included creativity. IBM's SPSS (2015) was used to access and manage the data for statistical analysis and was run in collaboration with the researcher and statistician.

The qualitative data from interviews was collected on quality of life perceptions expressed by the pilot program participants. It was transcribed and analyzed to establish recurring themes that were coded with numbers of student responses. Students were asked, in addition, by another panel of student mentors the same questions a few days later in preparation for their final presentations at the end of the program to see if the students indicated the same responses or provided greater elaboration. The researcher used this documentation along with the transcriptions to identify codes from specific statements each student made about their experiences in Longwood LIFE related to perceptions of their quality of life. The researcher documented themes on a chart with coded student statements about the themes and how many times each statement or variation of the statement was listed. Two other professionals were given the opportunity to review the theme charts of qualitative data and agree or disagree with the theme choices chosen by the researcher. Themes and related supportive data counts were adjusted according to this discussion that followed the chart ratings. This interrater reliability of themes and codes provided for a review of data in collaboration with the principal investigator, who coded and prepared the qualitative data results.

Themes relative to domain clusters emerged in the student transcripts and were recorded with supportive evidence in the form of statements explaining the students' examples, feelings, and reasoning as to why they believed an area impacted them in a certain way or something they felt was relative and important to their experiences, learning, and future needs or goals. These individual themes were grouped together in clusters within the domain for further analysis. Both the individual themes and cluster groups were statistically analyzed in SPSS to establish significant differences in answers among areas of the domain and between participants.

The principal researcher wrote about how themes fostered personal growth along themes of developing greater independence as perceived and stated by participants in the transition pilot program in transcriptions. Details of specific statements from these transcriptions were aligned

with domain courses to support themes in the domain course areas. The researcher also entered the variables into SPSS under each domain and created values for each incidence of theme statements made by each student. Common domain variables were transformed into cluster variables for further analysis using the T-Test to establish any significant differences between participant's answers.

Social Domain Themes

The social domain themes related to the social skills course were taught by the speech therapy graduate students and emphasized group social skills needed for the college culture and community settings. Students had the opportunity to practice social skills with Longwood LIFE student volunteers, mentors, and faculty. *Expressive language* was a theme with supportive statements evidenced by "Speak clearly. Take your time when talking," and "Talk loud enough." *Statements and actions demonstrating appropriate nonverbal behavior* was a theme as evidenced by statements of "You can't hug your professors," "I used to hug people but now I ask them," "Give eye contact," "I learned that when talking with others to try to keep still, because if I keep myself still, my body won't be a distraction to what I am saying or to my focus for what I am trying to hear, so that I don't miss out on anything." *Reciprocal conversation and responses* was a theme focusing how to attend to conversational discourse as evidenced by statements such as "Wait until someone finishes to talk. Waiting to finish before having someone else talk, and "I listen well. I listen hard. I've got better about paying attention." The final theme that emerged was *taking initiative in social groups* where students referred to their self-awareness and responsibilities of participating in social groups. These supporting statements included "How to help classmates. If they need help, I can help my classmates make a project. Helping people who need help."

Skill domain themes were entered into SPSS (2015) for descriptive statistical analysis and for application of the T-Test. *Reciprocal conversation and responses* theme showed significant difference ($p=.05$, $M=2.8$). *Statements of actions demonstrating appropriate nonverbal behavior* theme was high tendency ($p=.07$) and also had the highest mean ($M=10.2$) in the social domain theme cluster. *Taking initiative in social groups* theme also had high tendency ($p=.09$, $M=1.6$). The overall statistical analysis of the T-Test with the skill domain theme cluster showed significant difference ($p=.01$) demonstrating the variety of student answers reflecting personal growth and accomplishment in the social skills domain (See Tables 3 and 4).

