

Holly Zumbrunnen

Team: Solar car

Role: Former leadership

## Background info:

My solar car team journey started two years ago when I joined the strategy division, which mainly handles software and data analysis. I stayed there for a year, and then switched to the communications division in my second year, where for the first semester I mostly handled organizational tasks and automations, given my compsci skillset.

After the first semester, though, our Communications Director (part of our executive committee and the leader of the communications division), as well as all but one of our members left. Despite my total lack of experience, I was therefore the most experienced one left, so I stepped into the Comms Director role. Obviously, given that I had very little useful experience, this did not go well, and I made a lot of mistakes.

Now that I am a senior in my final semester and no longer on leadership, I have a lot of knowledge that I'm taking with me, and I want to remedy the lack of knowledge by creating training materials for new members and the new leadership. I believe that my two goals, member retention and competent member training are interrelated in that if members receive competent training, they are more likely to stay because they know what they're doing, are able to learn more, and feel powerful and valuable when they do work for the team. That is why I hope to achieve both via my training.

## Objective one: provide quality training

**S:** I will create a set of training documents (my priorities being photography and photo editing, as this is where most of my unique and time-consuming-to-obtain knowledge lies) and lead general training presentations to ensure they are trained well enough that the knowledge I accumulated doesn't disappear.

**M:** I don't think a quantitative measure of success, like a quiz, would be practical or useful. Our division uses more "artistic" rather than "scientific" knowledge, and is therefore harder to quantify via facts and quizzes. The most reliable way to measure my success for this goal would be to:

- Talk to members by the end of the semester and ask them to walk through what they're doing. If they have a solid workflow and artistic process (perhaps even more effective than the one they were taught), then that will be a reliable indicator they have a strong grasp of what they're doing.
- Evaluate created materials as a coherent body of work at the end of the semester. There is no agreed upon standard for artistic quality, so I have laid out what I believe to be some criteria for a good body of work for our team:

- Shows a consistent “aesthetic” and brand image between works
- Photos used are consistently bright, crisp (not blurry), and clear (show unambiguously what you’re supposed to be “getting out of” the photo – people working in the shop, for example, should typically not be obstructed and should have the background blurred to avoid confusion with shapes behind them)
- Designs strike a good balance between interesting and professional

I will grade these by assigning them 1-5 values, with 5 being the most clear demonstration of achievement of that criteria. Then I will grade a sample of our previous works, and compare scores. I am looking for any improvement, no matter how statistically insignificant, because at the very small and incredibly subjective scale we are working at, I don’t believe that it would be reasonable to apply typical statistical methods on this data. I only assign numbers in the first place to make my subjective assessments easier to compare, and I personally believe that this is still not a sufficient way to determine artistic quality. However, I hope that it will make my assessments more understandable to an outside evaluator, who will hopefully be able to look at my grades and evaluate on their own based on my criteria, and come to the same conclusion.

**A:** I know this is attainable, because I am working with leads on it. I already have many of the training materials completed and will have more soon. In addition, I know that the knowledge I have can be passed down, because I myself acquired it through self-learning. Guided learning should streamline the process and give members a headstart to begin building on my previously gained knowledge.

**R:** Since I was one of only two members for a semester on our division, and the only acting member during the summer, I have accumulated a fair bit of knowledge that needs to be passed on before I graduate in December. If this knowledge is allowed to just evaporate, I think it will set our team back by a lot, because members will need to learn it themselves (a grueling process, let me tell you), and will also be less likely to stick around, because they will not feel like they are learning. Our team desperately needs all the skilled and dedicated Communications personnel it can get, so in creating these materials, I will be helping us towards that goal and along the path to success. After all, branding and outreach are crucial parts of any organization that requires money. That’s why I joined Communications!

**T:** I want to have the bulk of this done in the next few weeks, but will continue making supplemental documents for less time-sensitive issues until the end of the semester. The end of the semester is also when I will measure and reflect on how well I’ve done. See below for detailed schedule.

Milestone	Date Expected	Tasks to achieve the milestone	Hours expected per task
1. First training presentation completed with current leads	Sept 3	<ul style="list-style-type: none"> <li>• Meet with leads to go over objectives</li> </ul>	4

		<ul style="list-style-type: none"> <li>• Create presentation</li> <li>• Present to new members</li> </ul>	
2. Coordinate and finish training project for new recruits	Mid-October (current leadership will set this date specifically)	<ul style="list-style-type: none"> <li>• Meet with leads to discuss their learning objectives and give advice</li> <li>• Create training project materials + update old ones</li> <li>• Present training project</li> <li>• Guide members through the project</li> <li>• Evaluate subjectively when they present (did they learn how to use X tool, did they improve their design capabilities, etc)</li> </ul>	15
3. Create training document for our camera and social media photography	Nov 5	<ul style="list-style-type: none"> <li>• Borrow our team camera (and possibly LSA camera) to get demo pics</li> <li>• Assemble document</li> <li>• Put in Drive</li> </ul>	10

