

ABERDEEN SCHOOL DISTRICT

POLICIES AND REGULATIONS

NEPN Code: IMG

ANIMAL USE IN SCIENCE LABORATORIES

Organisms are an essential part of a science curriculum. Few things are as interesting and motivating to students as living organisms. The judicious use of live or preserved organisms can help students realize that the study of science is relevant, fascinating, and rewarding; not merely another dull textbook exercise.

Although there are many advantages to providing science students with opportunities to study real animals, it is important to be aware of and sensitive to ethical and practical concerns. The purpose of this section is to discuss some realistic guidelines for using organisms in a classroom. The final decision regarding the use of animals in the classroom should take into consideration the following recommendations, safety rules, local and school guidelines, personal views, and assessment of students' needs, interests, maturity, and ability to behave responsibly.

- 1. Whenever possible, live animals should be observed in their natural habitats or in zoos, parks, and aquaria.
- 2. Biological experimentation should lead to and be consistent with a respect for life and all living things. Humane treatment and care of animals should be an integral part of any lesson that includes living animals.
- 3. Lower orders of life such as bacteria, fungi, protozoans, and invertebrates can reveal much basic biological information and are preferable as subjects for studies wherever and whenever possible.
- 4. Before bringing a live animal into the classroom, determine whether a proper habitat can be maintained in the classroom situation. Such a habitat includes temperature, space, and type of food. Students should have a clear understanding of the appropriate care needed by the live animals brought in the classroom. Do not allow students to tap on animal enclosures or otherwise disturb the animals.
- 5. No wild vertebrate animals should be brought into the classroom. Purchase animals from a reputable dealer only.
- 6. Live animals should be nonpoisonous and healthy. Any mammals used in the classroom should be vaccinated against rabies unless the animals were purchased recently from a reliable scientific supply company. Proof of animal vaccination is required. Quarantine any animal to make sure it is disease-free before bringing it into the classroom.
- 7. Animals' care shall be supervised by a teacher experienced in proper animal care.
- 8. Make sure the living quarters of classroom animals are clean, located away from stressful situations, appropriately spacious, and secure enough to confine the animal. You may wish to lock the cages to prevent the accidental release of animals; the small padlocks used on luggage are good for this purpose.
- 9. Remove wastes from animal living quarters daily. Thoroughly clean animal living quarters periodically to ensure that they are odor-and germ-free. Provide a daily supply of fresh water and any other need specific to the particular animal.

- 10. Provide for the care of animals during weekends and school vacations. Inform the custodial staff of the presence of animals and warn them of any special requirements. For example, turning off the aquarium pump to save electricity or spraying the classroom for insects can be fatal to animal collections.
- 11. Students should be instructed as to how to handle each species brought into the classroom. For example, students can receive painful wounds from the improper handling of some fishes, mollusks, and sea urchins.
- 12. Animals should be handled only if necessary. If an animal is frightened or excited, pregnant, feeding, or with its young, special handling is required.
- 13. Students should thoroughly clean their hands after handling animals or the cage containing animals. Students may be asked by their instructor to wear gloves when handling animals.
- 14. Organisms should be returned to their natural habitat after an observation period of no longer than 14 days.
- 15. Laboratory-bred animals or species that are not indigenous to an area should not be released into the environment.
- 16. If an animal must be euthanized, it will be done under the direction of a veterinarian.
- 17. Before performing any experiment involving live animals, check local and state regulations.
- 18. No animal studies involving anesthetic drugs, pathogenic organisms, toxicological products, carcinogens, or radiation should be performed.
- 19. Any experiment requiring live animals should have a clearly defined objective as stated in the approved district science curriculum guide and course plan relating to the teaching/learning of some scientific principle.
- 20. No experimental procedures that will cause pain, discomfort, or harm to mammals, birds, reptiles, fishes, and amphibians should be done in the classroom or at home.
- 21. Surgical procedures should not be performed on live vertebrate animals.
- 22. If fertilized bird eggs are opened, the embryo should be destroyed humanely two days before it would have hatched, at the latest.
- 23. Whenever possible, substitute plants or invertebrate animals for vertebrates.
- 24. When working with preserved animals, make sure that the students maintain a serious and respectful attitude toward specimens.
- 25. Dissections included in the curriculum and some course plans provide unique learning objectives; however, if a student chooses to avoid dissections, he/she will be provided with alternative-related activities. It should be pointed out that no simulation or recording can replace hands-on, first-hand experience.
- 26. During examination of animal organs, students will be asked to wear gloves and protective gear. Students should thoroughly clean their hands after handling animal organs.

PROFESSIONAL RESOURCES:

NSTA Position Statement: Responsible Use of live Animals in the Science Classroom. March 2008.

Principles and Guidelines for the Use of Animals in Precollege Education. Institute of Laboratory Animal Resources, 2020.

Intel International Science and Engineering Fair International Rules and Guidelines 2019.

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