Table 3

One-Sample Statistics of Social Domain Themes

Social Domain Themes	N	Mean	Std. Deviation	Std. Error Mean
SD_Expressive_Language	5	1.4000	1.94936	.87178
SD_Statements_Actions_Appropriate_Nonverbal_Behavior	5	10.2000	9.52365	4.25911
SD_Reciprocal_Conversation_Responses	5	2.8000	2.38747	1.06771
SD_Taking_Initiative_Social_Groups	5	1.6000	1.67332	.74833
Social_Domain_Themes	5	4.0000	2.34521	1.04881

Table 4

One-Sample T-Test of Social Domain Themes

Social Domain Themes	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SD_Expressive_Language	1.606	4	.184	1.40000	-1.0204	3.8204
SD_Statements_Actions_Appropriate_Nonverbal_Behavior	2.395	4	.075	10.20000	-1.6252	22.0252
SD_Reciprocal_Conversation_Responses	2.622	4	.059	2.80000	-.1644	5.7644
SD_Taking_Initiative_Social_Groups	2.138	4	.099	1.60000	-.4777	3.6777
Social_Domain_Themes	3.814	4	.019	4.00000	1.0880	6.9120

Independence in Life and Work Domain Themes

The independence in life and work domain themes were addressed in the Preparing for Adulthood: Independence in Life and Work course, with applications to other activities around campus such as accessing the buffet-style dining hall, completing purchases in the student center, transitioning to multiple locations, utilizing the locker room for lifetime activities preparation, and exploring careers field trips. Students were asked to share which ways they had gained more independence and areas in which they still needed help. *General independence* emerged as a theme with multiple examples expressed by students such as “I can fix things by myself. I can do more things.” “I’ve learned a lot about how to be independent about living arrangements.” “I am independent getting dressed. I am learning how to blow dry my hair.” “I can do sewing, email, and make pancakes.” “I learned to cut my food in the dining hall.” “In the Fitness Center, we folded towels.” “It’s important to listen in your job.” “We went to the daycare center, and I want to learn how to take care of the children. I told the people there that.” *Independence in sewing* theme included student statements, “I might need to know how to fix something by sewing. I can sew.” “If I’ve already been set up with an assignment like sewing, once I’ve been talked to and have experienced the steps in and an explanation and I want to get started...I trust myself so I direct myself to following those steps and tell myself the things I need to do to help myself and hear things repeated from other people to stay on task to concentrate on things I’m doing,” and “I can sew buttons.” *Independence in functional math for daily living* theme included students statements, “If you have a budget, you can do what you need to do like shopping,” “I learned how to count money,” and “We did math when we was doing the calculator to see how much it costs.” *Statements of career choices* theme focused on discussions about setting future career goals and included “I want to help kids as an aide in an elementary school, “ “I want to explore other jobs and other places and learn more about those jobs,” “I want to be a graphic designer,” and “Would like to learn more about cooking jobs.” *Needing help* theme emerged as students indicated areas they need help in daily living relative to their Longwood LIFE experience on campus or in daily living areas of personal care, future career goals, or situational decision-making. Student responses included “Need more help with math,” “I might need help with getting places around campus based on my vision and knowing where I am and my surroundings,” I still need help in the student center counting money and giving the right amount,” and “Can I say read? I still need help with reading.”

Independence in life and work domain themes were entered into SPSS (2015) for descriptive statistical analysis and for application of the T-Test. *General independence* theme revealed a high tendency and also had the highest mean ($p=.009$, $M=8.2$). *Needing help* theme had high tendency ($p=.06$). The independence in life and work cluster domain theme had the greatest significant difference ($p=.004$, $M=4.2$) demonstrating the individual variety of personal growth skill areas (See Tables 5 and 6).

Table 5

One-Sample Statistics of Independence in Life and Work Domain Themes

Independence in Life and Work Domain Themes	N	Mean	Std. Deviation	Std. Error Mean
ILWD_General_independence	5	8.2000	3.89872	1.74356
ILWD_Sewing	5	3.4000	3.64692	1.63095
ILWD_Functional_Math_Daily_Living	5	2.0000	2.82843	1.26491
ILWD_Statements_Career_Chances	5	3.0000	1.87083	.83666
ILWD_Needing_Help	5	4.4000	3.84708	1.72047
Indep_Life_Work_Domain_Themes	5	4.2000	1.54919	.69282

