

Harmony School senior projects wide-ranging; graduation today

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From studying YouTube, tasting tea and visiting Hawaii, Harmony School seniors covered a wide range of subjects and locations in their senior projects.

For his project, Harmony student Robert Meya was able to tap into a passion he's had since childhood.

"I've always been interested in aviation," Meya said. In elementary school, he regularly drew rockets, and he always wanted to travel to Mars. After graduation, Meya will study aerospace engineering at Purdue University.

When he heads to college, Meya will be able to draw on the hands-on experience he gained through his senior project. He traveled around Indiana, Florida and Ohio, meeting plane-builders, visiting aviation museums, taking workshops and trying his hands at skills such as welding, fabric covering and woodworking. He even built his own model rocket.

Through the experience, "I learned what it takes to be an engineer," Meya said. "I need to have a problem-solving mentality."

As he prepares to leave Harmony School and head to college, Meya is most looking forward to moving from modeling rockets to high-powered rocketing.

Meya's classmate, Heather Harlow, took a different approach to her senior project. When she came across a worn copy of "Stranger in a Strange Land" by Robert Heinlein that her mother had given her late father as an anniversary gift, Harlow knew what she could do.

During internships at the Lilly Library of Indiana University and at the Indiana Historical Society, she learned about media preservation, and Harlow chose to restore her father's copy of "Stranger in a Strange Land."

It was an act of memoriam because her father was "a big science-fiction nerd," she said. After carefully restoring the book, it is now "where it belongs on a bookshelf in the living room," Harlow said.

She's learned it takes patience, steady hands and interest to help conserve historical documents, preserve books and restore glass-plate negatives for photos. While at the Indiana Historical Society, she was working with a collection of 900 glass-plate negatives and only got through 24.

The lesson Harlow took away from the experience and that she hopes to share with others is, "throw yourself full-force into something, even if you're not sure what you're going to get out of it."

Harlow plans to attend Indiana University with a focus on international studies in Russian and Arabic. What follows is information on all the projects the 10 Harmony School seniors worked on this year. Harmony School provided the information. The seniors will graduate Saturday in a 3:30 p.m. ceremony at the school. Related events are scheduled through the day.

Isabelle Bardessono

For her senior project, Bardessono learned everything she could about tea: its history, production, blending and preparation. In January, she visited a number of tea rooms and a Japanese tea garden in San Francisco. In February, she interned with a tea blender in Millerton, N.Y., whose company is a family-run business. She followed this by traveling to London, where she visited blenders, tea shops and tea museums, and experienced traditional English afternoon tea in many different forms. Her essential questions were: “How are teas chosen, blended and prepared? Is a tea shop a viable business and career for a young adult? Would owning a business be a career she would consider for her future?”

Tristan Caulfield

Caulfield’s project was divided into two parts. The first was learning two different programming languages through online courses offered by Stanford University. The second was delving into a micro-controller called an Arduino, which is user-programmable and can be employed to build a variety of electronic devices. His final goal was to build a Quad Rotor (a rotor-craft that uses four rotors to lift and propel itself). His essential question explored: “To what extent are the fields of robotics and software engineering integrated, and would it be an advantage to know both disciplines if one of them was pursued as a career?”

Natasha Hastings Heinz

For the first part of her project, Heinz traveled to the island of Kauai to intern with photographer Sara Wall. While there, she concentrated on her digital photography skills and started to work with Adobe Lightroom. On her return, she interned at Quick Pic in Bloomington. Heinz focused on three types of photography during her project: landscape and nature, motion and portrait. Her essential questions were, “As someone who began her training in film photography, what advantages and disadvantages are there to working with digital imaging? Has digital photography made the job of being a professional photographer easier? From developing film in the darkroom, to putting a micro SD card in your computer, has software such as Photoshop made retouching photos simpler, or is current technology just as difficult to learn? What advantages do I have coming from a generation raised on computers?”

Heather Harlow

Harlow spent her spring interning at the Lilly Library and at the Indiana Historical Society,

learning how to restore and preserve books, photographs and film in an increasingly digital world. Her mentors, James Canary, head of preservation at the Lilly Library and Ramona Duncan-Huse, senior director of conservation at the Indiana Historical Society, oversaw her work, as she searched for an answer to her essential question: “In an age in which digital media are becoming more popular than their analog counterparts, is preservation as an art still a viable career choice, and how effective are its practitioners at preserving ‘dying’ analog media formats?”

Piper Lacy

For Lacy’s project, he studied YouTube as a growing platform for education and community building, specifically among queer, transgender and gender nonconforming people. Lacy made his own YouTube videos, and connected with others while sharing his own stories and opinions. Over the course of his project, Lacy learned how to improve education about this group of people, and what further actions should be taken for acknowledgment of and justice for trans people. His essential question was: “What are the positive and negative attributes to come out of building a queer community on a website like YouTube, and how does this overall benefit this generation of trans people?”

Robert Meya

Meya plans to study aerospace engineering at Purdue University, so he spent the spring traveling around the Midwest, making a movie about how to build an airplane from basic parts. He visited and worked with eight separate plane-builders, who are each currently on a stage of the aircraft that he needed to document. His essential question was: “In what ways did observing the process of building a plane demonstrate the differences between the theories of how a plane works vs. the practical application of the physics?”

Jay Rademachir

Rademachir spent his project creating a Dubstep, Drum and Bass and Moombahton album, while improving his DJ skills. He also learned how to mix and master his own tracks from Steve Johnson, a local musician who has his own studio. Rademachir’s second mentor was Meghan Reef (also known as DJ Pixie), who worked with him on his performance style. During his project, he performed around Bloomington under the name of D3F3X (d-fex). His essential question was, “How is the electronic music scene changing; where does it seem to be leading; and is it possible for someone under the age of 18 to become a locally known electronic musician/DJ?”

Jessica Smith

Smith returned to the place of her birth, Maui in the Hawaiian Islands, to undertake an internship at the Maui Ocean Center, an aquarium that takes on five interns a year. Interns are expected to engage the general public in conversation about Hawaii’s tropical marine life; give marine-themed

presentations to people of all ages; learn and practice aquarium techniques for caring for tropical marine life; and learn what goes into the creation and design of displays. While she was there, Smith also worked with different nonprofit organizations in an effort to preserve and restore Maui's natural ecosystem. Her essential question was: "Under what circumstances are keeping aquatic mammals in captivity morally right, and who gets to make this decision? How does Hawaii, being a tourist destination, hurt its natural ecosystem, and what are they doing — or could be doing — to use that to their advantage in repairing and preserving the ecosystem?"

Katherine Thomas

For her senior project, Thomas concentrated on continuing to develop her skills in fine arts. During the summer of 2013, she spent several weeks at the California College of the Arts and has been building off the foundation she started there. She took an intro to life and object drawing course with Maureen Forman through Ivy Tech, and her mentor during her project has been Danielle Urschel. Urschel has a master's degree in fine arts and has been teaching Thomas basic printmaking and letterpress, as well as how to design, expose and print photo polymer relief plates. Additionally, Smith learned how to photograph her work using a tripod and artificial lighting and dabbled a bit in teaching herself how to use acrylic paints. Her essential question was: "In modern-day society, in what ways is the study of fine arts a legitimate preparation for a future career?"

Nicholas (Nico) Larimer

Larimer completed his project a semester early and graduated in December. He focused on software engineering, developing an application programming interface to handle all the essential functions of a game engine, upon which he could build a complete suite of tools to simplify the development of games.