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23 October 2022

To Whom It May Concern:

My name is Scott McComb. I have been working with Hai Lin since Fall 2019 when he joined the student body of Raisbeck Aviation High School.

First, some context about our school. The first two years of students' academic careers at Raisbeck Aviation High School involves a heavy emphasis on intensive project-based learning. In 6- to 16-week units, students work in small teams to address myriad challenges. In science, for example, they design, build, and test a series of pint-sized heat shields to protect a chocolate bunny from the heat of re-entry, explore wind turbine blades to generate as much power as possible from an array of fans, and evaluate how different factors affect take-off performance of various aircraft using an engineering-grade flight simulator. The real-world application makes the curriculum engaging, but the high stakes (and correspondingly high performance) occur when students present their findings to people who do the work for a living, i.e., in small groups, students justify their heat shield designs to thermal protection systems engineers and astronauts, wind turbine blade design to aerodynamicists, and flight test reports to flight test pilots and engineers. As juniors and seniors, our students begin taking AP or university-level classes. For those students who are so inclined, they can engage in long-term and audacious engineering projects both in and out of school. Hai Lin has thrived here.

When we worked together during his 9th grade year, Hai Lin demonstrated tremendous raw talent, deep curiosity, effective study habits, and extraordinary tenacity. I have been pleased to continue to work with him (and watch him apply and hone those traits) during our work on the school’s award-winning Green Energy Team over the last three years.

The Raisbeck Green Energy Team had its start in a class project regarding wind turbines in 2015. In 2018, its focus changed to designing, building, testing, refining, and eventually racing a full-sized solar-powered car. From the wheels to the chassis to the suspension, from the solar panels to the batteries to the motor controller, from driver safety and communication to telemetry, each system has been designed and built by students. The preparation is intense (well beyond the scope of a typical high school curriculum or club) and sustained (a typical design cycle takes 2 years; we complete it in just under 10 months). The three days of scrutineering and four days of racing at the Texas Motor Speedway in July is physically and emotionally grueling. Win or lose, the payoff is incalculable (though, of course, it helps to win: our team has distinction of being three-time national champions!). To bring an idea from conception to reality and test one’s engineering and scientific mettle as part of a team helps shape the next generation of engineers and problem-solvers. Hai Lin has been instrumental in the team’s success.

Nearly every day after school and well into the summer, Hai Lin can be found working on the school’s solar car. Given how quickly he incorporates new information, his contributions are found in virtually every system of the car from design (he and a teammate collected data to analyze the drag coefficients of different iterations of the car; Hai Lin presented their results at a professional conference last spring) to suspension (custom-milled), electrical systems (both high-voltage and supplemental), user interface (communication and telemetry), safety, etc.

For the many strengths that Hai Lin brings to the team, Hai Lin also has some areas of significant growth. Most pertinent to your consideration of his application: his pursuit of excellence sometimes comes at the price of team cohesion. Since his sophomore year,

* I have seen behaviors that indicate that he thinks that agreed-upon norms and expectations do not apply to him.
* I have seen interactions where he dismisses others’ contributions and input preemptively and sometimes impatiently.
* When his words or actions have impacted others negatively, I have seen him explain and justify; I have seen him acknowledge his mistakes or apologize for his actions far less frequently.

For Hai Lin to be a more effective team player and leader, he will need to combine his competence and confidence with more adept interpersonal skills. For someone of Hai Lin’s intelligence, I am surprised and sometimes disappointed that he is less deliberate about improving in this area.

Please let me know if you have additional questions: you may reach me by phone (206.947.9537) or email (scott.mccomb@highlineschools.org).

Sincerely,

signature

Scott McComb

Science instructor, Science Olympiad coach, Green Energy Team advisor, AIAA advisor