Table 6

One-Sample T-Test of Independence in Life and Work Domain Themes

Independence in Life and Work Domain Themes	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
ILWD_General_independence	4.703	4	.009	8.20000	3.3591	13.0409
ILWD_Sewing	2.085	4	.105	3.40000	-1.1282	7.9282
ILWD_Functional_Math_Daily_Living	1.581	4	.189	2.00000	-1.5120	5.5120
ILWD_Statements_Career_Chances	3.586	4	.023	3.00000	.6771	5.3229
ILWD_Needing_Help	2.557	4	.063	4.40000	-.3768	9.1768
Indep_Life_Work_Domain_Themes	6.062	4	.004	4.20000	2.2764	6.1236

Aesthetic Domain Themes

The aesthetic domain themes related to the fine arts exploration course which entailed a variety of fine arts experiences on and off campus including art lessons at a local art studio in the downtown area close to Longwood University's campus. Students took art class on campus to learn photography and create postcards. They were in the theater building creating puppets and enjoying creative improvisations. They attended a musical with the theater department. They explored connections between feelings and different genres of music. One student asked an interviewer during the informal extension interview session, "What's your favorite music genre?" *Statements of expressions of feelings* theme involved students expressing personal feelings. Student comments included "I am happy for some fun things," "...because it makes you feel like you are happy to listen to different kinds of songs," and "Sometimes you have to express your feelings so they can help you, so we listen to them [songs], sing them, and express your feelings." *Artistic enjoyment and creativity* theme where students stated types of artistic experiences they enjoyed and related them to being creative included statements like, "Theater-how to use my imagination. More ability to create and show imagination," "Like art, drawing, tracing, and sketching," and "I like that we get to talk about our puppets." *Friendship in fine arts exploration* theme related to students' perceptions of relationships developed in fine arts settings as part of college experiences. Statements emerged such as "It hurts me a lot to say goodbye to my friends because my friends is a really big deal to me. I wanted to be in college longer," and "...be with your best friends," when discussing perceptions about the fine arts setting.

The aesthetic domain themes were entered into SPSS (2015) for descriptive statistical analysis and for application of the T-Test. *Artistic and enjoyment* theme revealed significant difference and the highest mean among the individual themes in this cluster ($p=.001$, $M=13.0$). The aesthetic domain cluster themes revealed significant difference as well ($p=.001$, $M=5.2$) indicating there was great variety in what the students perceived as important in their fine arts experiences and what they felt was meaningful to them. This personal growth was measured by the high mean responses in the *artistic enjoyment and creativity* theme (See Tables 7 and 8).

Table 7
One-Sample Statistics of Aesthetic Domain Themes

Aesthetic Domain Themes	N	Mean	Std. Deviation	Std. Error Mean
AD_Statements_Expressions_Feelings	5	1.4000	1.67332	.74833
AD_Artistic_Enjoyment_Creativity	5	13.0000	2.91548	1.30384
AD_Friendship_Fine_Arts_Exploration	5	1.2000	2.16795	.96954
Aesthetic_Domain_Themes	5	5.2000	1.38644	.62004

Table 8
One-Sample T-Test of Aesthetic Domain Themes

Aesthetic Domain Themes	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AD_Statements_Expressions_Feelings	1.871	4	.135	1.40000	-.6777	3.4777
AD_Artistic_Enjoyment_Creativity	9.971	4	.001	13.00000	9.3800	16.6200
AD_Friendship_Fine_Arts_Exploration	1.238	4	.284	1.20000	-1.4919	3.8919
Aesthetic_Domain_Themes	8.387	4	.001	5.20000	3.4785	6.9215

Lifetime Activity Themes

The lifetime activity domain themes related to the lifetime activities course in Longwood LIFE where the students participated in physical fitness activities and discussed the importance of health and well-being. They danced in the dance studio independently and with a dance instructor, lifted weights in the university fitness center with a personal trainer, swam in the pool with lifeguards, and played basketball and soccer with Longwood LIFE mentors. Themes that emerged in this domain included *statements selecting a future lifetime activity* and *explanations of why lifetime activity is important*. Student preferences for a future lifetime activity included all of the activities they experienced, including “weightlifting,” “swimming,” “swimming and basketball,” “dancing,” and “indoor soccer.” *Explanations of why lifetime activity is important* theme statements included “Swimming because you get exercise and your heart,” “Basketball, I just have fun with friends,” “Swimming get exercise...important for heart,” “I like moving,” and “To stay healthy after school, I should weightlift.”

