

ARMS (Adult Role Models in Science) Volunteer Handbook

Goals of the ARMS Volunteer Program

- Establish science education as a priority in the elementary classroom
- Develop the skills of classroom teachers to be leaders in science education
- Enhance science education through volunteer involvement, assisting teachers and serving as role models for students
- Promote the involvement of females and minorities in science
- Involve scientists from industry and higher education in connecting science in the classroom to science in the community

What is the Role of a Science Volunteer?

The specific role you will play in the classroom depends on the specific needs of the teacher you are working with as well as your particular interests and expertise.

Time commitments vary. Some teachers may want a volunteer once a week throughout the school year. Some may need a volunteer for a particular unit of study for a month or so. Some may just need an extra hand for specific experiments or extra adults on a field trip.

Following are some of the ways a volunteer could help:

- Working with individual students needing one on one interaction with an adult to succeed in science.
- Working with small groups of students needing more personal attention or with students working on a small group project.
- Working with the whole class on a hands-on lesson, assisting students where needed.
- Helping the teacher set up hands-on demonstrations or experiments.
- Accompanying the class on outdoor field studies.
- Developing and/or conducting a science activity related to the volunteer's field of expertise.
- Talking with students about your work and answering their questions.
- Working with the teacher to develop lessons/activities related to your work.

Whatever your role is to be, it is important to determine the teacher's needs and any particular needs of students. It is also important that you share your interests and areas of expertise with the teacher and be clear about what you would like to do in your volunteer experience. There will inevitably be some

give and take. A volunteer may be needed to do some tasks that aren't high on his/her list of priorities. A teacher may need to adjust his/her schedule to fit in a volunteer's presentation about his/her work as a scientist. If both the volunteer and the teacher are willing to work together to make the best use each of their talents, the students will benefit the most.

Volunteer Responsibilities

Your assignment is important to the children and the school. We ask that you perform the duties to the best of your ability, observe the days and hours agreed upon and cooperate with other staff and other volunteers at the school. Please think seriously about this commitment. If you decide to volunteer, please keep your commitment. It is very frustrating for teachers and discouraging for the students if a volunteer just "doesn't show up".

If you have any questions or concerns, contact your teacher partner or Dolly Ledin, ARMS coordinator 222-4865 or daledin@facstaff.wisc.edu

At your initial meeting with the teacher, write down the basic duties you will be doing in the classroom and the days and times you will be working. Make a copy of this for yourself, the teacher and ARMS coordinator, Dolly Ledin.

You need to inform your teaching partner if you cannot report for your assignment, will be away for an extended period or can no longer fulfill your responsibilities.

If, during your volunteer assignment, you hear confidential information concerning the school, teachers or students, you must maintain the confidentiality of such information. Share your observations about the students only with your teacher partner.

Each time you volunteer in the classroom, please record your presence in the volunteer log, located in each school office.

Please keep a simple log of your activities, your reflections on your volunteer experience and ideas and concerns to share with your teacher partner and the ARMS coordinator. This will help us to evaluate the program, be aware of successes and identify problems.

Teacher Responsibilities

In the ARMS partnership it is important that you feel supported in your efforts to teach. In return you have the opportunity to make the volunteer's experience as meaningful as possible.

Please choose meaningful jobs for the volunteer and choose jobs the volunteer is comfortable with.

Have a special spot for the volunteer's coat and other belongings.

Be as organized as possible. The volunteer should know what to do, when, and where. One suggestion would be to have a folder in the classroom for the volunteer with volunteer assignments and specific directions.

Arrange for regular communication with the volunteer, either meeting before or after their volunteer time, talking on the phone regularly or communicating via email. Make sure the volunteer understands your expectations and that you understand the volunteer's goals and interests.

Communicate about the needs of students – make sure volunteers understand the abilities of students and the kind of help they need to succeed in science

Communicate about the curriculum – Give volunteers an opportunity to look over the FOSS manual and, if possible, make a copy of the lesson they will be assisting with.

Show your appreciation often.

Please give the volunteer a tour of the school, introduce them to other staff and make them feel welcome and a part of the school community.

Please communicate with the ARMS coordinator with any questions or concerns
- Dolly Ledin 222-4865 or daledin@facstaff.wisc.edu
2970 Larsen Rd. Madison, WI 53711

Other Tips for Volunteers and Teachers – Enhancing Classroom Science

- Share Motivation

foster excitement, support questioning but resist giving answers, share your experiences

- Observe behaviors – encourage scientific behaviors –

- exploring, not playing
- hypothesizing, not random guessing
- questioning, not giving up
- collaborating, not dictating

- Guide students through the investigation process

allow for constructive exploring ask students what they observe and why, ask questions to encourage further inquiry, ask students to summarize their ideas