Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Diana Bulatova
Student number	5583624

Studio		
Name / Theme	AR3AD11 Dwelling Graduation Studio: Designing for Care in an Inclusive Environment	
Main mentor	Birgit Jürgenhake	Design tutor/Architecture
Second mentor	Lex van Deudekom	Building Technology tutor
Third Mentor	Frederique van Andel	Research tutor/Architecture
Argumentation of choice of the studio	The studio addresses the ambitions to create an inclusive, comfortable, and safe environment for all social groups.	

Graduation project	
Title of the graduation project	Autonomy-supportive architecture for intellectually disabled youth. From formal education towards autonomous living.
Goal	
Location:	Laakkwartier, The Hague
The posed problem,	During the phase of transition from childhood into adulthood, young adults with intellectual and developmental disabilities (YAIDD) face a high level of stress due to their unreadiness to make a step towards independent living. During the adolescence years, educational facilities for YAIDD 'cocoon' youth with intellectual disabilities and by these means segregate them from the mainstream life. However, as soon as a child outgrows the age of 22, the formal education system can no longer support the individual development and procession to independent living. In this way, the excessive support in the childhood and lack of options in the adolescence create pose a gap in the development process of YAIDD.

research questions and	How can an architectural design stimulate YAIDD to make a smooth transition towards autonomous adulthood after their completion of the formal education?
design assignment in which this result.	Design comprises of the Youth Development Hub, which intends to provide opportunities for continued education, medical support, leisure and social activities for YAIDD with the necessary support needs for those still vulnerable to become fully independent. Moreover, opportunities to live in a 'training home' is offered within the Hub and in its periphery to allow YAIDD to experience living autonomously and later make a step towards their independent adulthood.

Besides the limited options for education after the completion of primary, secondary and vocational training, the current options for practical daily-life knowledge education for YAIDD is limited and could impact on readiness of the target group towards becoming an independent adult. For that purpose, design assignment for this research is to bridge educational and living practices for YAIDD. Wellbeing, Social Participation, and Independence are taken as the guiding principles to ensure autonomy-supportive experiences of YAIDD. From the design perspective, safe environment is ensured by following design guidelines for intellectually disabled users. By providing controlled and safe spaces for education, living, and socialization, the design should aid YAIDD build tolerance to transition into their independent living in the mainstream society.

Process

Method description

The research has started with literature review of the daily-life issues of YAIDD and their families. Besides reading scientific reports, individual stories were analyzed through documentaries, blogs and interviews. This step acknowledged the problem statement on a behavioral and psycho-social perspective, outlining areas for improvement in the lives of YAIDD concerning their Wellbeing, Social Participation and Independence. Next, literature review was expanded to the design field. Design guidelines for intellectually disabled users were studied and summarized through hand-sketch concept diagrams to become a tool-box during the preliminary design stage. In the following step, case studies were analyzed as examples of design solutions to the developmental and healthcare facilities for YAIDD. The buildings were analyzed in terms of their spatial organizations, rooms dimensioning,

atmospheres and materialization. While some buildings were researched by means of Secondary research material, other case studies were studied during a site visit and interviews with the architects. In addition to the aforementioned research methods, the fieldwork activities have been a recurring practice throughout the whole process, which means that the first-person information was obtained by having contact with some representatives of the target group, interviews with YAIDD's parents, and visits to independent and assisted living arrangements. One particular experience had opened up the chosen research subject on a personal level, when one day was spent with a YAIDD to note down the activities that he performs daily, the spaces that he attends and his social circle.

After gathering the research data, site analysis was conducted on the selected location – Laakkwartier. The analysis entries depended largely on the selection criteria for the site, such as availability of functions and a programmatic mix, connectivity to the public transport network, accessibility, and availability of gathering spaces.

Before starting the urban design process, a vision was clearly formulated and applied to the site. For this project, the typology of 'Thuishaven' (as developed by Pameijer organization) was re-imagined and applied for the Youth Development Hub. The centralized base for educational, wellbeing and residential center offers varying levels of support for YAIDD that wish to become autonomous. This vision is applied to the selected location in Laakkwartier through volumetric studies and preliminary floorplans.

Literature and general practical preference

The research related to intellectual disabilities was addressed in the fields of human and environmental psychology, medicine, and sociology, and interpreted into the built environment. The theories of Environmental Preference, Sensory Integration, Deinstitutionalization and Quality of Life Concept are explained as the basis for the theoretical framework.

According to Environmental Preference theory, humans tend to be more engaged with complex spaces (to the extent of one's abilities). Complexity and mystery are the two factors that positively engage users and can be distinguished in the quantity and variety of architectural components in a scene, geometry, and composition. The foundation of the Sensory Integration Theory is that proper integration of human sensory systems fosters the growth of language, attention, organization, motor skills, interpersonal relations, and academic learning. When applying the general principles of de-institutionalization and Quality-of-Life concept, the opportunities, inclusion and life-fulfillment of the intellectually disabled user group became acknowledge in the wider society and architecture.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The topic that I chose for the Graduation research aims to enable individuals with intellectual disabilities to take a step towards independent adulthood, and hence promote inclusion of the mentioned social group within the built environment. Architecture is seen as a tool to integrate YAID group into society and provide them with an opportunity to elevate their independence, social participation, and wellbeing.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The graduation work aims to research the trends related to the transition phase of YAID and propose architectural interventions to stimulate adaptability of YAID to the mainstream society. The research data obtained from the interviews, fieldwork and site visits can be also used for the future research made in architectural and environmental behaviorism fields to analyze the behavior and spaces of YAIDDs.