



**UCLA Wind Project
Final Metrics Report
2022-2023 Collegiate Wind Competition
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Connection Creation Team:

Amos Ancell (Mechanical Lead)

Eva Fiedler (Electrical Lead)

Zack Figueroa (Project Manager)

Faculty Advisor: Sam Taira

Recruitment plan outcomes

At the UCLA Wind project, we started this year with 8 members who carried over from last year, and through our recruitment efforts throughout the year through our social media and personal pitching, we gained 8 new members. From last year, we were able to double the size of our team, with a total of 16 members and active membership of 14. When considering our team breakdown and demographics, we will highlight these 14 members, as the remaining members joined later and will be integral in our project next year, but not in our current design.

Within our team, our membership breakdown is as follows, considering the undergraduate population

- Grade level
 - o 64.2% 4th year students
 - o 21.4% 3rd year students
 - o 12.3% 2nd year students,
- Ethnic Breakdown
 - o University
 - 5% African American
 - <1% American Indian
 - 33% Asian and Pacific Islander
 - 21% Hispanic
 - 26% White
 - 4% Other
 - o School of Engineering
 - 37.6% Asian
 - 26.6% White
 - 14.3% non resident alien
 - 12.2% Hispanic
 - 8.8% Other races
 - o UCLA Wind Project
 - 64.3% White
 - 28.6% Asian
 - 7.1% Hispanic
- Gender Breakdown
 - o University
 - 41% Male
 - 58% Female
 - o School of Engineering
 - 69.4% Male
 - 30.6% Female
 - o UCLA Wind Project
 - 50% Male
 - 50% Female
- Major Breakdown

- 42.9% Mechanical Engineering
- 14.3% Aerospace Engineering
- 7.1% Math
- 7.1% Chemical Engineering
- 7.1% Computer Science and Engineering
- 7.1% Civil Engineering
- 7.1% Material Science and Engineering
- 7.1% Environmental Engineering

Reflection on recruitment plan

Overall, I believe that we were able to well execute our recruitment plan on the engineering on turbine design side, but we were not as successful with our project development team. The introduction and continued use of our social media accounts on Instagram was integral in growing our team, giving us an easy way to send out information, and a convenient resource to direct interested members towards. Through this Instagram and the recruitment efforts of our student organization, the Renewable Energy Association (REA), we received many messages and emails during the year expressing interest and wanting to join the team. As mentioned before, these recruitment methods allowed us to almost double our active membership of our turbine design team.

The aspect of our team recruitment that did not go as well as we had hoped was the recruitment of non engineering majors for our project development team. This was not without effort, as we have reached out to several business organizations and clubs on campus to pitch our project, but we have not gotten a response from these organizations. I believe one of the reasons that our efforts in recruiting non engineers was hindered by being hosted under the engineering school at UCLA. Because the engineering department is its own school, the recruitment and outreach efforts of clubs are often contained to within the engineering school, limiting our reach to those outside of engineering. Additionally, at the UCLA Wind Project we were slightly delayed in starting our project development team due to our focus on building a strong turbine team, so our recruitment did not start as early as we would like to. Due to this delay, we think that many of the non-engineering majors we tried to recruit would have already found other clubs and committed to other teams.

An aspect of recruitment that we did not anticipate was the personal outreach of our team members. This would happen when our team members would talk to their friends or classmates about the project during normal conversations, and that person ended up coming to a meeting and joining, as opposed to learning about it via our social media or newsletters. This method accounted for 4 of our new members, which was unexpected.

Overall I believe that we did well in our recruitment efforts, both in building a strong team for this year's competition, and also securing younger engineers that will be able to carry the project forward and continue to grow our work.

Social Media

- Instagram

Our Instagram account we created this year was @uclawindproject, We started it in late September, and do this day we have grown it to an account with 53 followers

We have posted 7 times on our account, along with 6 story posts during this project year. The average like count was 9 likes, with our highest sitting at 12 likes

Our Instagram account grew at a satisfactory rate this year, being a newer team it was harder to break into social media, especially without a dedicated officer to social media. But we were able to reach a lot of newer people that may have not otherwise been interested, and received several messages about how to join the club. Overall we consider this to be a success

- **LinkedIn**

This year we created a LinkedIn company page in order to show off our accomplishments and promote our club and members on a professional level. We created this page at the beginning of February, so our engagement is not as strong.

