Program Objectives:

- To familiarize children from a young age with the preparation of healthy and nutritious meals from whole ingredients.
- To increase consumption of fresh vegetables and fruits in the school setting.
- To allow children to make the “farm to plate” connection – including an understanding of where our food comes from, and what is required to grow it.
  - Through integration of school garden into cooking activities, and discussion of where produce we use originates.
- To introduce concepts of sustainable and socially responsible eating by setting an example, including:
  - Sourcing of seasonal produce from the school garden or local farms as much as possible;
  - Using chemical-free and sustainably grown produce as much as possible;
  - Minimization of waste - composting of food waste, reusable dishes and utensils.

Contact Information:
Contact us with problems, questions, or if you cannot attend a date you are scheduled for.
**Background:**

The Kate Mitchell after-school cooking club is being coordinated by the Volunteer Center of Story County and Mary Greeley Medical Center, in partnership with ACPC, the organization that runs Kate Mitchell’s after-school care program. Wheatsfield Cooperative Grocery is also a partner, providing all produce and other food items we need weekly, free of charge. The cooking club is currently held weekly, and includes all children participating in ACPC for that day. At this point, cooking club is held on alternating Wednesdays and Thursdays; starting at 2:45 on Wednesdays and at 3:45 on Thursdays. The school day ends early on Wednesdays (at 2:05), and at 3:20 all other days. You should get to school early enough to be ready to start on time – generally 15 minutes ahead or so.

**Sample Procedure for Cooking Club Lesson:**

1. Put down table clothes and set out tools and ingredients that will be needed for the lesson. Divide tools and ingredients to have all items necessary for the recipe at each table, if possible.
2. Write recipe in a simple, kid-friendly format on the white board - you can move the whiteboard up to the edge of the stage.
3. Have students wash hands before sitting down at tables.
4. Introduce the day’s recipe, and the main ingredients being used. If possible, share where the produce came from. Also share background on the produce being used (carrots are the root of the plant, and are harvested in fall). Try to lead using simple questions – who has eaten beets before? Also introduce simple nutrition (carrots are high in vitamin A, which helps us see better).
5. Follow recipe steps, using table leaders to monitor, assign tasks and help students.
6. Distribute food for students to eat, offer seconds/thirds if there is excess.
7. Hand out recipe cards to students to take home.
8. Clean up dishes, tables etc. and leave room as it was found.

**General Procedures:****

*Facilities and Supplies*
- Cooking club is held in the Forum of Kate Mitchell School, which is directly through the library from the main office.
- Most cooking club supplies are kept in the labeled bin in the Forum, located under the table to the left of the door.
- Any additional cooking tools, plates, bowls and utensils as well as the oven we are able to use is located in the special education room (Sherry Ghielsen’s room) which is the first door down the hallway on your right, as you walk into the school’s main entrance. We have permission to use the kitchen, but students must be supervised at all times.
- All items used from the kitchen should be washed, or put in the dishwasher. If using a significant number of dishes, run the dishwasher after you have loaded it. All items from cooking club bins should also be washed, dried and returned to bins. You can recruit students to help with this.
All food scraps should be put in wooden compost bins in school garden (located inside fence by large parking lot), rather than thrown out. This excludes dairy or meat products. See section on Composting for more info.

Planning

- We pick recipes based on what is seasonally available, and if possible what is growing in the garden. **Keep recipes simple!!** Everything takes longer than you expect with 20+ kids. You can find recipes through the curriculum packet, online or just make one up. Try to think of background info you will share with the students (cultural background of the dish, nutritional qualities, how the ingredients are grown, etc).
- You must send a list of all ingredients and supplies you will need to Kristen or Valerie by the Monday before cooking club. This is necessary to get items from Wheatsfield. If there is a cooking tool that we do not have, that you want to use, ask us and we can likely get it.
- Inventory of our supplies:
  - Table cloths
  - Cutting boards
  - Plastic knives
  - Scissors
  - Paring knives
  - measuring cups
  - measuring spoons
  - mixing bowls
  - salad spinner
  - garlic press
  - utensils
  - plates
  - olive oil
  - salt and pepper
  - electric skillet/"oven"
  - food processor
  - fully stocked kitchen (in special education classroom)

