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	Chiel Vlutters
Student number	5724538

Studio		
Name / Theme	Public Building – Vertical Campus	
Main mentor	Ir. Henk Bultstra	Architect
Second mentor	Ir. A.M.F. van Dam	Architect
Third mentor	Ir. Ger Warries	Architect
Argumentation of choice of the studio	Having had a lot of experience in housing design I wanted to learn more design skills regarding public buildings. Also the site and the particular design brief got me interested in the project.	

Graduation project	
Title of the graduation project	Designing a interactive educational environment where practice and theory come together to create a new form of lifelong learning.
Goal	
Location:	The Hague, central station area
The posed problem,	University buildings often have a high threshold for outsiders to participate in their activities. When designing for a lifelong learning environment, a lot of opportunities could be gained, for both students and the local community, to engage in an inclusive and transparent environment that aims to promote knowledge sharing between all its users. By inviting the local community into the educational atmosphere of the university an interactive environment can be created where both theory and practice come together.
research questions and	How to design a transparent and hybrid campus in The Hague, that fosters interaction and knowledge sharing between its divers users? How to design

	this accommodation for education so that it appeals to public visitors and its students and how to maintain the necessary boundaries between private and public within the building?
design assignment in which these result.	The design aims to transform conventional educational spaces into a lifelong learning environment accessible to students, young professionals, and individuals aspiring to learn at any age. This space facilitates for collaborative work and learning intend to effectively bridging the gap between theory and practice. By integrating multiple functions, the design envisions an interactive environment, carefully crafted to engage a divers set of users by emphasizing design solutions that encourage interactions and foster an open and transparent atmosphere that is inviting to the public.

Process

Method description

The architectural research predominantly involves desk research focused on strategies for fostering lifelong learning, reimagining learning spaces, and hybridizing facilities and functions. This theoretical framework aims to yield solutions and design strategies, which will be further explored through an in-depth case study research. This comprehensive study will encompass various typologies and facilities that are integrated within the design.

Literature and general practical references

The literature consists of theoretical frameworks, case studies and empirical knowledge

Literature:

- Aurelia Chitiba (2012). *Lifelong learning challenges and opportunities for traditional Universities, Constanta.*
- Roine Leiringer & Paula Cardellino (2011). *Schools for the twenty-first century: school design and educational transformation.*
- Leon Benade, Eva Bertelsen & Lyn Lewis (2018). *Reimagining and reshaping spaces of learning: constituting innovative and creative lifelong learners.*
- Martin Parisio (2013). *Designing learning spaces in higher education for autonomy: Preliminary findings and applications.*
- Andrew Harrison & Les Hutton (2014). *Design for the Changing Educational Landscape Space, Place and the Future of Learning.*
- Katie H Dufault (2017). *Rethinking Partnerships on a Decentralized Campus.*

- Terry Byers, Elizabeh Hartnell-Young & Wesley Imms (2018). *Empirical Evaluation of Different Classroom Spaces on Students' Perceptions of the Use and Effectiveness of 1-to-1 Technology*

Case studies:

- Civic Architects, ITC faculty, Enschede
- The Roy and Diana Vagelos Education Center, New York City
- AFAS Experience Center, Leusden
- Lochal public library, Tilburg
- Forum Groningen, Groningen

Results

Creating an interactive space tailored to different target groups necessitates a thorough understanding of each group's unique characteristics. These traits were carefully analyzed and compared to devise a design strategy accommodating various learning scenarios. Six distinct learning situations were identified and integrated with compatible programs. For instance, the mountaintop scenario, conducive to formal information dissemination, could connect to a theater or lecture hall, facilitating communication from experienced individuals to novices. Conversely, the waterhole setting, associated with interactive two-way communication, might be linked to spaces like ateliers or libraries, fostering engagement between both teachers and students.

These learning environments were intricately woven into the design brief's program, necessitating specialized configurations, particularly vertically, to suit each scenario's requirements. The layout of the vertical campus hinged upon this configurational system, serving as its foundational principle.

However, the research journey was not without its challenges. One notable hurdle was the requisite level of public accessibility for the concept to function effectively. While a more public building has its advantages, such as fostering a sense of community, it also introduces drawbacks in terms of ownership, identity, belonging, and security. The design aimed to mitigate these challenges, yet their inherent complexity suggests further research is warranted to determine whether their benefits outweigh the positive impacts of the design approach.

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 Public Building Group investigates the future of public buildings and their role in the built environment, by developing new spatial formulas, programmatic articulations, and building components. The work of the Public Building Group involves reinventing past structures and questioning existing typologies through research and design as well as research by design.
   Public architecture should respond to and accommodate today’s needs while anticipating the future.

The concept of lifelong learning has surfaced multiple times in the studio syllabus, prompting me to contemplate a personal interpretation of what it could signify for a campus. Additionally, it aligns with our master track, aiming to address social needs through architecture and design. Moreover, it bears relevance to our master program, emphasizing the crucial connection between theoretical knowledge and practical application. This exploration has spurred me to consider how educational initiatives beyond architecture are offering such opportunities, or if there exists a deficiency in these prospects.

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

It is imperative to redefine the conventional campus into a forward-thinking concept that not only fosters lifelong learning, but also eradicates the boundaries between theory and practice. By bridging the gap between theory and practice, students acquire a more robust and adaptable education, better equipping them for real-world challenges. Concurrently, students can help young professionals or adults, particularly in areas like technology, which can often discourage older individuals from pursuing further education. Recent times have illustrated that technological advancements and economic uncertainties can lead to a significant transformation in job opportunities and required skills. This design concept seeks to investigate methods of enhancing the appeal of learning for everyone, aiming to contribute to the development of a more educated society as a whole.