We posted our acceptance into the phase 2 of the CWC alongside the DOE announcement. This post received 12 impressions on LinkedIn.

This account has not been utilized as much as we would have liked to, so it has grown at a slow rate. We plan to utilize this much more next year to increase professional outreach.

Overall when compared to our social media goals, I think that we performed adequately but have room for improvement for next year. While the Instagram was a useful tool, I believe that we should have used it more and started earlier to coordinate our social media outreach with our in person and organization recruitment. Compared to our original plan, I think that our usage of our Instagram account was on par with what we expected, expanding our reach and team well, and we have good lessons to take into next year. Additionally, I think that our LinkedIn page can definitely be more used, although this was not originally in our social media plan for the year, but was thought of after phase 1 was completed. I think that the LinkedIn can be a great way to spread our team's accomplishments to industry professionals and help our members secure industry opportunities through our team.

Interviews

Of those we reached out to, we ended up making industry connections with:

- Alicia Mahon, Wind Energy Program Manager at Pacific Northwest National Laboratory
- Nassir Cassamo, Scientist Innovator in Wind Energy at TNO
- Rafael Mudafort, Researcher in Wind Turbine and Wind Farm Simulation Software at NREL
- David VanLuvanee, Head of Offshore Wind Advisory Americas at Ramboll
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With these connections we first conducted an initial meeting with the industry member and the project manager, where we asked our required questions for the connection creation contest in order to get sense of how to direct the future team meeting. We then reached out after to try and set up a meeting, but had run into some issues with our connections. Of the industry people, we ended up conducting a team interview with Alicia Mahon, which will be discussed later. With the remaining connections, we were unable to meet with Nassir or Rafael due to scheduling issues, as many of our team members did not list themselves as available during the same time slots our industry professionals could meet. We were unable to reach David after our initial interview, so we could not conduct a team interview.

We were able to organize a team meeting with Alicia Mahon on December 5th. Of our team we had 4 total members show up, which was expected from polls that had been sent out. This low attendance was

likely due to the timing of the meeting, as this interview occurred a week before finals week, so many of our members were busy with classes. Overall this meeting was very informative, teaching our members more about the professional wind industry, and what it looks like and what it takes to be a project manager within the industry.

We think that the investigation and interviews we conducted with industry professionals were helpful in increasing our team's understanding of the industry and the possible paths we can take. However, we do believe that there are improvements we can make for future years that will increase the value of these events. We think that reaching out to alumni of past CWC competing teams would help us gain insight for the competition, as many of our industry connections did not know much about the competition and the process. Additionally, I think that making these connections earlier in the year would assist in the process of job searching for our team, as the main recruitment period for many companies is early fall, and as a quarter system school, we already start fairly late in the recruitment cycle, so sharing job info as soon as possible will be key in future years.

Outreach events

Our main outreach event is currently planned for May 12th in collaboration with the Society of Latino Engineers and Scientists (SOLES), a student organization here on campus that works as a local chapter of the Society of Hispanic Professional Engineers (SHPE). This event will take place at a Los Angeles high school, and will bring together 3 separate high schools for a total expected attendance of 80 students to spend a day of workshops on leadership and science.

Our team will be hosting a turbine design workshop, where the students will use ordinary class materials such as index cards and cork to create a wind turbine. The effectiveness of the turbine will be determined by how many washers the turbine can lift when placed in front of a fan to simulate air flow. This workshop will be preceded by a presentation on wind energy and our project to introduce the students to both the topic and team.

We are currently expecting 80 students in attendance for our workshop and have 4-5 of our team members volunteering their time to help, along with the volunteers on the side of SOLES.

This outreach event reaches our high level goals that we had set out for the year. We are able to target local high school students to spark interest in wind energy, and in addition, SOLES partners with schools that have programs for underrepresented communities in STEM. This also achieves our goal of trying to reach students who have been historically underrepresented in science and engineering and get them passionate about science and renewable energy early. In future years, we would love to partner with organizations on campus to run events at UCLA for college students in order to affect a more immediate community.