The lifetime activity domain themes were entered into SPSS (2015) for descriptive statistical analysis and for application of the T-Test. The *statements selecting a future lifetime activity* theme revealed a significant difference and the highest mean ($p=.010$, $M=11.2$). The lifetime activity domain cluster theme revealed significant difference ($p=.001$, $M=7.2$) as evidence of the variety of answers students expressed about the impact of their lifetime activity experiences in the Longwood LIFE program (See Tables 9 and 10).

Table 9

One-Sample Statistics of Lifetime Activity Domain Themes

Lifetime Activity Domain Themes	N	Mean	Std. Deviation	Std. Error Mean
LAD_Statements_Selecting_Future_Lifetime_Activity	5	11.2000	5.44977	2.43721
LAD_Explanations_Importance_Lifetime_Activity	5	3.2000	3.56371	1.59374
Lifetime_Activities_Domain_Themes	5	7.2000	2.97069	1.32853

Table 10

One-Sample T-Test of Lifetime Activity Themes

Lifetime Activity Domain Themes	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
LAD_Statements_Selecting_Future_Lifetime_Activity	4.595	4	.010	11.20000	4.4332	17.9668
LAD_Explanations_Importance_Lifetime_Activity	2.008	4	.115	3.20000	-1.2249	7.6249
Lifetime_Activities_Domain_Themes	5.420	4	.006	7.20000	3.5114	10.8886

Self-Determination and Self-Advocacy Domain

The self-determination and self-advocacy domain themes were based on the student seminar class that occurred every other week late in the day. Some students could not stay consistently due to appointments or sporting commitments in their home schools. There were a variety of instructors including graduate students from the counselor education program and Virginia Department of Education's "I'm Determined" program (disability advocacy organization) speakers. Parents met in a support seminar during this time, so staying was dependent on parents' ability to attend the parent seminar scheduled around the parents' work schedules. Themes that emerged from this domain related well to the activities of using one's voice to express desires and set boundaries with others. One theme was *statements about standing up for myself*, and was based on comments such as "I can stand up for myself. When someone is bullying you, you can say stop it," "One thing I learned about being a self-advocate is that I've learned that I can stand up for my beliefs, my thoughts, my opinions, my body, all the basic things about me and I can state if someone is bothering me or hurting me," and "Important-can do things in life no matter where you are...It is important to advocate for myself in the real world." Also, a student talked about reaching out for help as needed in saying, "Advocating for myself is important. I am confident in...If I need help, I can ask for it." *Statements about being independent and doing things by myself* theme revealed student statements indicating students had the ability to do things independently, such as "I can do things by myself more," "I can know how to help myself at home," "Learned doing things by myself...can do anything I set my mind to," "(Being a self-advocate) helps me be a better Longwood student," and "Learn what you want to be."

The self-determination and self-advocacy domain themes were entered into SPSS (2015) for descriptive statistical analysis and for application of the T-Test. There were no themes revealing significant difference, but the cluster theme for this domain was close to high tendency ($p=.10$). The *statements about standing up for myself* theme had the highest mean ($M=9.2$) and generated the greatest number of student statements about standing up for oneself as an area of personal growth and positive impact (See Tables 11 and 12).

Table 11
One-Sample Statistics of Self-Determination and Self-Advocacy Domain Themes

Self-Determination and Self-Advocacy Domain Themes	N	Mean	Std. Deviation	Std. Error Mean
SDSAD_Statements_Standing_Up_For_Myself	5	9.2000	11.12205	4.97393
SDSAD_Statements_Being_Independent_Doing_Things_By_Myself	5	1.4000	1.51658	.67823
Self_Deter_Self_Advocacy_Domain_Themes	5	5.3000	5.55203	2.48294

Table 12
One-Sample T-Test of Self-Determination and Self-Advocacy Domain Themes

Self-Determination and Self-Advocacy Domain Themes	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SDSAD_Statements_Standing_Up_For_Myself	1.850	4	.138	9.20000	-4.6098	23.0098
SDSAD_Statements_Being_Independent_Doing_Things_By_Myself	2.064	4	.108	1.40000	-.4831	3.2831
Self_Deter_Self_Advocacy_Domain_Themes	2.135	4	.100	5.30000	-1.5938	12.1938