3. **Did you manage to fulfill your initial design ambitions?**

The fundamental objective of this studio's assignment, centred on innovating both physical and mental aspects of education, is essential for the continual advancement and enhancement of our educational systems. My aim with this project was to cultivate an environment wherein knowledge not only from the university but also from the local community could thrive, contingent upon the active engagement of individuals. Without the appropriate mindset and social drive, the building risks becoming merely another typical university structure. To counteract this possibility, I prioritized the educational aspect by incorporating various learning styles into the design, rather than solely focusing on program mixing, which remains flexible. By integrating these elements, I believe my ambition to create such an environment has been realized. However, the true test lies in the actual experiences of individuals engaging with it, which would provide a conclusive assessment.

4. **How do you look back on your design process?**

Reflecting on my design process, I've observed both successes and areas for improvement. Firstly, I've discerned a narrative thread woven throughout my journey, guiding me towards my final design. This narrative comprises both deliberate design choices and the challenges I encountered along the way. Initially, I opted to incorporate a significant portion of the existing structure into my design, which constrained my creative freedom and perspective of the site for a considerable duration. However, I eventually recognized that such extensive reuse wouldn't align with my design aspirations. This realization marked a turning point, reigniting my vision and revealing fresh opportunities. Regrettably, this

epiphany came relatively late in the process, limiting my ability to fully capitalize on the newfound insights. This led to a failed attempt during my first P4 presentation. However, just before the summer break, my tutors and I proposed a new plan. I spent the vacation working on this new concept, and by September, I presented it to the tutors again. This time, I succeeded in developing a design that was more in harmony with its surroundings and better reflected my design ambitions compared to the previous version. I put in significant effort to revise and refine the design based on the initial feedback I received in September. Feeling fully prepared for the P4 retake, what I called my P4+, I saw this as a step up from my earlier work. The extra time I invested over the holiday felt like it truly paid off.

5. **How do you reflect upon the feedback that was given by your mentors?**
   Following P2, I underwent a complete overhaul of my design due to a relocation requirement. This setback resulted in a delay of several weeks and prompted intense feedback sessions, during which I had to rapidly assimilate a wealth of new information. This constraint on my creativity and design autonomy compelled me to seek more input from my tutors than initially anticipated. Despite this, I meticulously weighed all suggestions against my own ideas to ensure that the project remained true to my vision. After my initial failed P4 in May, I had a positive experience planning my next steps during the holidays. I felt reassured, knowing that both my tutors and I had confidence in my ability to steer the project in the right direction. We agreed that I could reach out to them for help if needed, but I ultimately chose to work independently and at my own pace on the new concept. Their trust in my approach was invaluable, as I needed that creative break to regain perspective and avoid repeating the mistakes of my previous design. In September, after the holidays, we resumed with weekly meetings, even though the tutors were busy with new classes. I truly appreciated the consistent feedback and support they provided throughout the year.

6. **How did your research influence your design/recommendations and how did the design/recommendations influence your research?**
   The majority of my research was conducted through case studies and my personal insights into the subject matter. Supplementing this were academic literature and informal discussions with peers, which helped refine and expand my perspective on the design objectives and aspirations. For instance, initially, the focus was on merging theory and practice for optimal outcomes. However, as the design phase unfolded, it became evident that mere program mixing wouldn't suffice to activate user engagement and communication. Consequently, the project's concept evolved to incorporate elements that stimulate interaction among users. Moreover, the unique challenges posed by the project site necessitated adjustments to the concept. For instance, the considerable footprint of the tower prompted a reevaluation of horizontal and vertical connections. These insights collectively shaped the final design and research outcomes.

7. **How do you assess the value of your way of working (your approach, your used methods, used methodology)?**
   The research topic and ambition I set for myself were challenging to quantify and largely relied on personal experience as a student and empathy for the situation.

In hindsight, I realize that my research lacked a comprehensive understanding from the perspective of the party with whom I identified the least – the practical side of my concept, namely businesses and the local community. Assessing their enthusiasm for and expectations regarding participation in such a concept could have provided valuable insights into its feasibility. Interviews with these stakeholders might have shed light on how they envisioned its implementation.

Nevertheless, I still believe that in an idealistic scenario, this concept would remain robust as it embodies the fundamental essence of teaching: the transmission of experience to others.

8. **How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?**

As previously mentioned, I believe that beyond its economic implications for participating companies, this environment holds significant potential for the betterment of humanity as a whole. While practical studies have long demonstrated the efficacy of hands-on learning over theoretical instruction, such approaches have typically been reserved for craft or physical work. Why not extend this model to higher education, ensuring that students are better equipped for their careers while simultaneously leveraging the fresh perspectives of young minds in the professional world?

Our TU Delft Architecture department serves as a commendable example, actively involving tutors from the professional sphere. I am of the opinion that other fields of study could similarly benefit from this approach. There exists a balance to be struck for each individual, as not all knowledge can be solely acquired from books, nor can it be solely gained through practical experience.

9. **How do you assess the value of the transferability of your project results?**

I believe that my project seeks to revolutionize our perception of learning and teaching on a broader scale, transcending the boundaries of its individual scope. Its fundamental principles hold potential for applications beyond my own project. These principles could be adapted for designing experience centers, large office spaces, or commercial buildings, provided there is an overarching goal of fostering interaction among diverse groups of people. In essence, it can be viewed as a versatile system rather than merely a design.