

RETIREES SCHOOL VOLUNTEER ASSOCIATION TRAINING

OVERVIEW

- **RETIREES SCHOOL VOLUNTEER ASSOCIATION**
- **MISSION OF TOWN CAPTAINS**
- **RECRUITING & SUPPORTING VOLUNTEERS**
- **THE JOB**

**TIMSS, FRAMEWORKS & MCAS
WORKING WITH TEACHERS
WORKING WITH STUDENTS**

**RETIRES SCHOOL VOLUNTEER ASSOCIATION
TRAINING
CONTENT**

- **INTRODUCTION**
- **RETIRES SCHOOL VOLUNTEER ASSOCIATION**
 - WHO ARE WE**
 - PURPOSE**
 - DEMOGRAPHICS**
 - CONTACTS**
 - MEMBER SKILLS**
 - MISSION OF TOWN CAPTAINS**

RETIREES SCHOOL VOLUNTEER ASSOCIATION TRAINING

CONTENT (CONTINUED)

TYPICAL ACTIVITIES

- **CLASSROOM TEACHING**
- **TEACHING AIDE**
- **TUTORING**
- **AFTER SCHOOL PROJECTS**

**FUTURE SCIENTISTS AND ENGINEERS OF
AMERICA**

FUTURE CITIES

- **SCHOOL ADVISORY COUNCILS/BUSINESS ALLIANCES**
- **SPECIAL PROJECTS**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

CONTENT (CONTINUED)

- **TOWN CAPTAIN TASKS**
 - MAKING INITIAL CONTACT WITH THE SCHOOL SYSTEM**
 - DETERMINING NEED**
 - RECRUITING AND PLACING VOLUNTEERS**
 - PROVIDING SUPPORT TO VOLUNTEERS**
- **RECRUITING VOLUNTEERS**
 - WHY VOLUNTEER**
 - KNOW YOUR ORGANIZATION**
 - KNOW YOUR SCHOOL SYSTEM**
 - OUTREACH**
 - USING LOCAL RESOURCES**

RETIRES SCHOOL VOLUNTEER ASSOCIATION TRAINING

CONTENT (CONTINUED)

- **THE JOB**
 - **SETTING YOUR GOALS**
 - **THIRD INTERNATIONAL MATHEMATICS AND SCIENCE STUDY (TIMSS)**
 - **CURRICULUM FRAMEWORK AND MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM (MCAS)**
- **PREPARATION**
 - FINDING RESOURCES**
 - MAKING A LESSON PLAN**
 - MAKING SURE IT WILL WORK**
 - BE PREPARED TO MAKE CHANGES**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

CONTENT (CONTINUED)

THE JOB (Continued)

- **WORKING WITH THE TEACHER**

YOU ARE THERE TO HELP

THE TEACHER IS ALWAYS IN CHARGE

SUBSTITUTE TEACHERS

WHAT DO YOU DO IF A TEACHER MAKES A MISTAKE

RETIREES SCHOOL VOLUNTEER ASSOCIATION TRAINING

CONTENT (CONTINUED)

THE JOB (Continued)

- **WORKING WITH THE STUDENT**
 - WHAT MAKES KNOWLEDGE STICK**
 - THEIR GOALS**
 - COGNITIVE LEVELS**
 - HOW ARE THEY GOING TO TEST YOU**
 - DO'S AND DON'TS**
- **SUMMARY**

RETIREES SCHOOL VOLUNTEER ASSOCIATION TRAINING

WHO ARE WE?

- **A non-profit (501c3) organization formed by retired Raytheon engineers in 1993 and incorporated in 1995.**
- **Members consist of retired engineers and technical staff who have agreed to volunteer their time to public schools.**
- **Our goal is to appoint Town Captains in each community that has more than 10 recent retirees from the Exempt Payroll. They will act as the interface to their School system and the coordinator who solicits members to provide the service requested.**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

PURPOSE

To provide assistance, on a volunteer, non-paid basis, for enhancing the science and math education of K - 12 New England public school students, in response to requests from their local school staff and/or administration.