Discussion

Quantitative Analysis

Implications of Dependent Variables

The first research question, “Will the Longwood LIFE transition pilot program student perceive an increased quality of life as a result of participation in the college pilot program?” was addressed through the results of the five participants’ ratings on Pearson’s Quality of Life T-Score. Three students scored in the “High” quality of life range and two students scored in the “Average” quality of life range. Students with only an intellectual disability indicated a higher rating than those with an intellectual disability and autism or an intellectual disability and other health impairment. Three students live in a two-parent household and two live in a one-parent household but have supportive extended family as demonstrated by grandmothers participating with mothers in program orientation, attending special events with students, and providing transportation and resources needed for involvement in Longwood LIFE.

Other contributing factors to students’ ratings are their disabilities and how they present challenges in their daily lives. Academic and communication skills contributed to students’ abilities to access learning opportunities presented in domain classes. All but one student in the Longwood LIFE program could read independently on an upper elementary reading level. All students could write with support for generating ideas or following sentence structure modelling with peer tutors. Academic activities related to course content were adapted specifically for each student and with greater emphasis placed on experiential learning within a social environment, which ensured the success of the students. Socialization was supported with boundaries and guidelines in place for appropriate interactions. Many social opportunities were typically provided around campus throughout each day in classes, extra activities, and in the dining hall. Students with ID and autism tended to have more difficulty with social skills and making transitions in the college environment where students are required to transition to multiple settings daily on campus and where professors change each class period. Peer support can vary in number and familiarity for each of these class periods.

Transitioning to different sensory environments can be problematic. One of the Longwood LIFE students with ID and concomitant autism needed support in the transitions from different sensory environments and some breaks during the day depending on the intensity of the sensory factors and level of activity required. Another student did not need support with transitions but bonded better and was more interactive when prompted to become more fully engaged with others or when participating in preferred activities, such as soccer or photography.

Students with other health impairments can have conditions impacting the mobility and the endurance needed for multiple transitions as well as the ability to participate fully in all activities around campus independently. The Longwood LIFE students with Other Health Impairment (OHI) included mild cerebral palsy and seizure disorders manifested in short term memory loss. These students were successful with assistance provided in following routines and schedules, prompting in cumulative skills needed for course activities, and scaffolding for fine and gross motor activities.

These adaptations were typically provided and integrated into daily schedules in advance of the students' arrival to campus as well as updated for new activities and locations. It also required work beyond what had previously been required of some of our students, such as extra time provided for fine motor tasks like cutting food in the dining hall independently. "I learned to cut my food," was reported in student interviews. Providing adaptations as opposed to full inclusion without these adaptations in the curriculum presented to all students in the classes impacted the quality of life learning experiences.

All students accepted into the program indicated that going to college was a goal in life, and they believed getting an education would help them learn skills they needed to obtain a desired job and increase independence in life. The expression of these values indicated they already developed an understanding of wanting to be involved in, as well as deserving the higher education experience like their family members and peers. In the closing presentation interviews with the public, all students were able to express what they learned and what they wanted to learn. Some of these goals were additional goals from what they initially expressed they needed. This was the case with a student who said his goal was "to learn to read." Another student said he "needed" to take one of the animation classes at Longwood after spending time with a college professor in the animation program reviewing the student's drawings. After spending time in Longwood's Andy Taylor Child Care Center with the children and interviewing the center's director, two other students added the goal of taking a course geared at becoming an instructional aide.

After talking with sets of roommates who explained how they take care of their daily living needs, attend classes, and work, the students with ID said they wanted to live in an apartment like those they saw on campus. Students' exposure to program courses impacted their perceptions about what they needed to do to have the quality of life they desire as young adults. This included observing college students in their work study jobs and apartment living situations. Involvement in a transition program on a college campus provides this real-world opportunity as opposed to providing job simulations in training centers and on high school campus-based transition programs.

