

National Geographic Student Expeditions: Student Feedback for OpenAg

What made the process so enjoyable?

- Putting materials and kits in your hands immediately
- Competitive build nature helped! Created an environment of friendly competition

What made the instruction useful?

- Live interaction with students and grad students made for competent problem solving
- Instruction was step-by-step which was helpful

What did you guys like about the food computer exercise?

- That we worked with components and weren't given something already constructed. Starting from scratch was great.
- Ability to personalize the food computer
- Personal interactions with the OpenAG team. They were very engaging.
- Working together, and working with our hands made the idea of the food computer come to life and seem realistic
- Working in small groups
- Great introduction to arduino skills
- Made programming seem fun, because something actually happened
- Learning basic software, construction, and electrical engineering was extremely helpful and rewarding
- The creative side of it and competition made the exercise extremely fun
- Using zip ties, screwdrivers, and duct tape was awesome because we had always thought that intense gear was needed
- Solving problems creatively (fixing things with zip ties and duct tape)
- Decorating was awesome! This could be turned into a competition.
- Working with the same group of people day after day was cool. Got to know them and it became personal.
- People were super friendly. OpenAG team was awesome!
- Liked how we were split up at the beginning

- The overview was very useful. Recommended order: coding, fabrication, assembling parts. Some drew a lot on it when building their stations.
- Freedom to build was awesome

Do you think you'd be able to do it by yourself without instructors?

- No. The advice and troubleshooting education was really needed
- It would be possible but would take a lot longer

Has this changed your view of food culture and ag?

- Now seems more accessible to start changing ag from in the home
- More open now to new ideas and approaches
- Nice to see the “fringe” become real and into the “traditional” role

Were there any points in the build process that could use improvement? Or other areas for improvement?

- Having more concise and clear instructions with names of gear. Maybe give each component a number which the instructor can reference. Or create a main key for gear/materials.
- Sometimes names of things in directions didn't match equipment provided (ex. air pump vs. aeration) – true things up
- More pictures and diagrams in the instructions
- A lot of people do not know what the materials are (maybe have a non-engineer write the instructions, like LEGO instructions)
- More complex coding or more instruction in coding (though some students would be left behind)
- Set regular check in times with OpenAG team members to survey progress and answer questions
- Having a “skeleton” code or add some coding stuff into the instructions.
- Make it easier to rectify mistakes
- Add Music!

Overall thoughts:

The students loved being allowed in the shop space and getting to experience the Media Lab. The food computers really gave them the feel that they were building something worthwhile and important. While it was a challenging build for most, all were extremely pleased to be trusted with the task!