Their tasks would be:

- **To work with teachers and pupils on Science, Math and Computer project**
- **To participate in classroom Science and Math teaching.**
- **To be mentors for Science clubs, academic decathlon and similar after-school activities**
- **To work with school advisory councils in curriculum development, planning and course evaluation; also Technology Workforce Development Committees**
- **To convey experiences in leading-edge technology**

RETIRES SCHOOL VOLUNTEER ASSOCIATION TRAINING

DEMOGRAPHICS

Town Captains are currently assigned in the following Cities & Towns

Acton/Boxboro

Arlington

Bedford

Bolton

Concord/Carlisle/Lincoln

Framingham/Natick

Holliston/Hopkinton/Ashland

Lancaster

Lawrence

Leominster Area

Marlboro/Northboro

Sudbury/Maynard

Waltham/Newton

Wayland

Woburn/Stoneham

Worcester/Shrewsbury

RETIRES SCHOOL VOLUNTEER ASSOCIATION TRAINING

MEMBER SKILLS

RSVA members have skills in:

- **electrical and mechanical engineering**
- **hydraulics, computer programming**
- **math**
- **project management**
- **packaging and Industrial design**
- **physics**
- **chemistry**
- **manufacturing methods**
- **computer aided design, etc**

Many of our members are graduates of the Northeastern University RE-SEED Program

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

TYPICAL VOLUNTEER ACTIVITIES

Classroom Teaching/Teaching Aide

- **Acton- 6th Grade Computer Lab**
- **Arlington- 6th Grade Science**
- **Framingham- 2nd Grade Math, 5th Grade Science, 6th Grade Math**
- **Lawrence- Middle School Math and Science**
- **Marlboro- Middle & High School Science**
- **Nashoba Valley High School- Computer Programming**
- **Sudbury- 6th Grade Science**
- **Woburn- 4th Grade Math & Science**

RETIREES SCHOOL VOLUNTEER ASSOCIATION TRAINING

TYPICAL VOLUNTEER ACTIVITIES (CONTINUED)

Tutoring

Framingham - 4th & 5th grade advanced math

After School Projects

Future Scientists and Engineers of America

FSEA (Future Scientists and Engineers of America) Clubs in Framingham and Tewksbury

Future Cities

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

TYPICAL VOLUNTEER ACTIVITIES (CONTINUED)

School Advisory Councils/Business Alliance

Bedford - Business Alliance

Framingham -Strategic Planning Committee; School-to-Career
Steering Committee

Waltham -Technology Leadership Committee

Worcester County -Alliance for Education

Special Projects

Concord -Solar powered vehicle; 3-axis accelerometer; Rocket motor

Waltham -City-wide fiber optic communications network

-Supported repair and activation of Raytheon-donated Numerical Control
Milling Machine at High School

Woburn -Robot Project

General -Judges at Massachusetts High School Decathlon, Science Fairs, Science Olympiad

Guest Instructor in Arlington, VA - 5th Grade "Light & Optics" Unit

RETIREES SCHOOL VOLUNTEER ASSOCIATION TRAINING

MISSION OF TOWN CAPTAINS

- **Making initial contact with schools**
- **Determining the need**
- **Recruiting and placing volunteers**
- **Providing support to volunteers**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

THE VOLUNTEER JOB Getting ready

- **Set your goals**
- **Do your homework**
- **The Third International, Mathematics and Science Study (TIMSS)**
- **Massachusetts Mathematics Curriculum Frameworks**
 - provides guide for the development of specific Curriculums**
 - establishes the standards for learning and testing**
- **Massachusetts Comprehensive Assessment System (MCAS)**
 - State testing requirements**
 - What is tested on the MCAS**
 - Types of questions**
 - How are the student answers scored**
 - How are test results used**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

THE VOLUNTEER JOB Class Preparation

- **Finding Resources**
- **Making a Lesson Plan**
- **Making sure it will work**
- **Be prepared to make changes**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

THE VOLUNTEER JOB WORKING WITH THE TEACHER YOU ARE THERE TO HELP

- **Teachers are Individuals**
- **Be part of the team not a burden**
- **Being on time every time**
- **Only on a need to know basis**
- **The teacher is always in charge**
- **Substitute teachers**
- **What do you do if a teacher makes a mistake**

RETIREEES SCHOOL VOLUNTEER ASSOCIATION TRAINING

THE VOLUNTEER JOB WORKING WITH THE STUDENT

- **What makes knowledge stick**
- **Their goals**
- **Cognitive levels**
- **Why some students have trouble learning**
- **Tutoring tips and guidelines for helping students**
- **How are they going to test you**
- **Do's and Don'ts**