Implications of Quality of Life Inventory Weighted Variables

The sixteen quality of life weighted variables combined the importance placed on the indicator with the level of satisfaction expressed with that area of life to indicate "Low," "Average," or "High" ratings based on frequency percentages of study participants' overall feelings of importance and level of happiness in that area of life. The overall quality of life weighted indicators receiving the highest ratings ("High" ratings of over 50%) were goals-and-values (60%), work (80%), play (80%), creativity (80%), helping (60%), love (60%), friends (80%), and community (60%). This supports that the students' importance levels are closely correlated with their levels of satisfaction in these areas. For instance, students indicated they value working to support themselves and want to earn money in a job of their choice. In many cases, this work involves helping people they love, including their friends, and others in the community. They indicated life is to be enjoyed. They value their "play" activities with friends and enjoy hobbies they can do with friends. Their belief systems about what is meaningful in life and how to determine right from wrong seem closely related to their current life experiences and very relative to course discussions in Longwood LIFE. For instance, students said, "I can help my

classmates,” “Learn about my community,” and “Learn relationship skills.” They readily expressed play activities they enjoyed and what made them happy in saying comments such as “Makes you feel happy to listen to different kinds of songs.” Friendships were a component of enjoying aesthetic activities in saying “Be with your best friends.” The quality of life weighted indicators receiving the highest “Average” ratings (“Average” ratings over 50%) were health (60%), home (80%), and neighborhood (60%). Student health ratings for importance and satisfaction were closely related indicating that the participants understood their health to be important and were actively working to eat healthily and exercise. They talked about eating healthy food choices and getting exercise in saying it is “Important for heart,” and, “It’s good for you,” in student interviews on the topic about their lifetime activities course. In reference to their home environments, students indicated they wanted to remain in their homes or one day live on their own in an apartment. One student stated, “I’ve learned a lot about how to be independent with living arrangements.” These discussions were centered in their preparing for adulthood course in Longwood LIFE as well as some exposure to money management where students indicated they had weaknesses in the student interviews with statements like “I need help with money.”

Qualitative Analysis

Implications of Domain Theme Clusters

The second research question, “What domain areas impact the personal growth of the transition pilot student,” was addressed in student interviews and revealed significance in the social skills, life and work, aesthetic, and lifetime activity domain areas, which were the four courses students participated in during the days in which they attended that emphasized setting goals in these areas for adulthood. Students were actively engaged with age-appropriate student volunteers and mentors within these learning environments in all required work activities with strong modeling and scaffolding provided as needed for individual students.

The social skills domain cluster showed significant difference ($p=.01$) for application of the T-Test and showed specific significance in the theme of *reciprocal conversation and responses* ($p=.05$). The theme of *statements and actions demonstrating appropriate nonverbal behavior* had the highest mean ($M=10.2$). The Longwood LIFE social skills course required students in participatory simulations to practice making conversations and exercising appropriate nonverbal behavior for the college culture and community settings. These variety of student answers relative to how students spoke with clarity, making eye contact, and demonstrating good manners in the dining hall and classroom environments reflect students’ self-perceptions of personal growth and accomplishment in the social skills domain (See Appendix C).

The third research question, “What domain areas impact the preparation for independent living of the transition pilot program student?” was especially addressed in the Preparing for Adulthood: Independence in Life and Work domain course. This independence in life and work domain cluster showed significant difference ($p=.004$) for application of the T-Test, and the *general independence* theme had the highest mean ($M=8.2$). The Longwood LIFE independence in life and work course focused on becoming more independent with daily living skills such as accessing food in a buffet-style dining hall and sewing buttons and hems. Keeping up with belongings and following a changing schedule was emphasized. Talking about upcoming

decisions about career goals and interviewing students and professionals for jobs on and off campus meant determining the questions to ask on career exploration trips. Assessing one's own strengths and weaknesses was a discussion where students were encouraged in class to recognize when they needed help and should ask for it and when they needed to solve problems independently. The variety of student answers on the independence in life and work domain cluster supports students' self-perceptions about their growth in independence and promise to keep working at it with statements such as "It is important I can do things by myself. I am going to be doing things by myself."

