

Innovation in History: Impact and Change

Iowa Sample Topic List

The following list was created as a guide to help you think about innovations with Iowa connections that might make interesting topics. Selecting a topic unique to Iowa can be beneficial for many reasons: 1) You have a good chance of finding primary sources and experts close to home; 2) The topic may be more unique; 3) You can make the topic personal by looking at it from a local perspective. Several of these topics reflect regional and national trends; remember the “big picture” when examining these ideas. At the same time, consider that most of the topics below require NARROWING. Some research tips have been provided.

Consider paging through issues of *The Goldfinch*, a magazine of Iowa history for young people formerly published by the State Historical Society of Iowa, and *Iowa Heritage Illustrated*, a popular history magazine currently published by SHSI. The Fall 1988 issue of *The Goldfinch*, “I is for Iowa Inventors!” may be especially helpful. A few highlights include:

- ★ **Eskimo Pie** – Originally called the “I-Scream-Bar,” Christina Nelson’s creation helped lift cocoa- and chocolate-producing countries out of an economic depression.
- ★ **Incubator** – Rebecca Johnson patented a device to alert farmers to changing temperatures within an incubator. Her poultry business (and inventiveness!) offer insight into women’s roles in agriculture.
- ★ **Rice Krispies Treats™** -- Mildred Day, an ISU graduate, developed this popular treat in the 1920s as a fundraiser for a Campfire Girls group.
- ★ More than 50 **Iowa women inventors** received patents in the 1800s—perhaps one of their stories would be a great NHD topic!

The University of Iowa Libraries has created a website to for NHD students to help with topic selection and acquaint you with their collections. Check it out at: <http://guides.lib.uiowa.edu/nhd>

If you’d like some ideas to spark your thinking about topics related to Women in Science and Engineering, check out the Iowa State University Libraries web site. An on-line exhibit, *Today’s Seeds for Tomorrow’s Harvest: The Impact of Women Nutritionists* showcases “Women Who Made a Difference” – and whose scientific research might open the door to excellent NHD topics. http://www.lib.iastate.edu/spcl/exhibits/Seeds/women_index.html

Conducting research related to inventors who have been inducted into the Iowa Inventors Hall of Fame could produce unique topic ideas. Some of the inventors include:

- ★ **John V. Atanasoff** – built the world’s first digital computer (*The ISU Special Collections Department houses Atanasoff’s papers*)
- ★ **Ray T. Townsend** – Frank-A-Matic frankfurter stuffer
- ★ **Arthur L. (Blackie) Hubbard** – reinvented the mechanical cotton picker
- ★ **William P. Switzer** – developed atrophic rhinitis vaccine
- ★ **Everet F. Lindquist** – pioneer in educational testing
- ★ **F. A. Wittern** – vending industry innovator
- ★ **Noel M. Anderson** – specialty water pump specialist
- ★ **W.A. Jennings** – concrete ideas about concrete forms
- ★ **George Washington Carver** – developed 300 uses for the peanut (see an on-line exhibit about Carver at <http://www.lib.iastate.edu/spcl/gwc/bio.html>)
- ★ **Arthur A. Collins** – Radio Industry Pioneer
- ★ **Walter A. Sheaffer** – changed America’s writing habits
- ★ **John L. Naughten** – invented the Den-Tal-Eze chair
- ★ **William P. Bettendorf** – big wheel in the metal wheel business
- ★ **John Froelich** – built the first gasoline-powered tractor that propelled itself backward and forward
- ★ **David C. Nicholas** – creator of fax machine technology
- ★ **Harley A. Wilhelm** – a key figure in the Manhattan Project
- ★ **Allen Johnston** – made sewing simpler
- ★ **Joseph Musil** – road-building’s smooth idea man
- ★ **Wallace Carothers** – inventor of nylon
- ★ **George F. Nissen** – inventor of the modern trampoline

The following topic-based special awards are among those that will be offered at State History Day (*contingent upon sponsorship and funding*):

- Agricultural History Awards
- Archaeology is Awesome
- American Spirit Award (presidential history)
- Best of Iowa (Iowa history)
- Camp Silo’s Award
- Country Schoolhouse Award
- Leroy Pratt Award for Local History
- Main Street Iowa (economic development history)
- Outstanding Entry in African American History
- Outstanding Entry in Women’s History
- Women in Science and Engineering Award

Is it History?