Managing students

- ACPC staff will be present during the club, to assist in managing the students. They can also be asked to help out with leading students, etc.
- We have found that it is best to have a cooking instructor at each table, to monitor and guide that group. Students have assigned seats so will work with that group every week (this makes it easier to learn names, especially if the same leaders work with the same table each week).
- ACPC staff will generally take care of behavior problems, but just be firm and explain reasoning – “we need to share tools with others so all get a chance to participate”, “tools stay on the table to make sure we are being safe with others”, etc.
- Don’t force students to try food, just emphasize that it is good to try things at least once. Discourage students saying food is “gross” – instead they should say that they don’t like it.

Instruction

- Cutting boards should be used for all cutting – students should each have their own cutting board (or at most two students per board). Use tearing and scissors whenever possible, then use plastic knives. Older students can begin learning to use paring knives, if they are comfortable and carefully supervised while doing it.
- Review safe cutting procedures whenever knives are used (even better, have students tell you what they are, to review). See below for how to teach this.
- Divide tasks evenly among the students. Try to move through recipe one step at a time (e.g. have everyone tear up lettuce, then move on to carrots), it makes things simpler.
Introduce each new major step to the whole group, and then have table leaders guide through that step.

If using produce or herbs from garden, take group out to harvest before starting to cook, after washing hands.

Teach informally, throughout lesson: Take advantage of any learning moments and share information about cooking, nutrition, gardening etc as they are relevant to what you are doing. Share personal stories or favorites (I like to put potatoes in soup when I cook at home), and ask students questions as well.

Assign roles to students as much as possible – they are usually enthusiastic about helping: e.g., set up tables, dishwashers, taking scraps to compost, putting away supplies, writing recipe on board.

Ask for feedback at end of lesson: Do you like what we have cooked? What don’t you like/do you like about it? What other things would you like to cook in the future?

Give students recipe cards with the day’s recipe to take home. We want to encourage them cooking these healthy foods with their families. See recipe template in separate document – it can just be on printer paper, and try to keep it concise (fit four per page)
Teaching Tips
"The Three Fs" – Focus, Flexibility, & Fun!

(Borrowed from Life Lab Science Program, lifelab.org)

FOCUS: HOW TO GET KIDS TO PAY ATTENTION TO WHAT YOU'RE SAYING

* LEARN AND USE NAMES - Don't you like it better when someone calls you by name instead of "hey you?"
* CHANGE YOUR MODE OF PRESENTATION - Whisper, use an accent, etc.
* SEE THEM EYE TO EYE - Literally get down at their level and look them in the eyes. With younger kids play "where are your eyes?", challenging them to look at you as quickly as they can.
* USE GRABBERS - Help make them want to listen. Make a seed container into a "magic box," hide something behind your back, tell a joke - these kinds of things grab kids' attention.
* ASK QUESTIONS - Questions get others involved. Statements require that they already be paying attention.
* GET CLOSE - Close physical proximity makes a difference.
* USE SILENCE – To get group’s attention and silence: Say “Give me Five” once and hold up your hand. This is a technique all of the teachers use and the kids will follow it.
* USE A GAME - "Super Circle," quiet sign, group name, etc.
* DISCUSS WHAT'S HAPPENING - Talk with the kids about how they are feeling and behaving and tell them how you are doing. An honest exchange of thoughts and feelings often makes everyone feel better and get along.
* SEPARATE CHILDREN FROM ADULTS - Keeping all the kids separate from accompanying adults will keep their attention on you rather than on parents or teachers.

