

CON1007X Reflective Essay

The transition from classroom learning to hands-on-experience in my first year at UCT was both challenging and transformative, marking the beginning of my practical journey in the construction industry. Coming from a small town in the Eastern Cape into a big city like Cape Town was an overwhelming shift, both personally and academically. I arrived at university uncertain about what my degree would entail, and concepts like foundations, strip footings, DPC and ground floor structures were entirely new to me. However, when the department encouraged us to go on site and get to see the material we cover in the classroom, everything began to make sense. This reflective essay explores my on-site experiences with various organisations and delves into the thoughts of a 19 year old navigating his way into the construction industry.

My first opportunity to bridge the gap between theory and practice came during my time with Adrocon CC Civil & Building Contractor in Queenstown, Eastern Cape. The project, named Nonesi Fuels, involved the construction of a petrol station. On my first day I was introduced to Tim Van Oosten who would serve as my mentor during my 2-week practical training. The company culture was immediately apparent during a morning meeting where I was formally introduced, and I realised then that I would enjoy the next two weeks. Following the meeting, Tim took me to my first ever site visit at Nonesi Fuels. This is where I was introduced to Gavin and he walked me through the site, and he also mentioned that another student from the University of Pretoria was also completing their practical training during the holiday.

During my time at Adrocon, my mentor had prepared a plan for my training. In the first week, I assisted with project management tasks, helping to track progress across multiple sites, including refurbishing residential homes in Cathcart; a project for SAB in Queendustria, and the primary project at Nonesi Fuels. In my second week, I was more hands-on, learning how to use tools like a shovel and pickaxe, and witnessing concrete being poured. One key lesson I learned, even before it was covered in the classroom, was the importance of vibrating concrete after pouring to ensure structural integrity. During my second week, I took on the role of team leader for the general labourers responsible for housekeeping the site and ensuring it was kept clean at all times. I was excited about this responsibility, but it quickly led to my first significant challenge on site. I was tasked with overseeing the excavation work by a TLB Excavator, ensuring it dug only to a specified depth to avoid damaging the installed electric cables, and I began the task with confidence. However, toward the end of the day, the excavator hit a cable that was buried deeper than expected. This was my first major mistake on site.

Immediately I informed the site foreman, and we called Tim, who inspected the damage. After assessing the situation, he explained that the architect hadn't included this particular pipework in the drawings, so there was no way we could have anticipated its presence. While this information was reassuring, the experience was a sobering reminder of the unpredictable nature of construction work. This incident was a pivotal moment in my learning journey. Although it was my first significant mistake on-site, it taught me valuable lessons about the importance of thorough communication and double checking all site conditions, even those that might seem obvious. I also learned that while it is crucial to follow instructions and plans, unexpected issues can arise, and it is essential to stay adaptable and vigilant.



Figure 1: Damage to the cable caused by unexpected excavation depth.

The lessons learned during my time at Adrocon CC provided a solid base for my next practical experience, which came through the UCT Community Build Project. This initiative, a collaboration between UCT, Lawula Projects and Blue Moon Projects, aimed to address the housing needs in Vlakkeland by constructing RDP houses. My role in the community build was being a member of Team TANGO, found this experience to be both different from and

complementary to my previous training. The community build project was divided into two main sections, each presenting its own set of challenges and learning opportunities.

The first section involved teams being on site, this is where teams learnt how to set up levelling instruments, dig trenches for foundations and preparing the site for excavation. The challenges faced here were the long hours in the heat digging trenches, as well as dealing with numerous people who were angry and tired, some did not even become responsive and this led to many tensions. Despite these difficulties, witnessing the initial stages of building construction was a significant highlight. I learned the critical importance of site preparation, including the necessity of laying out the site clearly for excavation. This experience underscored a crucial lesson: effective planning and clear communication are fundamental to successful construction projects. Ensuring that everyone is aware of their tasks and the project's requirements before execution is essential for smooth operation.

The second section of the project focused on refurbishing already built homes. This involved tasks such as stripping screeds, plastering, and ensuring the homes were tidy. We also removed pre-installed toilets. This phase provided a more collaborative and engaging working environment. I had the opportunity to get to know other people from my degree as well as seeing their work ethic while undertaking these tasks. The process of stripping and refurbishing provided valuable insights into how a finished home should look and the layers of work involved in achieving that final product. Seeing the transformation from initial construction to a completed home helped me appreciate the detailed work required to deliver quality results.

The UCT Community Build Project deepened my understanding of the practical aspects of construction. The first section taught me the importance of thorough site preparation and planning, while the second section highlighted the significance of teamwork and attention to detail in refurbishing homes. Overall, this experience reinforced my appreciation for the complexities of construction work and the importance of both foundational planning straight through to the execution.

As the year neared the end, I was deeply invested into my industry and was eager to learn even more work. What started off as inquiring at the front desk, ended up serving my final practical training work for the year 2022 at Department of Public Works & Infrastructure. This is where I got to see the broader term "construction", the stages before the actual execution of the construction stage. During my term at DPW&I I was tasked with assisting the Construction Project Manager with project administration. This entailed the numerous projects he had across the Chris Hani District, we had to keep tabs of the projects as well as track their progress. This is

where the software of project managers was introduced into my world. I was also tasked with assisting to compile and load documents for Close-out reports on the Department of Education online filing system (EFMS system).

As short as my time was at DPW&I, the practical training there had the most lasting impression on me. It challenged the way I viewed the industry, it showed me that there is more to the industry than just being on site. However, they heavily encouraged students to start off on site before making ways up the ranks. As I neared my end of the practical training, I was delighted to be invited for the following year (2023) to join the office again, and even learn more than what I had done this year. This showed that being curious about your own work and the industry, shows mentors and seniors a dedicated student who wants to better themselves in the field. This attitude was able to get me an offer for more vac work the following year.

Reflecting on my journey from the classroom to the construction site, I can confidently say that my practical experiences have been pivotal in shaping both my technical abilities and my understanding of the industry as a whole. Each experience, whether it was learning how to use tools, managing on site challenges, or understanding the project management side at DPW&I, has contributed to my development as a future professional in the industry of construction. The challenges I faced, such as the cable incident at Adrocon CC, taught me the importance of being adaptable, vigilant and proactive, while my time at UCT's Community Build Project emphasized the necessity of teamwork and detailed planning.

Moreover, my exposure to the administrative side of construction through DPW&I broadened my perspective, reinforcing that there is more to the construction industry than just being on site. It is an intricate field that demands both hands on experience and strategic oversight. Moving forward I feel more equipped and eager to continue building on these foundations, knowing that curiosity and a willingness to learn will guide my growth in the ever-evolving industry. What began as a nervous step into the unknown has evolved into a clear passion for construction, and I look forward to the opportunities and challenges that lie ahead.