Teaching and Learning Strategies

All activities in the *Cooking Up Healthy Choices* curriculum were designed using experiential learning and inquiry. Experiential learning is grounded in the idea that experience is essential to learning and understanding. Specifically, experiential learning involves a recurring sequence of three distinct steps: 1) an experience (“Procedure/Experiencing”) that involves learner exploration; 2) a period of discussion and reflection (“Sharing, Processing and Generalizing”) where learners share their reactions and observations, process their experience, and make generalizations to real-life examples; and 3) an opportunity to apply (“Apply”) new knowledge and skills in an authentic manner, which helps learners deepen and broaden their understanding (it helps learning last!).

Inquiry is a teaching and learning strategy whereby learners are engaged in activities that require the observation and manipulation of objects and ideas in order to construct knowledge and develop skills. Inquiry is grounded in experience, focuses on the use and development of critical thinking skills, and targets the learning and application of specific content knowledge. Furthermore, inquiry starts with a question, and effective questioning strategies are critical when facilitating inquiry-based learning. Open-ended questions or prompts (e.g., *Explain what you know about...*; or *Discuss your understanding of...*) promote learner inquiry and are considered more effective than closed-ended questions or prompts (e.g., *Name the parts of...*; or *What is the name of...*).

The inquiry-based activities in the *Cooking Up Healthy Choices* curriculum were designed using the 5-step Experiential Learning Cycle by Pfeiffer and Jones (1983): Experience, Sharing, Processing, Generalizing, and Application. It is recommended that adequate time be allotted for youth learners to proceed through each step in order for learning to be maximized.

Organization of Learning Environment: 
*Creating the environments where learning happens*

The activities in the *Cooking Up Healthy Choices* curriculum were designed to be facilitated in a group-learning environment. Learners construct understanding through inquiry using observations, manipulation of objects and ideas, and personal reflection. However, learning is a social enterprise where dialogue and reflection with others are critical elements. Therefore, creating physical and social environments where learners can carry out inquiry will help them organize their thoughts and develop an understanding of the content and processes being emphasized in specific curriculum activities. Please see the recommended sequence to implement these components together on page 9.

Extending the Curriculum

*Cooking Up Healthy Choices* was developed as part of the Shaping Healthy Choices Program. The Shaping Healthy Choices Program is a multi-component approach to improve children's food choices. The Shaping Healthy Choices Program also includes an inquiry-based nutrition curriculum *Discovering Healthy Choices*, and newsletters for the family called *Team Up for Families*.

*Cooking Up Healthy Choices* is intended to reinforce foundational concepts that students learn in *Discovering Healthy Choices* activities.
Discovering Healthy Choices uses experiential learning strategies to engage students in learning about nutrition concepts and developing problem-solving skills to help them make healthy dietary and lifestyle choices.

The Team Up for Families newsletter includes messages about what the youth are learning in the Cooking Up Healthy Choices and Discovering Healthy Choices curricula, in addition to nutrition parenting practices. Team Up for Families also includes recipes from the cooking demonstrations in Cooking Up Healthy Choices.

Organization of the Curriculum

The cooking demonstrations are sequenced so that foundational concepts are discovered first, and then built upon in subsequent cooking demonstrations. Although Cooking Up Healthy Choices can be used as a stand-alone curriculum, it was designed to be paired with activities from Discovering Healthy Choices, an inquiry-based, garden-enhanced nutrition curriculum.

Curriculum Activity Layout

- **Cooking Demonstration Title**
  The cooking demonstration title introduces the facilitator to the topic that will be addressed during the demonstration.

- **Background Information**
  This introductory section provides facilitators with a brief overview of the subject matter covered in Cooking Up Healthy Choices and provides examples that help to explain the importance of the topic. This should not be provided to the youth as a reading assignment. This information is what the youth discovered or will discover in Cooking Up Healthy Choices.