FLEXIBILITY: REMEMBER, EVERY GROUP IS DIFFERENT

* VALUE DIVERSITY - Different kids have different needs, talents, and abilities.
* "READ" YOUR KIDS - How much energy do they have? How much do they know? Are they "getting" what you're giving them?
* PACE YOUR DAY - Alternate active and quiet activities, and tailor them to your group's energy level.
* DEVELOP A BAG OF TRICKS - Keep learning new activities and ways of explaining things. Carry a list of activities with you in case you draw a blank.
* FOLLOW THEIR LEAD - What do they want to do and learn about?
* LET THEM HAVE "FREE" MOMENTS - You don't always have to be talking or doing an activity. Give the kids a break and let them talk about whatever they want.
* GIVE THE KIDS CHOICES - Offer them real alternatives (where appropriate) and honor their decisions.

* EXPERIMENT! - Try new things. It's OK to make mistakes.

* USE TEACHABLE MOMENTS - For example, if you are trying to explain the concept of composting and the students are focused on one of our cats or a hawk flying by, use the refocused energy and go with it. Ask them “What purpose does that cat (or hawk) serve on our farm?”, or “What could happen to these predators if chemicals were used on our farm?” Try to recognize where the students are focused and use this to teach something.

FUN: THAT'S WHAT IT'S ALL ABOUT!

* REMEMBER - We're here to introduce children to farms and the natural world and to help them become comfortable in this setting. You can't teach them everything in a morning.

* LAUGH AT YOURSELF - A sense of humor can cure all ills.

* BE A KID, BE SILLY

* PLAY GAMES - They are fun and can teach things too. Make up your own games.

* ROLE PLAY - Imitate animals, plants, anything.

* EXPLORE

* SING
Tips for Effective Group Management
(Borrowed from Life Lab Science Program, lifelab.org)

EXPECTATIONS
* Set the tone you want your group to have. Let them know how to be "successful." Tell them what behaviors you expect of them so that when you need that behavior you can remind them. Demonstrate the behaviors you want them to display. Then reward them for getting it right!
* If you are scattered and unfocused the kids will be, too. The more "together" you are, the more together they'll be.
* Let them know what to expect. Give them an idea of what you are going to do when. If you tell them that they will see the worms at the end of the tour, they won't ask you about it all morning.

REDIRECTION: TELL THEM WHAT YOU WANT THEM TO DO. DON'T ASSUME THAT THEY KNOW WHAT BEHAVIORS YOU EXPECT OR WHY.
* Try to avoid saying "Don't do this, don't do that." Give the kids ideas of what they should do. "Please walk" rather than "Don't run."
* Ask hyperactive kids to help you with something. Channel their energy into something positive.
* Use "I" statements. "I'd like it if..." "I like the way that..." "I don't like it when..."
* Have the kids consider the consequences of inappropriate behavior. "What would happen if everyone picked a pepper from this plant?" "What might happen if you climb on this old fence?"
* Challenge kids to demonstrate an alternate behavior. "What else could we do to...?" "How else can we...?"

CHOICE MAKING
* Offer your group choices and honor their decisions. Be careful to give them real choices and ones that you are willing to abide by.

ANTICIPATION
* Try to prevent problems before they happen. Stay a mental step ahead of your group. Identify your "high energy" kids and keep them busy, maybe by giving them specific responsibilities or tasks to carry out.

POSITIVE REINFORCEMENT
* Catch a kid doing something good and tell them. Others might follow.
* A behavior that gets reinforced (rewarded) is much more likely to happen again!
* Be genuine. Smile and thank the child for coming back to the group, sharing a tool, etc.

INVolVEMENT
* If everyone is involved in whatever you are doing, there won't be anyone left to "act up." Use activities that get them doing things, not just listening and watching.
* Make a point to involve those individual kids who aren't already involved. What do you think Melissa? Billy, would you...?
AVOID STEREOTYPING
* Don't expect that only boys want to get dirty or that girls will be afraid of spiders. Be aware of the tone of voice and the ways that you convey approval to children of different sexes /cultures.

