

Luke Van Leeuwen - Team Pitstop

Self-reflection narrative after the in-class Team Pitstop activity

As part of the Wheelders Design team, Antony Saleh, Connor Gumbs, Hongyu Guo, and I are working on designing and creating a solution for our client's problem. Our client Rice Robotics needs a set of 6 wheels for their mock Mars Rover for the University Rover Challenge (URC) competition. Our group comes from varied backgrounds. Academically, we have two mechanical engineers, an electrical engineer, and an Operations research major. The other members of the team are all freshmen, while I am a sophomore. This combination of backgrounds has equipped our team well for producing a satisfactory solution for our client. The four of us represent a diverse range of cultures, having an international student from China, one from Palestine, and two U.S. natives from Texas and Florida. Our team's values are equality, communication, and responsibility.

Our pit stop was productive, as our problem situations and the action plans we created from those situations were agreed upon. We all participated in recognizing our shortcomings and worked well together to develop what we believe to be effective action plans. To start, we decided that our communication had been lacking in two situations. First, we had struggled to find meeting times that worked for all of us, or we weren't willing to make certain sacrifices to be able to make meetings. We agreed on finding and setting a fixed meeting time every week instead of our previous flexible scheduling. This way, we know to plan things at a set time so that we are all free to meet for an hour at least once a week. Second, we agreed that we had not been communicating with each other on developments in our work. This has caused wasted time and inefficiency as some parts of our work have relied on the prior work of others in our team. Additionally, this has caused further problems when members of the team are proceeding on their work, which has caused others to have to wait even longer to do the work that builds on that. We agreed to fix this by updating each other as we finish each task in our work that we have delegated among ourselves, and we have set an earlier deadline over the weekends for all of our work to be completed by, so that if anything comes up or if any proofreading needs to be done, we have the time to do so. Next, we recognized a situation that we feel is hampering our overall collaboration with each other; we feel that we aren't bonded enough. Given that our group can be more on the introverted side, this has been a fever idea to us in our recent brainstorming sessions. A lack of familiarity has also caused less empathy, which we fear may cause problems down the line as work and stress ramp up. We agreed to try and schedule in some bonding sessions or hangouts at the recreation center or in Rice village to help build our relationships with each other.

All of us agreed on these goals and feel that as we implement them, we will see positive change among our team and positive benefits in our work. To add on to the positive momentum we built from this pitstop, I also set individual goals for myself. I set a smart goal, committing myself to hold a short 5-minute period before or after our writing mentor meetings, where I lay out the tasks and assignments that we have to get done before the next Sunday. This will help with task delegation and while also allowing us to visualize more how much time we need to put into our work that week. Additionally, I set a goal to try and mentor my freshman teammates more. Be it about classes, opportunities, or skills, I want to help them navigate their time at Rice as a freshman and help them acquire skills that could be beneficial to the design of our project, such as CAD skills or manufacturing skills. This will also enable us to all be able to add and implement our diverse ideas on the project since none of us will be held back by our knowledge limitations.

SMART Goals (Individual & Team)

SMART Goals	Situation	Action Plan (Smart Goal)	Follow-up plan
Team Communication (Individual)	I have observed that we don't really know what work each of us has gotten done going into a new week and how much we get done going into a new week on Tuesday or Thursday. This causes us to procrastinate getting our work done, as well as making us disorganized for class on Tuesday when we are given time to get work done.	I will commit to holding a short 5-minute period before or after our writing meetings every Sunday. In this short meeting, I will briefly introduce what the next EDP is about and discuss what work needs to be done so that we can delegate it among ourselves at the start of the week, giving us more time to accomplish our parts.	By the end of October, I will observe if our work is getting done sooner in the week. I will discuss the results of my observations with the team and gauge if the 5-minute periods are something we appreciate and see as beneficial for the team.
Inspire Ethos (Individual)	I have observed that my freshman teammates are still learning about a lot of skills and tools that are beneficial for engineers. They are also still finding their way around campus and learning how to navigate living on their own and getting their coursework done.	I will commit to offering help to them when I can, when it comes to life at Rice. I will also hold an hour meeting before we start prototyping, where I teach them how to use SolidWorks and then how to take those files and 3D print them.	By the end of October, I will discuss with my team if there is anything that I can help them with on campus or with engineering skills like CAD or manufacturing. If they do want me to help them or teach them more, then I will go about planning more meetings or finding someone who is more qualified to teach them the skills they want to learn.
Team Communication (team)	As a team, we observed that we do not update each other on our progress with the work we have delegated to ourselves. This oftentimes causes us to do our work later in the week, as some parts of our work rely on others completing their part, but without an update, we don't know when it has been finished.	As a team, we are committing to updating each other in our group chat every time we finish the task we are working on.	We will ensure that our team is constantly updating each other on all aspects of our work. Additionally, we will keep track of who is working on each part to proactively check in with them to see if it's been completed, just in case they might have forgotten to send an update in the group chat.
Team Management (team)	As a team, we observed that we have struggled to set and make it to consistent meeting times due to our scheduling them flexibly. This poses a risk to both our quality of work together and the risk that we may miss deadlines, as we aren't taking the time to work, review, and edit things together.	As a team, we are committing to designating a set time every week to meet, regardless of how much work we have to do or not.	For the rest of the project, we will have a set hour work period on a weekday every week. We have sent out a when to meet to gauge everyone's schedules and find a time that works best for everyone consistently.
Inspire Ethos (team)	As a team, we recognized that we are not very bonded with each other. We felt that this is discouraging us from sharing ideas with each other since we are more on the introverted side as individuals, and this is negatively affecting our brainstorming efforts.	As a team, we are committing to having team bonding activities with one another at least once a month.	Once a month, we will have a team bonding activity, likely at the recreation center, to strengthen our bond with each other. This will help us grow closer to each other, building more rapport and empathy for each other.