

**PRESENTATION MANUAL FOR
CLASSROOM AGRICULTURE PROGRAM
VOLUNTEERS**

2006

INTRODUCTION

Our sincere thanks for being a volunteer for the Classroom Agriculture Program (CAP). Traditionally, everyone who didn't themselves live on a farm had grandparents or relatives that did. That situation no longer exists, and agriculture is becoming more and more removed from its roots—making your presentation all that more important in helping the students “connect with” agriculture and food.

You now have the opportunity to speak to our future consumers and educate them on the importance of the agri-food industry. Almost all of our everyday moves can be traced back to agriculture, from food to clothes to movies to the tires on our automobiles. This is your chance to open the children's eyes to agriculture.

Our theme for CAP 2006 is **PARTNERS**, with a sub theme of Growing More Than Food, Growing Alberta. We are providing this Presentation Manual to be used as a springboard full of ideas and inspiration for your presentation.

CLASSROOM AGRICULTURE PROGRAM MISSION STATEMENT:

TO PROMOTE AGRICULTURE BY EDUCATING AND INFORMING ALBERTA STUDENTS

Goals for Volunteers:

1. to adapt the following information to their own operation and experiences, as well as agriculture in general, remembering that personalizing it is what makes the program unique and exciting;

to use visual aids and hands-on materials whenever possible;

to emphasize the economic spin-off from the agri-food industry following the Growing More Than Food, Growing Alberta philosophy;

to emphasize that every day is Earth Day for Alberta farmers and ranchers as farmers are the original environmentalists;

to inspire students to discover more about agriculture following your presentation.

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PRESENTATION SUGGESTIONS

The key to a good experience is student involvement. It would be unfair as well as unsuccessful to simply read information to the students. The time and energy put into the preparation of the presentation will directly influence your success. It will be time consuming, however, it is our industry.

Although the farm economy is challenging, we really need to resist the urge to whine about how tough things are. We are there to give a positive presentation and not to provide a narrow or isolated view of farming.

We encourage you to develop your own program using information supplied in this Presentation Manual. The Manual is full of information and you are to select what you require. The material was never intended to be used verbatim but as a resource.

Relate to the students the partners involved in the industry and how you fit. Teachers emphasize the importance of hands-on aids as well as visual aids.

Here are some suggestions:

1. Before beginning, ask some questions to find out their knowledge level, e.g. what do you think of when you hear the word "farm"?
2. Try not to talk above their heads with terms and vocabulary.
3. Smile, relax; easier said than done, but worth it.
4. Use nametags for students. Ask teacher to have nametags ready, or bring some in. This makes presentation/discipline easier if you can identify students. Also, students like to be called by name.
5. Wear a nametag yourself or write your name on the board.
6. If a question is raised and you are not sure of the answer, do not be afraid to say you do not know but will find out and let them know - and do so.
7. Some issues that might come up and you should prepare for:
environment, e.g. global warming, world hunger, destruction of the rainforest;
animal welfare
food safety (steroids and antibiotics)
8. Remember you are to teach, inform and provide experience for the students that they might not otherwise receive. You are the expert in this area but you must plan ahead and be prepared.
9. If possible, set up in the library and have the classes come to you.

“PARTNER” SUGGESTIONS

“Partner” would be defined as those people with occupations other than farmers or ranchers.

1. Choose the partners you want to talk about and relate them to a student’s family, i.e. banker’s son, accountant’s daughter, etc.
2. Give each student a card with an occupation on it, i.e. truck driver, veterinarian, bank manager, etc.. Then say “Who am I?” and read out a job description. The student with the appropriate card holds up their hand, i.e. “What size of loan do you think you’d need to buy a new swather Jim?” Answer: bank manager.
3. Role playing: Cut out pictures of people; let student pick one; have them act out occupation for the rest of the class to guess. Or, put occupations on pieces of paper; have students draw one, and then act it out or give visual hints.
4. One person plays a farmer/rancher and second person take part of a partner i.e. vet, truck driver, teacher, banker.
5. Poster of a cattle drive (along a road). Road signs could be partners meeting along the way to market. Pictures can be used at each road sign.
6. Day in the life of a rancher and spouse. Dress the part.
7. Discuss the farm and marketing partners, i.e. farmer needs the truck to go into town to see the banker. Farmer also needs the truck to haul in hay. Display on white background paper pictures of day adventures. Use black background paper to show night adventures, i.e. calving, calling the vet or trucker, taking agricultural classes etc.
8. Make a poster showing a day in the life of a producer during the busiest time of year or, make your entire presentation around a day in your life, using opportunities to bring in partners.
9. Make a poster, or timeline showing the partners involved getting the animals from pasture to plate. Emphasize these animals are NOT pets.
10. Dress up as each partner discussed, using a hat or prop to illustrate occupation.
11. Cut out silhouettes of people and paste on cards to pass around to students so they can take on role of occupation on their card.

