

Project Manus - Democratize Access to Practical Science in Haiti

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Summary

Project Manus is the first open-use makerspace of this kind in Haiti. It promotes peace by democratizing access to tools of scientific invention and innovation in Haitian high schools.

Project Description

I was blessed with an incredibly unusual educational journey. From Haiti to MIT, I have attended prestigious educational institutions that allowed me to pursue my scientific academic interests and benefit from unique opportunities. The majority of Haitian students do not have the same access. I have always been aware of my privilege but I have never accepted that this situation where only the fortunate ones benefit from rare educational opportunities should remain as it is. As gang violence and political turmoil exacerbated the already existing education gap in Haiti, it felt right to create a project that could not only strengthen the education system, but also transform it into a tool for social mobility, youth engagement and social cohesion. Hence the birth of Project Manus, a hub for scientific innovation where learners from different subsets of society could acquire skills they never had the chance to develop before.

Our strategy for implementing the project was twofold. First, we wanted our makerspace to be linked to an educational institution so that we could leverage an existing student network and gain the trust of external collaborators from the onset. We then tapped into various overseas funding sources and local sponsorship opportunities. Due to the limited availability of resources in Haiti, the threshold of confidence and performance required by domestic companies before investing in projects is very high, a situation that disadvantages startups. Fortunately, we applied and qualified for several grants through project competitions in the United States, which allowed us to develop our project from scratch, gaining enough credibility to reassure and excite potential local partners about the project's promise.

I chose Saint-Louis Gonzague (SLG) as our community partner not only because I have a longstanding relationship with the representatives, but also because it is a reference in Haiti in terms of an organization that strives to advance scientific innovation and education as a whole in Haiti. SLG is known for hosting one of the most competitive technology-centered contests for high school students in Haiti. I truly believed that their expertise in those fields would increase the reach of Project Manus among the Haitian youth. From the start, our collaboration efforts were incredibly efficient and productive. Not only did they give us the certainty of their willingness to help us launch Project Manus, they also demonstrated their compatibility with the overall mission of the project. This helped us secure important partnerships that complemented the support we received from Davis. Companies such as EKO Depot, and Thompson Electronics resonated with our vision and supplied us with a total of \$5,000 worth of tools. The MIT Office of Minority Education and the Physics Department provided us with \$3,000 and \$2,000 respectively. Finally, we received about \$7,000 worth of equipment from various organizations around MIT and Boston.

Project Manus is the result of 17 months of consistent work. We spent an extended period designing our *makersheet* (a comprehensive list of all the tools needed for the space), creating our initial teaching program and timeline as well as gathering the support necessary to minimize the risks of failure. These were the major reasons behind the smooth delivery of the project this summer. We hope to maintain this consistency as we elaborate our strategies to run our training program at a large scale, and ensure the sustainable access to all students across Port-au-Prince.

Reflection

I define peace as a stable and sustainable state of being, free from conflict and in which the possibilities for a dignified standard of living are accessible to all. This definition, in my opinion, considers peace as a continuous quest for the conditions that allow individuals to improve their lives,

regardless of their identity or origins. Peace is always in the long term: it is never fully acquired. Rather, it is something we must strive for every day to preserve the efforts already made and to continue moving in the right direction.

Project Manus is an ambitious bet on the future of Haiti and on the young people that will shape it. It is part of a long-term vision that has the potential to fully transform the country. Technological innovation has historically been neglected on the agenda of community leaders and politicians because it was seen as a superficial pursuit for a country already struggling to put food on the table. It has been neglected in favor of seemingly more urgent activities such as agriculture, security, traditional education, etc. Our approach does not contradict the vision of local leaders but rather complements it. We view technology as a mandatory crossroads for any country that wants to develop effectively and efficiently in the 21st century. Our project contributes to long-term peace by providing young people with a space to nourish their intellectual curiosity and apply their skills to solving modern problems. Project Manus contributes to peace through its promise to keep young people off the streets and into spaces of innovation and creativity. Project Manus contributes to peace by engaging members of the private and public sectors to prioritize the development of scientific learning across the country in order to better equip young people to not merely *enter* the job market, but to create and strengthen *job markets*. Project Manus is more than a creative makerspace - it is the physical representation of a vision that is to transform our education system so that it is more directly linked to the problems plaguing our country, transforming education into a force for a better community as a whole.

Generating interests among relevant stakeholders in Haiti has by far been the most significant challenge I faced through this project. From the start, I realized that building a makerspace required more than tools and technical knowledge. I needed to bring together a dynamic group of individuals capable of helping me conduct the tasks that went beyond my expertise. These included advocating for the project's importance through schools, protecting it through legal layers, and ensuring its sustainability. Despite my deliberate efforts to start early, people were reluctant to believe that a project of this magnitude could be achieved by a student. A project they had never seen before. It required dozens of meetings to convince a diverse group of teachers, school principals, law students, and engineering students to join a development cabinet to help advance the project. Beyond that, I had to come up with creative ways of demonstrating progress even at times the project stagnated. This included creating updated 3D design of the space, or drafting science curriculums that the makerspace would enable.

Although these tasks required careful diligence and time, I am extremely grateful to have undertaken them. Bringing these people in at such an early stage of the project allowed them to develop a sense of belonging to the cause, and embrace the project as their own. Consequently, I benefited from their bi weekly commitment and learned from their perspectives to strengthen aspects of the project that were quite unclear before the creation of the cabinet. We placed ourselves in a great position to deliver a minimum viable makerspace, with added layers of protection and room for growth. We also now hold strong partnerships with educational institutions as well as teachers.

Project Manus really changed my outlook on people. Our project would not be what it is today without the generosity of donors around the world. We have managed to raise nearly \$30,000 in funding and equipment, to advance a project that has never been done before, in a community that is completely unrelated to any of the donors. These donations will have the power to give hundreds of kids in Haiti a ticket to life. They will enable them to explore uncovered parts of their imagination. One really cannot put a value on these opportunities. This project has truly allowed me to assume good intentions from people, and reinforced my beliefs in our ability to make a better world.

Personal Statement

Project Manus opens doors to unlimited opportunities for Haitian students. The makerspace does not just offer tools for hands-on learning, it creates a bridge to positive knowledge and empowerment for a youth that is constantly targeted for recruitment by armed gangs.