The aesthetic domain theme cluster showed significant difference ($p=.001$) for application of the T-Test with the *artistic and enjoyment* theme having the highest significant difference ($p=.001$) and the highest mean ($M=13.0$). The Longwood LIFE fine arts exploration course included theater and art experiences ranging from puppetry to photography. Improvisation was especially effective in helping the students to express appropriate feelings for a variety of situations. Theater was a venue for building relationships among age-appropriate peers where Longwood theater students were regular class participants and often interacted with Longwood LIFE students in other campus locations. Students grew in their communication skills and in awareness of what they valued and enjoyed through their puppet's life story on stage at the closing presentation. Student interviews supported students' self-perceptions of personal growth in the aesthetic domain with high mean responses in the artistic enjoyment and creativity theme. Comments such as having "more ability to create and show imagination," and "I like that we got to talk about our puppets," explained how the puppetry presentation provided a pathway for students to share their goals and aspirations while engaging in natural conversation as a puppeteer with the interviewer.

The lifetime activity domain theme cluster showed significant difference ($p=.001$) for application of the T-Test, and the *statements selecting a future lifetime activity* theme showed significant difference ($p=.01$). The Longwood LIFE lifetime activities course emphasized health and wellness in areas of physical activity for enjoyment and building strength and endurance. Students expressed what they liked and did not like and expressed in interviews they had to overcome obstacles that were difficult as expressed in statements such as "Didn't like fitness class at first...will continue swimming...fitness center and will continue swimming." They expressed they understood the value of physical fitness for the "heart," "to stay healthy," and "to keep you strong."

The self-determination and self-advocacy theme cluster was close to high tendency ($p=.10$) with no significant differences in theme areas. The Longwood LIFE student seminar addressed mainly setting boundaries with others, voicing concerns, wants, and needs, and standing up to others. The seminar occurred five times and not everyone could stay to participate in the late afternoons when the seminar was offered. Still, the greatest number of mean responses supported student perceptions of growth in standing up for oneself as supported by student interview responses such as "I can stand up for myself." One student summed it up in saying, "Learn what you want to be," and "Can do anything I set my mind to."

Conclusions

The researcher hypothesized the Longwood LIFE pilot program would positively impact the perceptions of the participants regarding their quality of life through the course domain areas of social skills, independence in life and work, fine arts exploration, lifetime activities, and self-determination and self-advocacy. This was assessed through students' responses to quality of life indicators found in the Pearson's QOLI. Students state the level of importance and level of satisfaction in areas of life that typically contribute to personal happiness. Student interviews about their learning experiences in the domain courses of the Longwood LIFE program and students' perceptions of themselves in domain areas by the end of the program gave important key details specific to each person to further design the person-centered education program for each individual participant.

Quantitative and qualitative data offers support that the Longwood LIFE pilot study students expressed their perceptions about what contributes to their happiness in life, what they value, want, need, as well as their current levels of satisfaction in life. The fourth research question, "What accomplishments have the transition pilot program students made as a result of participation in the college transition pilot program study?", was addressed throughout student interviews. Students reported greater self-awareness of their accomplishments across domain course areas. Students shared what was important to them about their social skills. They shared the importance of speaking clearly, exercising good manners, listening and responding during conversational discourse and adhering to social personal space boundaries. One student voiced, "I used to hug people and they didn't want to hug, but now I ask them. It's important to remember to do that."

Students expressed ownership of what they were learning about being independent and taking initiative. The statements about their accomplishments included, "I learned how to work independently sometimes by myself. Learn relationship skills. Learn about the community. Helping people who need help." Students discussed learning about being more independent with living arrangements, getting dressed, blow drying hair, cutting food in the dining hall, sewing, emailing, making pancakes, folding clothes, cooking, and generally working hard at Longwood. Students indicated a greater self-awareness of what they could do independently and of areas in which they needed help. One example was when students bought snacks in the student center and asked for help with affirming the correct change. Students expressed what they knew how to do and what they needed to learn. They also expressed their likes and dislikes about the program. This included statements about feeling happy listening to music, painting, and building puppets. They were able to express lifetime activities that were valuable to them such as basketball, weight lifting, and swimming. Making friends was valuable as well as standing up for oneself when the situation presented. One student stated, "You can do things in life no matter where you are...It is important to advocate for myself in the real world." Discussions about doing things for oneself and being a self-advocate were prevalent in the Longwood LIFE pilot program, so student internalized these lessons and understood their relevance.

