

**Scattergood Friends School and Farm
Academics Report to Iowa Yearly Meeting Conservative
July 2015**

For the last two years, I have been asking myself what it means for Scattergood Friends School to be a Quaker, college preparatory farm and school in Iowa. What does that look like in the classroom? As I have shared this question with faculty, students, alumni, and members of our wider community, several pieces have become clear, and have shaped the direction of our academic programs. More specifically, I have heard about the significance of Intersession and May Term in providing a progressive and interdisciplinary educational environment, the desire to more fully incorporate the farm into the academic life of our students, and the importance of providing a strong college preparatory education.

At their core, Intersession and May Term offerings provide us with the ability to suspend our academic schedule and delve deeply into large questions. These courses are critical in preparing our students to go into the world as practitioners of the disciplines they study. The students and their teachers find these experiences to be invaluable. When May Term was initially envisioned, it was seen as an opportunity to try a teaching and learning style that was intriguing to staff and students in a time period that was manageable and safe. I am pleased to report that over the last year, teachers at Scattergood Friends School, inspired by May Term, have been working to make more interdisciplinary connections between their courses. Disciplines exist in the real world to serve a purpose, like different tools in a toolbox. What made this project interesting is that students were using math and science as their tools. In this case, our students were looking to solve a crime.

The planning for this project began last year after David Cohen, our geometry and algebra teacher, set out to make math education more relevant and engaging for his students. After several months of planning, David joined with teachers Michael Severino-Patterson, from Advanced Biology, and Stephanie Sheikholeslami, teacher of Government, staged an elaborate crime and launched students into an investigation in which they took on the roles of crime scene investigative unit and of members of the justice system. Students in our geometry class used mathematical tools to analyze pace and temperature data in order to assemble a list of suspects. Students in Government became attorneys, applying the information compiled by geometry and advanced biology students.

This incredible project was made possible by a generous \$5,000 grant from the Toshiba America Foundation. The Toshiba grant allowed Scattergood to purchase equipment to replicate and sequence DNA in our science laboratories, thus enabling our high school students to participate in work they normally would not experience until college-level biology classes. Advanced Biology students analyzed the DNA samples found at the crime scene using gel electrophoresis and compared them to the samples taken from suspects. On March 12, in the culminating act of this sweeping inquiry, the entire school gathered for a mock trial. The trial involved both

sides presenting DNA evidence. To effectively argue their cases and question expert witnesses, students needed to understand the procedures used in the lab and to be able to access and analyze that data.

Another recurring theme that came out of discussions with constituents was how critical the farm is in Scattergood Friends School's history and mission. Last year, we launched a new class called Agricultural Research, a hands-on experience that places students in the roles of scientists. Students researched current trends in agricultural sciences, engaged in research design, and carried out their own studies using the farm as a living laboratory. Ultimately, these young scientists traveled to Ames to present their findings at the Iowa State Science Fair.

At the end of this course, students remarked that the process had altered their pre-existing views of science as a clean-cut and linear procedure. They are now beginning to understand the cyclical nature of scientific research and the burden of proof placed upon scientists. This is a level of investigative work that many students do not encounter until graduate school. In many traditional high school classes, students memorize scientific *facts*, but often do not understand that these so-called rules are, much like many of the *truths* we seek in Quakerism, subject to change and interpretation in light of new data or evidence.

In the fall, our freshmen and sophomores will spend first quarter based at Scattergood's organic farm, which will become the basis of all of their core academic classes. These students will be applying skills and concepts in a meaningful context, and thus become active participants in their own learning. In this context, math becomes an opportunity to learn how to be a more successful farmer, as opposed to an isolated algorithm to be memorized for a test. In the fall, the test will not be on paper, but will be scored on the vegetable scale. This initiative will form a critical foundation for a broader program as students continue on to further immersive academic research in our curriculum of project-based learning. Most importantly this class will prepare students with the foundations needed to thrive in intensive, high-level academic courses, such as Agricultural Research.

For the entire history of Scattergood's existence, farming has been a critical part of the school's mission. There are many schools that have followed suit and introduced successful programs involving areas of sustainable agriculture. The idea of place-based education is one that has also proven to be successful in attracting and retaining high-quality students. Ultimately, expanding our farm program in our 125th year is a testament to the rich legacy of relevant education that Scattergood has provided for generations.

We believe that these programs not only build on our institutional strengths, but they also take full advantage of our unique offerings and will continue to help us grow a compelling college preparatory curriculum. However, the quality of a college preparatory program should not be measured solely on the content that it offers – it should also be evaluated by the habits of mind that it cultivates in its students.

Colleges and top paying industries are looking to hire individuals that can demonstrate the following abilities:

- Critical thinking and problem solving
- Collaboration across networks
- Agility and adaptability
- Initiative and entrepreneurship
- Effective oral and written communication
- Accessing and analyzing information
- Curiosity and imagination

Our progressive academics provide Scattergood students with a strong foundation in each of these areas.

Irving Treadway recently said that he was confident that there are at least 60 kids in the world that would like to be at Scattergood; the hard part is that they do not know about us. In Seth Godin's *Purple Cow: How to Make your Business Remarkable*, he goes against conventional wisdom by urging business owners to stop advertising and start innovating. This revolutionary farm immersion program will set us apart from all the other schools in the country that have a farm or garden. And it has already started working. Last month, the National Association of Independent Schools contacted us to discuss the program for a feature on innovative learning environments. The story can be found here: <http://inspirationlab.org/story/7237>.

I am so pleased to be working at Scattergood Friends School at a time when we are leveraging our rich past to move towards the future. As members of IYMC, I invite you to be a part of this amazing journey.

Respectfully submitted,

Louis Herbst
Assistant Head of School