- **Concepts and Vocabulary**
  Facilitators are provided with a list of defined concepts and vocabulary that is meant to be discovered by the youth during their exploration and completion of the cooking demonstration activities. The list should not be provided to the youth at the beginning of the activity. At the end of each activity, the facilitators should ensure that the appropriate terms and concepts have been discovered by or introduced to the youth.

- **California Nutrition Education Competencies**
  The matrix of California Nutrition Education Competencies on page 6 of Cooking Up Healthy Choices displays which Nutrition Education Competencies are met by each of the cooking demonstration activities. Learn more about the California Nutrition Education Competencies at http://www.cde.ca.gov/ls/nu/he/nerg.asp.

- **Time Required**
  Each cooking demonstration includes an estimate of the time needed to complete the demonstration and activities. The actual time required will vary based on level of learner interest, size of the group, age of the group members, and the setting in which the demonstration and activities take place.

- **Country Connection**
  Each cooking demonstration was selected to represent food from cultures around the world. This section includes information about the country from which the recipe originates. Each of the countries selected are aligned with one of the cooking demonstrations, which students explore in Module 1 of Discovering Healthy Choices. In that module, students participate in different activities that help them learn about different countries, including agricultural practices, traditions, and cultural foods of that country.
• **Vegetable/Garden Connection**

*Cooking Up Healthy Choices* recipes feature produce that students may be growing in an instructional garden or have learned about during activities in *Discovering Healthy Choices*. If using *Cooking Up Healthy Choices* in conjunction with *Discovering Healthy Choices*, this section provides information to the facilitator about how the ingredients connect with modules of *Discovering Healthy Choices*.

• **Ingredients**

This provides information to the facilitator about the ingredients needed to complete the demonstration. The ingredient amounts are designed to provide enough samples for 30 students during a cooking demonstration. Note: these are intended to be small samples, and not a meal.

• **Materials**

This is a list of the materials needed for the facilitator to complete the demonstration and activities. The list describes the materials to be used, like cookware and utensils.

• **Getting Ready**

This list describes what needs to be done by the facilitator to prepare for the activity, how many of the materials to prepare, and what tasks need to be completed prior to the beginning of the demonstration.

• **Opening Questions/Prompts**

Questions or prompts presented at the beginning of each activity are meant to draw the youth into the topic being addressed in the activity. Responses to the questions will provide the facilitator with an understanding of what the youth already know about the topic. Facilitators should encourage the youth to record their answers to these introductory questions on the blank page of the demonstration handout, as this is an important part of the learning process. Note: These questions/prompts are not intended to “quiz” the youth; rather, through their open-ended design they are meant to help facilitators understand youths’ prior knowledge and/or misconceptions they may have about the topic. Learning has to begin somewhere, and it is important to understand where our learners are along the continuum of knowledge and skills.

• **Procedure (Experiencing)**

This is the part of the curriculum when the youth experience and complete the activity itself. It is important for youth to record their observations, ideas, and other thoughts during the procedure on the handout provided, as this is an important part of the learning process.

• **Sharing, Processing, and Generalizing**

Following the Procedure, there is a period of discussion and reflection, during which time the youth share their observations with each other. Again, through open-ended questioning this provides youth an opportunity to communicate their findings, listen to what others discovered, consider the various thought processes, and learn from each other. This section helps to solidify what the youth have learned throughout the course of the activity and correct misconceptions. This phase also contains prompts that allow the youth to engage in thinking about the demonstration.

• **Master Recipe**

The master recipe provides the facilitator with an overview of the recipe, and a reference for purchasing ingredients. Although this provides the recipe, the activity should be conducted by following the procedure. Note: the listed ingredient amounts differ as compared to the recipe in the student handout, as the master recipe is for 30 small tastings and the student handout recipe is for a family.

• **Student Handouts**

For every cooking demonstration, there is a handout intended for students to actively record their thoughts and observations throughout the cooking demonstration, and then take it home to share with their families. The recipe on the handout reflects the ingredients necessary for a family to make the dish at home.