Recommendations for Program Development and Future Research

In the development of a two-year program, developing assessment checklists to chart individual progress in skill goal areas of each domain course is a necessity. Students indicated in pilot study interviews areas they perceived improvement in their skills. The Quality of Life Inventories indicated which indicators they perceived as important to their overall happiness in life and how satisfied they were in each area. Each domain course incorporated discussions and activities relative to these QOLI indicators. Each course set skill goals and reported progress in mid and final progress reports. Some of the skills showing levels of independence were evaluated in the ten-week program through checklists developed by program staff. These were included in students' portfolios along with pictures and anecdotal reports of activities, experiences, and products generated through domain courses of Longwood LIFE. An "independence in the dining hall" checklist charted how independently students made food selections, got their food and eating utensils, made healthy food choices, served themselves at food stations, were mindful of portion control, cut food themselves, and cleaned up after themselves. Levels of independence included students needing hand-over-hand assistance, levels of physical and verbal prompting, to no assistance required. Observations of both the Longwood LIFE and dining hall staff confirmed personal growth of all students in the dining hall within the ten-week session.

Developing pre- and post-assessment checklists specific to skill development within each domain course and for overall transitioning to greater levels of independence would be valuable to collect throughout the program in all domain course areas as well as in the exit student interview from the program. Further consideration needs to be given to the development of the skill assessment checklists to track the levels of independence broken into smaller steps leading to independent performance of the skill. It would be helpful for students, families, and employers to know whether students need hand-over-hand assistance, a visual support with pictures or words, verbal prompting, pointing and verbal prompting, or magnification for successful completion of each daily living skill or job task required for mastery aligned with students' goals.

Having each Longwood LIFE student have a personalized schedule including program offerings two days a week with other Longwood LIFE students on campus needs to be considered. Program participants could work in job placements with mentor support on campus job sites as a part of each student's vocational class. Modifications for job tasks and accommodations could be provided by trained student job coaches. Case management could be initiated through Longwood LIFE in collaboration with other public educational institutions and service providers. Lifetime activity needs to be expanded. Activities provided in collaboration with organizations in the local community based on student interests in aesthetic and lifetime activity domains of the pilot could be explored and considered for incorporation into the program. Students could take art classes at an art studio, swim classes at the YMCA, play basketball with Parks & Rec, and participate in a community theatrical production with scaffolding provided for individual students and peer support.

Longwood University is located in a rural Virginia region where school systems are servicing high numbers of students on free and reduced lunches and where businesses are closing. High

schools are struggling in this region to provide meaningful transition programs with internship opportunities and potentially would benefit from partnerships with other public institutions with shared resources for the benefit of mutual programming of educational goals. High school students with intellectual disabilities will continue their education at the post-secondary level where they can prepare for life and work in adulthood.

Longwood students majoring in education and special education need to expand their teaching and learning experience through practicums by teaching adult learners with disabilities and developing friendships as peers and mentors of age-appropriate peers with disabilities who they will encounter in their adult lives. Social work students' internships working as case managers for Longwood LIFE students to facilitate interagency partnerships with families that could continue beyond the Longwood LIFE certificate program show promise. Special education students serving as job coaches in the on- and off-campus internships is feasible. Internships need to be arranged in students' home communities where they are more likely to live and work after completion of the program.

Finally, using the QOLI as a pre-test upon entering the two-year program and as a post-test as a part of the exit process is valuable. Formal assessment data coupled with students' life and work goals, informal skill assessment checklists, portfolio of products and experiences, anecdotal progress reports, and exit interviews work to validate students' person-centered goals for life and work. Providing this information with the certificate of completion from the two-year Longwood LIFE transition program gives family members, case managers, and future employers a broader sense of how to support each graduating Longwood LIFE student in making future decisions about life and work aligned with individual student's perceptions of what he/she wants and needs for his/her quality of life. The final questions are always, "What do you want and need to be happy in life, and how do you want to participate and contribute to your community?"

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