

# Ideas for Ag in the Classroom Mini-Grants

The following are ideas related to urban-rural interdependence, commodity connections, science exploration and other unique ties to teaching students about agriculture. These ideas originated from the Minnesota Ag in the Classroom Grant Program.

## Art

- Visit and study different barn styles and build a model farm in your classroom.
- Construct a commodity quilt of agricultural commodities from North Dakota.
- Study different seeds and explore their uses; use them to make sculptures, pictures.
- Visit an area farm/business and draw pictures describing your experience.
- Have students research a specific agricultural commodity and then create a book about it.

## Current Events

- Set up e-mail pen-pal program about agricultural commodities across the United States.
- Develop a project exploring North Dakota products.
- Hold an "Ag Career Awareness Day".
- Have students follow the markets for various commodities, (milk, hogs, corn) then study the economic impact that these prices have on farmers and consumers.

## Environmental Education

- Study the connection between agriculture and the environment through classroom projects and field trips. (construct an ecosystem in your classroom)
- Study important conservation programs that farmers are involved in. Explore why farmers are the "caretakers" of the earth.
- Develop a unit on Integrated Pest Management. Explore its benefits and effect on agriculture today.
- Study the connection between Agroforestry and the Industry of Agriculture.
- Examine environmental interdependence- including history, dairying, erosion and flood control.

## Field Trips

Take a trip to a/an ...

- Animal and/or crop farm
- Agricultural museum
- ND experiment station
- Food processing

- Horticulture/Landscaping business
- Vegetable farm

The possibilities are endless! Make sure to include pre- and post- ag activities that complement your trip.

## Geography

- Develop thematic "Backpack" and "Discovery" units to increase agricultural awareness of students.
- Study agriculture in your area ( prairie and farm visits, plant and small creature survey, land survey, potato search, machinery tour and plant sketching).
- Develop a farm learning center with scale model farm equipment, supplies and animals to enact farm activities.
- Create a project on processing plants (where do raw products go when they leave the farm?).
- Create an introduction to agriculture unit exploring plants, machinery and farming.
- Compare and contrast different commodities and production methods.

## Global Connection

- Create an interdisciplinary project focusing on the interdependence between agriculture in the United States and another country(s).
- Celebrate National Farm-City Week in November.
- Study agriculture around the world- ag production, food distribution, supply and demand, imports/exports.
- Examine the causes and results of hunger nationally and internationally. Provide a hunger meal and a North Dakota-grown meal.
- Explore plants and their importance to the world.
- Plant a garden that might typically be found in countries such as Africa, Japan, or Mexico and learn about heritage, culture and the role agriculture plays all around the world.
- Compare cultural differences in agricultural methods. For example: Compare Hmong gardens and modern farming.
- Create a connection between students and international agriculture by exchanging letters/e-mails with farmers from different countries and growing international crops in the classroom.

## History

- Explore historic and modern methods of farming.
- Plant a Heritage Herb Garden and discuss diverse viewpoints of plant usage.
- Develop a living history unit including a field trip, spinner, weaver, quilter, or making liver sausage and ice cream in the classroom.
- Study the urban-rural connection through classroom activities and field trips.
- Develop an urban-rural exchange--find pen pals from an urban or rural class or host an urban or rural class.
- Design literature-based units on agriculture and its historic significance.
- Study the impact North Dakota agriculture has on the state and national economy.

- Create an interdisciplinary unit connecting historical and modern farming.
- Study Native Americans and how they use plants for food, medicine and crafts and the role agriculture played in Native American history.

## Nutrition

- Study agriculture and the food pyramid (building good nutrition together).
- Teach a nutrition unit on "The Farm to You- Eating Healthy".
- Implement "Food for America" curriculum. Use high school FFA advisors and students to teach the curriculum to younger students as leadership development. (combine this with farm tours)
- Conduct a study of food sources
- Make your own agricultural products such as butter or ice cream.
- Grow a Pizza! Students plant vegetable seeds, watch the plants grow, and harvest the fruits of their labor to make a pizza. Students learn not only about plants, but also about nutrition and the food pyramid.

## Science

- Plant a garden, study the development of seeds, plant growth and harvesting- the garden serves as an "outdoor classroom".
- Examine plant and tree growth (seeds, leaves and crops).
- Design a unit on hydroponics (plant growth without soil).
- Study the production cycles of area crops or crops of basic food production.
- Study agriculture through hands-on experiments in biotechnology and plant genetics- use your secondary students as teachers/mentors for elementary science students.
- Create a horticulture unit on plant cycles, soils and water. Use growing labs for hands-on study.
- Conduct a research project.
- Visit a local greenhouse- study plants and the local economic connection to agriculture.
- Study plant development and nutrient usage.
- Study ornithology and its relation to agriculture.
- Develop a Harvest Celebration Week that may include an agriculture poster contest, food science lab and videotaped book talks.
- Develop a unit on commodities

Here are some specific areas you can cater to any topic of study! (There are many more out there to use, be creative and hopefully this small list will give you some helpful hints and ideas!)

## Animals

- Beef
- Bees
- Chicken
- Dairy
- Fish
- Goats

- Hogs
- Horse
- Mink
- Ostrich
- Sheep
- Turkeys

## **Crops**

- Apples
- Barley
- Berries
- Corn
- Dry Edible Beans
- Green Peas
- Maple Syrup
- Oats
- Potatoes
- Pumpkins
- Soybeans
- Sugarbeets
- Sunflowers
- Wheat
- Wild Rice