## MASSACHUSETTS PUBLIC FIRE AND SAFETY EDUCATION CURRICULUM PLANNING GUIDEBOOK®

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## **Evaluation**

Evaluation is the last step in the program planning process. It is very important. The evaluation helps you to measure the impact of your program. Is your program achieving its goals? Was there an increase in knowledge or a change in behavior?

Evaluation is feedback. How are we doing? Is what we are doing working? Are the students learning what we think we are teaching? Reviewing your evaluation will allow you to determine if your short-term, intermediate or long-term goals have been met. You can determine what changes are needed to improve your program.

An evaluation plan includes comparing fire loss data before and after implementing the program (such as death, injury or property loss statistics) and measuring knowledge or behavior changes through pre-tests and post-tests.

### **Data Measures Long-Term Impact**

Many kinds of data are already being collected by most departments, such as the Mass. Fire Incident Reporting System (MFIRS), 9-1-1 calls, open air burning permits, and ambulance reports to name a few. You should have reviewed these during the Identification step. Sometimes special forms can be set up to assist you in your data collection. (i.e., EMTs have a special form to be filled out if they encounter a burn injury). Changes in your data can measure if your program is being successful or not.

#### **Pre- and Post Tests**

Pre-tests and post-tests are a common way of measuring change. These are usually in the form of multiple choice questions that are given before the program and then again at the end. The results of the pre-test give you a baseline of knowledge as well as pointing out topics or issues you need to cover. Results of the post-test should show an increase in knowledge. An important aspect of pre-tests and post-tests is how you word them. You might want to include action oriented questions rather than only knowledge based questions. An example of the difference is: "Has someone in your family tested your smoke detectors in the last month?" (action) or "How often should smoke detectors be tested?" (knowledge). These tests should not contain trick questions. The goal is to measure knowledge and behavior. If you use the same test for pre and post testing, you may rearrange the order of the questions.

### **Essays**

Another tool for evaluating your program involves asking the classroom teacher to have the students do an essay a few days after you have finished the program. For younger students, the teacher might lead a class discussion on what they remember about your visit. This will demonstrate what the students remember most about your program and help you to modify it to better meet their needs in the future.

## S.A.F.E. Program 3rd, 6th and 10th Grade Assessment Tools

The Department of Fire Services has created a 3rd grade assessment tool that allows for both local program flexibility and for a uniform statewide assessment of what

## **Evaluation** (Continued)

our third graders know about the core fire and life safety behaviors. It is designed to be given in the spring when students are developmentally appropriate. The test, the database and instruction guidance are on the website at www.mass.gov/dfs. We are in the process of developing a 6th grade and a 10th grade assessment tool.

### **Other Methods**

Other methods of evaluation include having students create poems, home escape plans, film strips, cartoons, posters, skits, demonstrations, or public service announcements. It is helpful to develop a checklist, rubric or scoring guide to grade the various types of methods you use.

### **Lessons Put to Use**

One other important aspect of program evaluation is to document your 'saves', no matter how trivial they may seem at the time. It is important to document and to acknowledge when a child actually uses the life safety information you have taught. Does your department have a mechanism for internal tracking when a family meets the firefighters out front at the meeting place? The more positive impact you can document, the better it is for your program.

## How Do We Know Students Learned What We Thought We Taught?

Without some kind of evaluation component in place you will not know if your program is working. The goal is to change the public's behavior, not merely increase their knowledge. Do not presume that because you have imparted knowledge to the students that they will adopt a better attitude toward life safety. Shriners Hospitals for Children asked a number of middle school age patients why they had not performed "Stop, Drop and Roll." The response was "there was not enough room." This evaluation told us we had successfully taught the concept of "Stop, Drop and Roll", but that we had not taught confined space clothing extinguishment. It is usually demonstrated in a large, open area. Through proper evaluation, you can show that there has been an increase in knowledge, a change in behavior, and increased awareness of life safety issues.

#### The Presenter and the Content

Evaluating the fire and life safety educator's presentation is another important part of the evaluation process. By providing evaluation forms to be completed by the students and classroom teachers, the fire and life safety educator can discover their strengths and weaknesses, helping the educator to improve the presentation. Be sure to include questions about your presentation style, communication skills, mannerisms, as well as the content, props and materials used.

These surveys can have questions requiring simple yes-no answers, or answers on a scale of 1-5. An example would be: "Was the instructor prepared for the class?" (yes or no), or "On a scale of 1-5, 1 being excellent and 5 being poor, was the instructor



## **Evaluation** (Continued)

prepared for class?"

The best type of evaluations however, will elicit a more detailed response. For example, "Did the instructor answer all of your questions? If not, what is your question?" or "In what ways do you feel better able to handle an emergency?"

In the same evaluation tool include questions about the content of the lesson. Ask the teachers about the age-appropriateness of the material, the vocabulary, the activities (too much, too little, too young, too old) and whether you included enough materials and activities to accommodate different learning styles and intelligences.

Just as you asked the professional educators for advice at the planning stage, elicit their input in the evaluation stage. The evaluation process is not just the last part of your program; it is the basis for the identification process in the design of your next program.