Using 4-H Science Blast in the Class

Our purpose

Michigan State University (MSU) Extension is committed to sharing resources with our community partners in youth science education. As Michigan looks to create a new generation of leaders, science must be at the forefront. This curriculum was developed as part of MSU Extension's "I Know MI Numbers" initiative to enhance science literacy and serve as a "go to" resource both inside and outside the traditional classroom. It offers educators the opportunity to connect in-school learning with real-world experiences.

Using this resource

This curriculum includes a variety of hands-on lesson plans, including experiments for first grade through high school. Lessons are grouped by grade level within content areas.

We recommend that for maximum retention, teachers/leaders should ensure that every child is active 80 to 100 percent of the time. This can be accomplished by providing everyone with a piece of equipment or a goal to be working on at the same time, and by decreasing the time spent standing in line time waiting for a turn whenever possible. Materials can be used in a variety of formal and informal environments.

IN THE CLASSROOM:

As a teacher in a classroom setting, you will note that each of the lessons contained in this resource are benchmarked according to the latest Michigan High School Content Expectations and/or Grade Level Content Expectations, as appropriate. While suggested grade levels are included, many lessons are appropriate for teaching or re-teaching concepts to older or younger youth. The curriculum is not listed in any particular order; instead, teachers are encouraged to select the lessons that are most appropriate in meeting their students' needs and complementing their classroom studies. This curriculum will serve as an excellent hands-on supplement to the text books and other resources available in the classroom.

IN AN AFTER-SCHOOL SETTING:

Paid or volunteer staff working in an after-school setting may also be interested in reviewing how these lessons meet state educational standards and benchmarks (see "In the Classroom," above). The instructions are written for use by adults and older teens who do not necessarily have a science background; you don't need to be a teacher to understand or use the lessons effectively. The activities are designed to help youth learn for themselves, and many of the activities have opportunities for youth to work cooperatively in small groups. This curriculum can serve as an excellent addition to your program plan. You might even consider building a science camp around the lessons.

IN A RECREATION PROGRAM OR CLUB SETTING:

Volunteers programming with youth will find these lessons easy to use as they guide young people in exploring a variety of science-based