NHD asks students to identify a topic’s lasting impact. This is tough to do when the subject focuses on a current issue or more recent history. **25 years or older** is a good “rule of thumb” when considering topics with definable historical impact.

Selecting a topic from the sample topic list will not increase or decrease a student’s success in NHD’s contest cycle.

More Iowa Innovation Ideas:

Berkley Bedell of Spirit Lake started Berkley Fishing during the Great Depression with his first fishing lures made from dog hair and chicken feathers braided around fishing hooks. Later the company licensed the ability to make nylon from DuPont and made monofilament fishing lines.

Make historic sites and museums a research destination! Visit www.iowamuseums.org for a resource gem in your area!

The State Library of Iowa offers a rare online **database of Iowa inventors and inventions** from 1843 through 2008. This database is searchable by inventor's name, title of the invention, the inventor's residence (town or county), date the patent was granted, and patent number. Check it out at: <http://www.statelibraryofiowa.org/services/patents-trademark/iowa%20inventors%20database>

Henry A. Wallace – breeding high yielding corn had a significant impact on U.S. and international agricultural and agribusiness.

Corn itself has a fascinating history. Inventors have adapted corn from its original state to develop products including high fructose corn syrup and ethanol. *The Omnivore's Dilemma* by Michael Pollan might help frame that topic and provide a starting point for further research.

Grant Wood helped form an important American art movement known as regionalism, which held that painters should paint those things they know best rather than rely on European influences. Go to: <http://www.lib.iastate.edu/narrative-menu/2023/3000> to see murals created by Wood for Iowa State University as part of the federal program to provide work for unemployed artists during the 1930s.

The invention and production of **steamboats** and their impact on the Mississippi river, both financially and ecologically, might be an option. Or, look into the system of **locks & dams** that tamed the Mississippi. Beginning in the 1830s the Federal Government, acting through the U.S. Army Corps of Engineers began improvements in the interest of navigation.

Norman Borlaug developed resilient strains of wheat and corn to help address world hunger.

Laurence C. Jones and Grace Morris Allen were pioneers in education who created new opportunities for African-American students in Iowa. Jones graduated from Marshalltown High school and the University of Iowa. Allen founded an industrial school in Burlington.

Margo Frankel was an early conservationist and parks promoter. Students could investigate how new ideas about preserving land led to establishment of state parks.

Thomas H. MacBride, who joined the University of Iowa faculty in 1878, founded the Lakeside Laboratory at Lake Okoboji in northwest Iowa and promoted the development of state parks, including the lake and park that bear his name in Johnson County, north of Iowa City. MacBride's papers are housed in the Special Collections department at the University of Iowa Main Library.

Students could explore the development of **Chautauqua** and performers with Iowa connections including Bix Beiderbeck and Miss Margaret Paul.

Cartoonist **J.N. "Ding" Darling** was instrumental in the conservation movement and developed the idea for the Federal Duck Stamp program.

The **John Deere plow** in 1837 changed prairie landscape as farmers put more land into production.

While many American Indian tribes were being relocated to reservations, the **Meskwaki** in 1856 purchased land near Tama to form their settlement. Students could investigate how the concept of land ownership was new – and an innovative way to escape forced relocation.

In 1856, a **land grant** of 4 million acres from the federal government helped raise money for railroad construction. The land was divided among four railroad companies to sell. Students could explore how the railroad industry led to formation of towns and businesses, year-round transportation, inexpensive travel, immigration, greater demand for coal and the rise of the coal-mining industry.

Rural Electrification Association brought electricity to farm houses. Other innovations, including telephones, radios, automobiles, and Rural Free Delivery of mail also helped lessen the impact of isolation on farm families in Iowa. Looking at how one of these innovations impacted rural families in Iowa might help narrow a topic that otherwise might be too broad.

James A. Van Allen created instruments to measure cosmic rays that led to the discovery of the radiation belts that surround the Earth and now bear his name. He also worked on weapons innovations that helped bring WW II to an end. Access Van Allen's papers at UI Special Collections.