## What advice would you give a new Clinic liaison?

1.) Define the project with clear deliverables. 2.) Meet weekly with the team 3.) Treat the team as you would an internal project team; expect clear reporting of results and schedule.

\* There is a lot of work time that is required of the Clinic team to prepare internal presentations and reports for the Clinic program that does not in itself provide value back to the sponsor. Be aware of these internal deadlines ahead of time when planning milestones and work. \* No work is completed during school recess time. \* Establish and understand your relationship and communication style with your faculty liaison early.

Scope conservatively and don't assume students will operate well with freedom. Make sure all materials are accessible and that lab environment is appropriate. Consider visiting the lab prior to committing to the clinic. Scope similar to a team of interns.

Complex problems are harder to solve by the given time and I recommend breaking the problems into smaller for 3 to 4 students to work on...

I think our liaison was great!

Plan, plan. plan. Have EVERYTHING ready internally at the start - actually 1 month ahead of time. Be prepared to spend ~3 hours at the beginning explaining your business and what problem you're trying to solve. Be prepared that while your students are hyper-smart, many things you take for granted (like reading a balance sheet, understanding P&L, reading 10k's) are new to them. Be a teacher.

The Clinic is a worthy project to be involved in.

Feel free to give them a meaty chunk of work, and a workstream that can grow if they finish early.

Be prepared! The students are incredibly capable and will drive fast toward solutions - your time/effort is essential to maintaining focus and productivity.

Set the right expectation during the project scope/goal setting phase. During the project, modify the goal and strategy accordingly.

Encourage frequent question asking and iteeration. Don't encourage the team to figure out everything before they start building / experimenting

Scope a project to provide early success in the first semester and allow students to attack open ended challenges in the second semester.

Calibrate the work given to the students with the student's skills

The more you can engage and interact the better.

I would give them the same advice I give my design team at work. Be honest about progress, challenges, and feedback. Come prepared to meetings.

Clarify role of liason/company resource, mostly should we have the students work through problems themselves with some pointers (this is what I did) vs. using our resourced to remove blokcers (faster progress but less learning). Also in hindsight I think we should have been more agile. Students made a 1 year project plan. In real life we also do this, but then constantly update it based on new information. We didn't do this for the clinic.

Plan your goals well and make sure they are achievable

Spend a lot of time in the first few weeks to make sure the scope of the project is manageable and focused on at most one or two key deliverables

Define more of the project scope and expected result and resources before, and not as part of the Clinic project itself.

1. Organize a separate goal-oriented team-building event with the liaisons and students. GF took the team to an escape room followed by a dinner spent analyzing the puzzle structure of the room. This allowed for early, solid rapport between members and liaisons as well as an awareness on our part of the students' individual approaches to problem-solving. 2. Establish a chain of accountability and project structure as early as possible. Regularly meet

to cover work that has been done since the previous meeting, insights revealed or roadblocks encountered during that work, and to set goals for the next meeting. 3. Speak periodically with the group's faculty advisor. They may have a perspective or information you may not be getting in regularly scheduled meetings.

Manage time very tightly in the second semester. Aim to finish project 4 weeks prior to deadline. Many of the most impactful results came in the last week or two and didn't allow for enough time for incorporating into presentations and poster board. More importantly, we didn't further explore these due to time crunch at the end. With students, there is a huge pileup at the end of the school year.

Be sure to define a tangible deliverable and don't be afraid to re-scope the projective needed.

Invest the time.

Specify a project of smaller and much more detailed scope.

Be prepared well ahead of time.

Don't be afraid to try cutting-edge ideas with HMC students.

Give constant feedbacks and have frequent communications. Immediate feedbacks are important because it allows the team to move forward faster in stead of wasting a week.

Be flexible.

To find out what clearance is needed by your company/institution prior to clinic beginning and then to let the clinic team know at orientation what to expect if clearance is needed prior to initiating work on the project

Spend adequate time planning and generating requirements before beginning the project with the students.

The team is a relatively smart group, but are a little overly optimistic in schedule. Make sure to have appropriate expectations on how much the team needs to learn and be effective. The team overall really got rolling in development only in the last 6-8 weeks of the project.

Stay close early on in the process to get over that initial knowledge hurdle. Then back off and let them run with it.

Help define software engineering vs. programming.

Having clear expectations and what the measure of success look like are important to communicate to the team early on

Understand that students have a lot of other activities besides your project

spend more energy in the problem definition before engaging the Clinic team

Try to narrow down options for projects as much as possible.

Talk to past liaisons or individuals associated with the Clinic months ahead of time.

Set clear goals that include some stretch challenges, then modify details as ideas emerge. Time spent in face-to-face meetings at sponsor site or HMC are well worth it.

Have a reasonable outcome in mind (demonstration, publication, etc.) but be flexible. (Example: we reoriented team to write a research paper rather than build a demonstration.) Get your team to visit. Visit your team. Keep a regular schedule of team meetings to the best of your ability. Be mindful of the goals of everyone on the project: it's at least as much (if not more) about giving senior students experience than it is about getting something for you & your org (even though it does cost some dough!) Don't kill your team; protect them from themselves! Above all be prepared to be impressed!

Ensure you have an adequate backup plan for yourself as liason to cover absences.

We found that the students were more comfortable talking to their teachers about problems they were having, instead of coming to us. Even though we made it clear we wanted to know their issues as well as their

achievements, they felt they did not want to "bother us". Direct communication with the students and making them feel comfortable coming to us was essential. We allowed them to make mistakes in order to learn, as long as we did not see it impacting the schedule to severely, by trying to guide rather then demand. We also made a point to verbalize our concerns with the students directly not only with details of the project, but also with organizational and communication concerns. This allowed the students to understand our project concerns. We also felt that visiting our facility was crucial to the "spirit" of the team. It helps that out facilities are fairly amazing, but we also showed them the history of the project, how the project fit into the scope of our company, and how we could incorporate it in the future. The first visit obviously inspired the team, so we made sure to get the second semester juniors to come and see ASAP. Also giving them some swag helped as well ;)