Tips for Effective Communication of Information
(Borrowed from Life Lab Science Program, lifelab.org)

DEVELOP AND MAINTAIN AN AWARENESS OF YOUR GROUP.
* Listen to them and watch them. What seems to "click" with them?
* Use "active listening" by being sure you understand what they are really asking and saying. "How many flowers are there?" can refer to either the number of kinds of flowers there are or the total number of blooms.
* Be aware of body language. Are they focused on what you want them to be focused on?

TALK ON THEIR LEVEL.
* Talk to them with respect - they are people.
* Feel out their level of knowledge by asking them questions. Listen to the kinds of answers they give and questions they ask. If they tell you that rabbits lay eggs or that lettuce is a root, you know you need to backtrack.
* Convey information in terms the kids understand and in ways that have relevance to their lives. Draw analogies between their homes and animal homes, for example. Use your imagination!!!

HELP THEM TO "FIGURE IT OUT" THEMSELVES.
* Allow them to discover things rather than telling them things.
* Answer their questions with a question. "Why do you think it's that way?" Promote speculation as to how and why things are the way the are. Admit it when you don't know something yourself.
* Know whether you are asking open-ended or closed-ended questions. Closed-ended questions require a definite right or wrong answer; open-ended questions have multiple answers and can generate discussion. Open-ended questions also allow kids to wonder and express their own ideas. Example of closed-ended questions: "What kind of plant is this?" Example of open-ended: "How can we help the plants on the farm survive?" "What do you think…”.
* Ask sequential questions that lead them to a discovery or realization.
* Encourage your kids to ask questions of their own.

USE A VARIETY OF ACTIVITIES AND METHODS OF PRESENTATION.
* Different children learn through different means. Some learn best by seeing, some by listening, and some by doing. A combination of activities that utilize all three of these modes will help ensure that the children in your group will get the most out of their experience here.
REINFORCE LEARNING BY TALKING ABOUT WHAT THEY ARE DOING.
*After you do an activity, ask your group how they liked it, what their favorite part was, what they know now that they didn't know before, etc. Processing our experiences into language helps reinforce the experiences.
Honoring Stages of Development in Teaching Environmental Education

(Borrowed from Life Lab Science Program, lifelab.org)

The Research of David Sobel

Based on Sobel’s analyzing hundreds of maps that children in the US, Caribbean, and England have drawn of their neighborhoods.

1. Empathy ~ 4-7 years old (K-2nd) - Maps have children’s homes in the center. Between the ages of four and seven is developmentally when kids are making emotional connections to things. This is the foundation on which they will build abstract thought and action later. At this age they are learning primarily through their senses and bonding to the natural world through play and their imaginations. Worms, ants, common birds, pets, are important. They need not know about issues, problems, pollution, etc. They need to develop empathy. Stories, songs, moving like animals, celebrating seasons, fostering a sense of wonder, bonding with animals.

2. Exploration ~ 8-11 years old (2nd - 4th) - Maps expand geographically. Home is not in the center. Becomes part of the larger map—the neighborhood, and beyond. Explorable landscape becomes important. Parks, streambeds, vacant lots, the blocks between home and school.
   This too is a bonding period. Making forts, exploring yards and parks, gardening, doing simple restoration projects, finding out where a stream goes, creating small imaginary worlds of living off the land, hunting and gathering, etc.

3. Social Action ~ 12 years old -and beyond (5th - ) - Maps now include social gathering places. The third stage is social action and it doesn’t start until kids are 12– As children start to discover the “self” of adolescence and feel their connectedness to society, they naturally incline toward wanting to save the world. Now they are ready to learn and do something about the issues.”
   Managing school recycling programs, river clean-up, passing town ordinances, testifying at hearings, planning and going on school expeditions are all appropriate.

