



4-H Grab and Go:

Discovery, Invention, Big Ideas and Wind

Concept:

Harnessing wind power for energy solutions is a recurring societal issue

Age Level:

Middle School: Grades 6-8

Education Standard:

NSES—Science in Personal and Social Perspectives

SET Ability:

Communicate, observe, interpret/analyze/reason

Life Skill:

Acquiring and evaluating information, Wise Use of Resources, Communication

Success Indicator: Youth will work together as a group to research and discuss harnessing wind power for energy solutions and its prominence in presidencies over time.

4-H Curriculum:

The Power of the Wind
(www.4-H.org/curriculum/wind)

Background Information:

In the 1850's before he ran for President, Abraham Lincoln wrote and delivered a lecture called "[Discoveries and Inventions](#)". He delivered this lecture across Illinois in cities including, Bloomington, Jacksonville, Decatur, Springfield and Pontiac. In this lecture, Lincoln said that discoveries and inventions were the result of "observation, reflections and experiment."

In Lincoln's lecture, he also addressed wind power. In one of President Barack Obama's speeches delivered on [January 16, 2009 to workers at Cardinal Fastener](#) in Ohio, he also addressed wind power. He chose this location to deliver his speech because Cardinal Fastener is a company that produces wind turbine parts.

When Barack Obama became president he gave a speech to the [Joint Session of Congress on Feb. 24, 2009](#), that mentioned some of America's "big ideas".

Directions:

1. Ask a youth to read the Lincoln speech, Parts I and II, followed by Obama's Speech.
2. Then lead youth through a discussion using the questions on the following page.





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PREPARATION

Time: 10 minutes

Space: meeting room

Materials:

- Access to internet and/or research materials
- Local news articles related to windpower
- Local zoning information

YOUTH DEVELOPMENT TIP:

Provide opportunities for youth to practice communication and social skills in small groups.

ADDITIONAL RESOURCES

Encourage youth to contact their county Extension office for additional resources on developing effective speeches.
www.csrees.usda.gov/Extension

1. How do Abraham Lincoln's thoughts about "Discoveries and Inventions" and Barack Obama's comments on "bold actions and big ideas" relate to the engineering design process?
2. How are the ideas of Lincoln and Obama alike? How are they different?
3. What changes have occurred in wind power industries since Abraham Lincoln's lecture?
4. List changes and ideas you feel still need to be made in the wind industry.
5. Prepare and deliver a five to ten minute speech that could be used to explain your ideas for the wind industry of the future. Describe your vision for discovery, invention, big ideas and wind.
6. Work with your group and develop a plan to more effectively utilize renewable energy in your community.

