

# Increasing Knowledge and Skills in this Digital, Global Era with Scott McLeod



## Project-Based Learning in Northwest Iowa

Many schools in Iowa are trying to find small chunks of time that allow students to engage in some inquiry- or project-based learning. These might be class-level projects, teacher-led exploratories, or student-led “genius hours.” Several districts in Northwest Iowa are going beyond these smaller experiments, however. They’re carving out a couple of weeks for a “J Term” after winter break, or a May Term at the end of the year, or even a mid-semester “MidMester Academy.” These initiatives typically offer students an immersive, project-based experience of 30 to 50 hours, capped with a public exhibition / defense to the community.

Student projects are quite varied and create student learning opportunities that may not occur in schools’ typical core curricula. For example, at Spirit Lake High School, students learn about Yamazumi charts, Kaizen events, elemental spaghetti diagrams, and other lean engineering techniques with Polaris, the local snowmobile manufacturer. They gain real-world web development experience by designing a new website for their community. They explore law enforcement issues such as crime labs, use of force, drug policing, SWAT, and polygraphs with the local police department. They discover how to weld by creating a new sculpture for the community. They learn about the beauty industry and the local theatre through field trips and hands-on disciplinary work.

Down the road at Okoboji Middle School, students learn about coding, robotics, computer-aided drafting, and 3D design in their *Designing for the Future* and *Robots: Let the Races Begin* projects. They identify a business or charity, create promotional materials, organize fundraisers, and compete against other teams as part of their *Pioneer Apprentice* project. They make atl-atls duck boxes, and goose nesting structures - and learn how to process wild game - in their *Outdoors in Iowa* project. Other projects allow students to explore Native American history, investigate risk-taking through the lens of immigration, study and create American folktales, use their geography skills to survive a fictional viral outbreak, and participate in an “Amazing Race” focused on the provinces and territories of Canada.

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Over at Southeast Valley High School, students learn the strategies of medieval warfare and compete against each other with self-designed catapults. They study the Holocaust and its relevance to today. They examine the history of rock and roll and write their own rock anthems. They design their own video games, learn about project planning and the hospitality business, are introduced to landscape design, and go deep with Rube Goldberg machines. And in Newell-Fonda High School, students learn outdoor survival skills, create “life hacks,” explore the financial and marketing aspects of running a sports franchise, and investigate the science behind real world objects through their own, local “How Stuff Works” spinoff.

Where’s the technology in all of these projects? As Science Leadership Academy principal Chris Lehmann would say, it’s “ubiquitous, necessary, and invisible.” Digital learning tools are present in all of these activities, they’re necessary to accomplish the work, but they’re invisible in the sense that they’re just a means to an end, not the end itself. And that’s how they should be. What could your students do in a 1- or 2-week immersive inquiry- or project-based learning experience?

### Upcoming events

The education documentary, *Most Likely To Succeed*, has received accolades everywhere that it’s been shown, including at the Sundance Film Festival. Every Iowa high school now has an amazing opportunity to use the film to spark some local conversations but the special rate for our state **expires on December 18**. Learn more about this incredible film and special statewide event at [TransformingIowa.org](http://TransformingIowa.org). Can we get every Iowa community talking about the future of schools during the same time window?!

- Feb 13, EdCampIowa, [edcampiowa.org](http://edcampiowa.org)
- Apr 5 & 6, Iowa 1:1 Institute, [iowaltol.com](http://iowaltol.com)

As always, stay in touch at [dr.scott.mcleod@gmail.com](mailto:dr.scott.mcleod@gmail.com), 707-722-7853, or [@mcleod](https://twitter.com/mcleod)!