Lessons for Environmental Educators

• Avoid premature abstractions. Kids can’t deal with problems beyond their understanding or control.
• No tragedies before 4th grade.
• No easy dichotomies—i.e. something is good, something else is bad. Emphasize the complexities.

Taken from Beyond Ecophobia: Reclaiming the Heart in Nature Education, David Sobel. Orion Society, 1996.
Teaching Knife Safety
(Borrowed from www.kids-cooking-activities.com)

Here are some tips for teaching knife safety but you, as the adult, will be showing them the procedure. So if you feel you have a little to learn about knife safety, please do so, also. We have a kids cooking video below that will help you with the proper knife technique.

- Always use a cutting board. It is safer to cut and better for the countertops! Use a large board to allow more space.
- Curl your fingers under/tuck them in when you are holding whatever you are cutting. For example, when cutting an apple tuck your fingers you are using to hold the apple in.
- Be careful when carrying a knife always carry it point down.
- If a knife falls step back and let it fall don’t try to catch it!
- Place things on a cutting board to cut. Don’t cut holding things in your hand.
- Pay attention to what you are doing. Don’t get distracted and always keep your eyes on your cutting.
- Never leave your knife in a sink where someone can reach in unaware and grab it. It is best to clean, dry and put away knives after they are used.
- Point the knife blade away from you. Do not cut toward you or your fingers.
- Store knives in a block not loose in a drawer. It isn’t good for the blades or for fingers reaching in a drawer.
- Hold the knife in a pinch grip use a rolling motion when you cut.
- The tip of the knife should remain on the cutting board.
- You could even put tape on the knife where your fingers are suppose to go as a guide.

If a cut happens, run under cold water. When it stops dry with paper or cloth and use a band aid. If it is a deep cut or doesn’t stop bleeding apply pressure to it, hold it above your heart and seek medical attention.

Read more: http://www.kids-cooking-activities.com/kids-cooking-lessons-jr-2.html#ixzz1c0uUpTFA
The Six Plant Parts
(Borrowed from Life Lab Science Program, lifelab.org)

ROOTS
The root, the part underground, anchors the plant and absorbs water and nutrients from the soil. Simple sugars, made in the plant’s leaves, are stored in the form of starches in the roots, to be used later for plant growth or for animals to eat. Some plants that store a particularly large amount of starch in their roots have become important in our diet, such as carrots, beets, radishes, and turnips.

STEMS
The stem supports the plant and contains most of its circulatory system. Vessels in the stem transport sugar and starches made in the leaves as well as water and minerals absorbed through the roots--to other parts of the plant where the nutrients are needed. Some stems we eat are asparagus, broccoli, sour grass, and fennel.

LEAVES
The leaf is a flattened or extended part of the stem. Leaves are the main food-producing part of the plant. They produce food through a process called photosynthesis, using carbon dioxide, sunlight, and water. The chlorophyll in leaves collects the sun's energy (light). The pores (stomata) of leaves absorb carbon dioxide (CO2) from the air. This carbon dioxide plus water from the roots is combined, using the sun's energy, to make simple sugars and starches: CO2 + H2O + Light ---> CH2O (a simple sugar.) We eat leaves such as lettuce, spinach, chard, basil, cabbage, and mint.

FLOWERS
The flower is the reproductive part of a plant. It gives rise to seeds from which new plants develop. Just like humans, flower must be fertilized so that the male and female genes can be brought together. But, some flowers have both sexes in the same flower and others need insects, animals, wind, or water to fertilize them. Flowers that we eat are cauliflower, broccoli, brussel sprouts, and artichokes. Some ornamental flowers such as borage, nasturtiums and calendula are also edible.

FRUITS
Fruits grow from fertilized flowers. It is the outer covering that surrounds and protects the seeds. Fruits we eat are apples, plums, zucchini, cucumber, tomato, peppers, green beans, pumpkins, and pea pods. Some fruits we don't eat like the husk of the corn or the shell of a walnut, but they are considered fruits too since they grow from the ovary and protect the seeds.