VISUAL AID SUGGESTIONS

1. Use the CAP video—It All Starts At The Farm, which is available from your Zone Coordinator.
2. For visual presence, you might create a poster with pictures for each concept; this would also act as a guideline for you. This works well only if the students are around you while you are teaching. When students are in their desks, the pictures would be too small to use as teaching tools but would add interest as displays.
3. A “Multi-Media Library Catalogue” which lists all video productions geared specifically to students is available at all Alberta Agriculture, Food and Rural Development offices. Also, a video is available from Alberta Milk Producers.
4. Set up a display using Alberta-produced food either pictorially or actual.
5. Some have made their own videos with great success.
6. Contact Olds College for posters.
7. Ask to borrow the Canola By-Products Tupperware kit from your Zone Coordinator.
8. Demonstrate “Food Recipe.” (See pages 4 and 5 for ideas.)
9. Bring in samples or by-products. (See page 9 for details.)

FOOD RECIPES

Mystery Chocolate Brownies

3	eggs	125 mL	1/2c butter
250 mL	(1c) sugar	90 g	1/2c cooked ground beef
5 mL	1 tsp vanilla	175 mL	3/4c flour
2 mL	1/2 tsp salt	2 mL	1/2 tsp baking powder
2	squares unsweetened chocolate	125 mL	1/2c chopped nuts

Beat eggs, sugar, vanilla and salt together until light and fluffy. Melt chocolate and butter. Cool and add to egg mixture. Add cooked beef. Sift together flour and baking powder and add to bowl. Add nuts and stir well. Spread mixture in a wax paper lined 8" x 8" pan and bake at 350° F for 35-40 minutes.

Dirt for Dessert

***NB Before taking this to class, contact teacher for possible peanut allergies. Substitute chocolate wafers for peanuts if necessary.**

glass bowl
graham wafers (rocks and sand)
2 packages instant chocolate pudding
jellybeans (rocks)
2 - 250 mL containers milk (rain)
gummy worms (worms)
multi-colored chipits (fungi and bacteria)
peanuts (beetles)
crushed Oreo cookies (dry topsoil)
yellow colored coconut (straw)
whipped cream (snow) (or marshmallows)

Today we are going to make dirt.

Package, label and seal small quantities of graham wafers, jellybeans, milk, gummy worms, peanuts, chipits, crushed Oreo cookies and coconut. Hand these packages out to various children and tell them not to let the worms, bacteria, etc., escape.

When the earth was a lot younger than it is now, in fact over 10,000 years ago, there was what was called an ice age. Just one of many, but the last one we had was around then. There were huge blocks of ice well down into where we live and as this ice and water tumbled along and crushed the gravel and rocks, it made sand. Later more erosion was caused by wind, heat, cold and water. The rocks were worn down forming minerals, sand, silt and clay. Grass grew and dried, tree leaves fell forming organic matter. They didn't do this all by themselves. They had

help from worms, beetles, fungi and bacteria. As the leaves and grass go through worms, etc., they go through changes and come out as enriched soil - the organic matter.

So first we have rocks and sand - graham crackers and jelly beans.

We also have to have air and rain (we are using milk today) to make the plants grow. Have child holding milk come to front and add to pudding.

Put chocolate pudding on top of crumbs (organic matter). Have other children come to front and add ingredients one at a time.

There is always dry soil on top (crushed Oreo cookies). Last but not least we have straw on the grain fields or grass on the pasture lands. Here we will use coconut. This straw helps the farmer keep his soil at home and not blow away or lost to water erosion. When the worms etc., work over winter it is turned into more organic matter. In winter we have a snow cover to help produce more moisture and helps keep the soil warmer (whipped cream). Put aside to decompose.

The farmer and his partners are concerned caretakers of the environment and value its natural resource. Every day is earth day for a farmer or rancher because his/her living depends on it.

The grand finale: everyone gets to eat the dirt! This will fee approximately 30 students.