4. Evaluate training document quality and effectiveness and revise as needed	Nov 10	<ul style="list-style-type: none"> <li>• Have the team take some photos after using the guide and evaluate their quality</li> <li>• Ask verbally for feedback on anything that was unclear or that didn't make sense</li> <li>• Revise docs</li> </ul>	1
5. Create training document regarding editing photos of our car	Nov 20	<ul style="list-style-type: none"> <li>• Take some example photos I've edited and get process screenshots of what they look like after some of the edits were made</li> <li>• Use this to create a walkthrough that someone could follow along in their own window</li> <li>• Add general tips with example photos from our Drive</li> </ul>	10
6. Evaluate editing training document	Nov 25	<ul style="list-style-type: none"> <li>• Have leads look it over and add what they want to it</li> <li>• Coordinate with them to send to appropriate</li> </ul>	1

		members and have them follow the document steps and review <ul style="list-style-type: none"> <li>• Revise as needed</li> </ul>	
7. Evaluate objective fulfillment	Nov 30	<ul style="list-style-type: none"> <li>• Visit a general team meeting at the end of the semester</li> <li>• Talk with members and ask them to walk through what they're doing</li> <li>• Evaluate our created materials to determine quality</li> </ul>	5

## Objective two: retain members

**S:** I want to retain members through:

- Creating quality training materials and presentations
- Initiating discussions after training to hone feedback, and to cultivate a sense of importance and enjoyment in members' work

**M:** I will know that this objective has been achieved if I see that we still have most of the members who showed interest during our first meeting by the end of the semester. For the purposes of quantitative data, I'll describe "most" as  $\geq 70\%$  of the recruits, as this is a lofty but not unachievable goal based on my previous observations. Basically, this will involve checking our attendance sheet for the number of active members, and then comparing to our number at the first general team meeting.

**A:** I know this is attainable. I am already in the process of making it happen. I have contact with current leadership and have already made a couple of documents in this past week in preparation for training. In addition, although I think my goal for the amount of retention I want to see is lofty, it has been done in past years.

**R:** It's no secret our division desperately needs members, and more importantly, needs dedicated and skilled members. Being a non-engineering division on an engineering team makes recruitment very hard, especially since non-engineers are often less amenable to the workload we expect. Having quality training is the primary thing I believe will help retain members, because members who feel powerful, capable, and proud of the work they are doing are a lot more likely to stick around. Back when I was in the Strategy division of our team, we were generally pretty good at retaining members, but of the people that did leave, some of the reasons included the time commitment being too high, lack of training, and not feeling meaningful on the team. In fact, I almost left at first due to the final two reasons. (As for the Communications division, I don't mention it because I only have n=2 deserters, due to the fact that we had less people and therefore less to leave. For one it was because they weren't dedicated in the first place and weren't invited back, while the other just didn't feel they were doing something important enough to justify the time commitment.) I believe that quality training will help eliminate the feelings of meaninglessness that people might feel, by giving them the tools to create quality work they'll be proud of, which will make the work feel important and valuable to them.

**T:** The schedule for this aligns heavily with milestones created by my other objective, since they are so intertwined. As with my other one, this objective will be complete and evaluated by the end of the semester. See below for detailed schedule. Since there is overlap, I only included the milestones unique to this objective here.

Milestone	Date Expected	Tasks to achieve the milestone	Hours expected per task
1. Initiate first discussion after initial training presentation	Sept 4	<ul style="list-style-type: none"> <li>Meet with leads to go over objectives</li> <li>Present to new members</li> <li>Discuss training with members informally, what they are excited to work on, and what their personal goals are</li> </ul>	1
2. Discuss after training project final drafts are presented	Mid-October (current leadership will set this date specifically)	<ul style="list-style-type: none"> <li>Meet with leads to check in on how things are going</li> </ul>	1

		<ul style="list-style-type: none"> <li>Discuss after presentations on what each member did well, as well as get feedback on the training project itself to record for later</li> </ul>	
3. Discuss feedback on photography training document	Nov 10	<ul style="list-style-type: none"> <li>Get members together after trying the document out and have an honest discussion about their learning</li> </ul>	1(?)
4. Discuss feedback on editing training document	Nov 25	<ul style="list-style-type: none"> <li>Get members together after trying the document out and have an honest discussion about their learning</li> </ul>	1(?)
5. Evaluate objective fulfillment	Nov 30	<ul style="list-style-type: none"> <li>Visit a general team meeting at the end of the semester</li> <li>Count people that are currently active</li> <li>Talk with members and ask them how they feel about staying on the</li> </ul>	2

		team in the future	
--	--	-----------------------	--