SEEDS
All seeds come from the ovary of a flower that has been fertilized. After fertilization the seed contains the embryo of a new plant, and its own food supply stored in the surrounding tissues. When a seed sprouts, it produces an above ground shoot with a stem and leaves, and roots that sink under ground. Some seeds we eat include peas, corn nuts, sunflower seeds, beans and wheat.

WHAT'S A VEGETABLE THEN?
Vegetable is a culinary term. In cooking, a vegetable is savory and a fruit is sweet. But we're not cooking in the garden. We're doing botany, where a fruit is the flesh protecting the seeds of a plant.
**Compost**

**WHY COMPOST?**
There are two main reasons to compost. By composting our leftover food waste, plant waste, and weeds, we can reduce the amount of waste being sent to our landfills. At the same time, we are creating an amazing, slow-released, nutrient-rich food source for our plants, increasing water retention of the soil, improving the structure of the soil and making soil microorganisms happy. By producing our own compost we do not have to purchase any fertilizers to feed our garden. Composting is one way organic farmers and gardeners get organic matter and nutrients into the soil.

**HOW DOES COMPOSTING WORK?**
A compost pile is built by a process of carefully layering or mixing of equal amounts of greens (leftover food, pulled up plants, and fresh weeds) and browns (straw, dried plant matter). To create a hotter (faster-decomposing) pile, some farmers add manure. By mixing these three elements (“MSG” = manure, straw, and greens) we create an optimal situation for the decomposers to “munch” on as well as the best balance of nutrients for our plants. A compost pile should be at least 3’ x 3’ x 3’ to heat up and compost well, and should be built in a cube shape (not a pyramid), to allow the most materials to be stacked and create enough bulk to heat up. Decomposition in a compost pile begins with fungus and bacteria breaking down the organic material. The energy of these microorganisms can heat a pile to 160 degrees. Just as humans produce heat when they work hard, so do the decomposers. This heat helps kill any diseases or weed seeds in the pile. Then when the pile begins to cool down, bugs (mites, beetles, sow bugs, earthworms, millipedes, earwigs, etc.) continue to break down the pile.

**WHAT DON’T WE PUT IN OUR COMPOST PILES?**
The main things not to put into a compost pile are dairy products and meat. Both of these items will decompose but they make the compost pile smelly. The smell attracts wild animals to the pile. We also avoid adding oily or greasy food and large amounts of citrus.

**Teaching about Organic for Kids**
Please use good judgement when talking about conventional versus organic food. We are not here to preach that one is better than the other; we are here to explain how an organic farm system works. We don’t want kids going home and refusing to eat their veggies or accusing their parents of poisoning them.
GOOD SOIL MAKES HEALTHY PLANTS
Compost is what feeds our plants. It makes them healthy and more resistant to pests. You can use an analogy of a child getting a good night’s sleep and a good breakfast and how that makes them feel. It’s the same with plants. If they get good soil, with plenty of compost in it, they will be stronger and healthier, less vulnerable to pest attack or disease.

GOOD BUGS AND BAD BUGS
Explain that some bugs are good, some are bad and some are both. All “bad” bugs (pests) have a “predator”. Explain that we have lots of flowers in our garden to attract good bugs (“predators”). Organic farmers like to have good bugs around and sometimes even buy them to release on their farms.

Mini list of common bugs:

<table>
<thead>
<tr>
<th>Good bugs</th>
<th>Bad Bugs</th>
<th>Neutral Bugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>lady bugs, ground beetles,</td>
<td>snails and slugs, spotted</td>
<td>Sow bugs, earwigs, spittle</td>
</tr>
<tr>
<td>wasps, big eyed bug,</td>
<td>cucumber beetle (looks like a</td>
<td>bugs, Jerusalem cricket</td>
</tr>
<tr>
<td>lacewings</td>
<td>yellow lady bug)</td>
<td></td>
</tr>
</tbody>
</table>