Other Food Ideas

grind your own wheat, and then make buns using the resulting flour
some provide muffins using ingredients from Alberta
some provide gum and marshmallows as by-products

DISCIPLINE SUGGESTIONS

For some people, the very thought of facing kids in a classroom can make them feel uncomfortable. However most classes are pretty excited about having someone different come into the classroom. Children being the perceptive critters they are, realize instantly when someone enters the room confidently. (So even if you are feeling like you'd like to bolt, fake it). Generally speaking, grade four is a very cooperative age, so your experience should be great!

Here are a few suggestions you might find helpful.

1. Bring kids to the front of the room around you. This makes for better contact with students; you sit on a chair and students on the floor. RULES are: (should be stated first) hands must be kept to themselves, sit on the floor; if they don't cooperate they will be asked to go and sit at their desk.
2. State attention rule: You will clap once to gain attention. Class to respond by clapping twice. Room to remain quiet after clapping to attention.
3. Before starting, remind them to raise their hand and wait their turn; however if hands go up while you are talking and you find it distracting, do not be afraid to ask them to put their hands down until you are finished.
4. These kids are used to various visual aids. Do not let that scare you. Little bits of trivia related to your topic or an occasional joke or sensational fact will keep their attention.
5. If you find you are getting off the topic with questions, do not be afraid to say "we are getting off the topic and we have a time limit".
6. Make sure the teacher stays in the room not only for discipline reasons, but you will have more chances to follow-up.
7. Take only one classroom at a time. Any more than 30 students at one time can cause discipline problems, plus it is more of a problem showing visual aids.
8. Some students may test you - do not let them throw you. You are the adult: remain in control; be firm and positive.

3. Slice this one-eighth section lengthwise into four equal parts. Three of these $\frac{1}{32}$ sections represent the areas of the world which are too rocky, too wet, too hot, or where soils are too poor for production, as well as areas developed by man.
4. Carefully peel the last $\frac{1}{32}$ section. This small bit of peeling represents the soil of our earth on which mankind depends on for food production.
5. Questions for class discussions:
 - What if this valuable topsoil which Man depends upon should suddenly disappear? What then?
 - What will happen if the world's population continues to grow while our earth's topsoil remains the same?
 - What ways can you and your family help conserve precious soil in your own backyard?

Another idea:

Invite a local soil conservation person into your classroom to discuss what special things are being done to save the soil; or

Make a graph based on this lesson, depicting the portion of land used to grow our food versus all the other areas of the world such as water or land regions.

SAMPLES AND BY-PRODUCTS

Most of the following list of sample items can be found at farm equipment or supply stores. As you purchase or borrow a tool, get a full description of how it is used.

Sample Items:

fence insulator	moisture tester	ear protectors (noise reduction)
teat dip	hoof pick	wrenches
chick waterer	rain gauge	rubber gloves
salt lick	SMV sign	curry comb
draw bar pin		

By-Products:

By-products are a hit. Make a poster listing parts and by-products or bring in as much of the following beef by-products as you can: For example:

- a. By-products are used in all sorts of mechanical items. Chemical manufacturers use numerous fatty acids from inedible beef fats and proteins for all sorts of lubricants and fluids such as:

animal feed	fertilizers	lubricants
cement blocks	high gloss for magazines	molds for plastics
explosives	industrial cleaners	printing inks
		whitener for paper

- b. Edible by-products include the following:

candies	cookies	pate
• chewing gum	• "Light" products	sausage casings
clarification agent for juice, wine and beer	• marshmallows	yogurt
consommé	mayonnaise	gelatin for salads
	oleo shortening	ice cream

- c. The medical world also relies on this resource for the pharmaceutical wonders it produces and uses. Some of these products are:

Sodium levothyroxine	Fibrinolysin
Heparin	parathyroid hormone
Trypsin	pancreatin
Chymotrypsin	Thrombin
Corticotrophin	Thyroid
Deoxyribonuclease	Glucagon
Thyrotropin	

d. Inedible by-products are the following:

bone china	leather sporting goods	asphalt
bonemeal biscuits	luggage	car polishes and waxes
boots and shoes	paints	hydraulic brake fluid
candles	pet foods	rubber tires
cosmetics	photographic film	textiles for car upholstery
crayons	plastics	deodorants
shampoo/cream rinses	detergents	shaving cream
doggie chews	soaps	fabric softeners
textiles	floor wax	toothpaste
glue	upholstery	insecticides
violin strings		

The **Canola By-Products** Tupperware Kit can be borrowed from your Zone Coordinator.

Sugar Beet Byproducts include:

beet pulp, beet pellets for cattle rations
molasses for non-human consumption
beet tops for animal rations or green fertilizer