

Discussion and Notes

Handling Live Animals in the Classroom

Biology is the science of life and living things. Studying living organisms in biology and life science classrooms is a “natural” way to engage students and nurture their interest in biology. Keeping live animals in the classroom requires thoughtful consideration of learning goals, school and district policies, and potential dangers.

Learning Goals and Objectives

The first consideration should be to focus on the learning goals for using living organisms in the classroom. There are many valid reasons for keeping animals in the classroom, but the primary one should be to provide meaningful educational experiences for students. The use of living organisms enhances the study of life processes and is uniquely suited to achieving key National Science Education Standards, especially with respect to the behavior of organisms. Review life science content standards and course goals to determine where the use of living organisms is most appropriate. The presence of live animals may stimulate interest, help students develop observational skills, illustrate principles of behavior, regulation, and adaptation of organisms, promote positive attitudes, and foster a sense of empathy. Whatever the learning goals, they should be clearly defined and referred to throughout the time the animals will be in the classroom.

Responsible Care of Animals

Implicit in the use of animals in the classroom are the planning, responsibility, and effort required for their proper procurement, humane care, and ultimate disposition or fate. Sound teacher judgment and concern for the well-being of the animals are essential requirements or considerations. A captive animal is totally dependent upon its keeper. The teacher assumes the responsibility for providing food and shelter and for ensuring that the animal is healthy, comfortable, and able to maintain reasonable natural behavior. In addition to addressing specific learning goals, the teacher should always exhibit a caring and sensitive attitude toward the animal.

School Policies and Legal Considerations

Your school district may have general policies or specific rules regarding classroom animals. Consult the principal, science coordinator or other administrators for advice and recommendations. Many native animals—especially fur-bearing animals, most birds, and threatened or endangered species—are protected by federal or state regulations and cannot be collected or maintained without a permit. Federal regulations restrict the importation of many animals, and some states prohibit importing and keeping non-native species that can cause ecological damage if they are released or escape. State wildlife agencies are familiar with these regulations and can provide information on animals that are protected in different areas.

General Guidelines

- ◆ Every species is unique. It is important to learn as much as possible about a specific organism or animal before bringing it into the classroom. Learn especially the animal’s habits and unique care requirements. Enlist student help in researching prospective animals—become experts before the organisms arrive!
- ◆ Rely on reputable biological suppliers who can provide healthy and vigorous live organisms, will deliver them in a timely manner, and can provide technical support.
- ◆ Plan a timeline that allows for the arrival of the organisms prior to the day(s) they will be used in the classroom. This will allow the acclimation of the organism to its new home or allow subculturing as necessary.

The “Classroom Living Material—Care and Culture Guide” available from Flinn Scientific (Catalog No. FB1747) is an excellent resource for teachers wishing to establish “living” classrooms. The guide provides valuable information on all aspects of caring for organisms, from microscopic algae to reptiles and amphibians.

Discussion and Notes

Animals should only be kept in the classroom to facilitate learning. In the case of younger students, it is probably best to remove animals from the classroom before students lose interest in them.

The ultimate transfer, disposition or fate of any animal must be carefully considered before it is brought into the classroom.

- ◆ Prepare all necessary materials (cultures, cages, etc.) before the arrival of the organisms. Anticipate all of the organism's needs so that upon arrival, the organisms will be treated humanely.
- ◆ Open shipments of live materials immediately and follow all directions for their care. Alert school receptionists or receiving staff about the imminent arrival of any live specimens.
- ◆ All animals must be provided with appropriate food, space, cleanliness, water, shelter, and day-to-day care.
- ◆ Involve students in the care and maintenance of the organisms from the day of their arrival. Avoid animal activities that are beyond the developmental level of students.
- ◆ Occasionally, a student might have an allergic reaction to a certain kind of animal or dust from an animal enclosure. If so, the student and animal should not be forced into proximity of each other.
- ◆ Do not allow imported exotic animals, wild animals, injured or stray animals, or known poisonous animals in your classroom. Bringing pets such as cats, dogs, etc. can quickly become a disaster for a variety of reasons and is strongly discouraged.
- ◆ Students should always wash their hands before and after feeding, handling or cleaning animals.
- ◆ Stay alert to changes in an animal's behavior or eating habits and seek professional help if a diagnosis is necessary.
- ◆ Some organisms bite, sting, or carry diseases that can be transmitted to humans. While these facts may not preclude keeping such animals, it does mean that all appropriate and sensible precautions must be taken. Gloves, cages, and other species-specific materials should be available.
- ◆ Not all students may share the same enthusiasm for animals. Be sensitive to feelings of fear or dislike, and also to phobias about certain animals (snakes, spiders, etc.).

Transfer, Disposition or Fate of Animals

Ethical and humane care of live animals requires that teachers plan responsibly in advance for the eventual transfer, disposition or fate of an organism. Teachers should also plan for the care and feeding of animals during school breaks. Animals that are not native to a given area or animals that have been purchased (even if they are thought to be native to an area) should **not** be released into the wild. (They may suffer and die or they may become established and cause ecological damage.) Animals are often transferred to another teacher who will be responsible for its care. In some cases, students will want to make an animal a personal pet. (This, of course, can be done only if the student and parents agree and are knowledgeable about the animal and its needs.)

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Keeping live animals in biology and life science classrooms can help students develop observational skills and nurture their interest in biology. Teachers should be aware of potential safety issues associated with handling live animals, and they must plan in advance for the ethical and responsible care of animals.

This safety meeting should take 6–8 minutes to present. The discussion period will vary depending on the issues that need to be addressed.

It is very important to keep these safety notes and a signed attendance sheet to verify that regular safety training meetings were held. The sign-up sheet is almost as important as the meeting notes and is usually the first thing that is reviewed by regulatory inspectors. A copy of the sign-up sheet we suggest using can be found at www.flinnsci.com/Sections/Safety/SNotes/signup.pdf.

Materials (one per staff member)

- ◆ Flinn Scientific Science Department Safety Training Notes, Volume 10–7
- ◆ Sign-up sheet (one for group)

Additional Questions for Discussion

1. What are some of the most important reasons or learning goals in your curriculum for keeping live animals in classrooms?
2. Is it possible for teachers to share the care of long-lived animals?
3. Animals will need daily care during long breaks and over the summer. How will extended care be handled?
4. If an animal becomes seriously ill, what steps should be taken to ensure the safety of the students and staff as well as the best outcome for the animal?
5. Are there procedures in place in case an animal escapes?

We Welcome Your Comments

Are the Science Department Safety Training Notes useful to you? Are they working for you and your department? We would love to hear from you if you have any suggestions for topics that you would like to see covered or for how we can improve these safety training notes. Please e-mail us with your comments and suggestions. Our e-mail address is flinn@flinnsci.com.