In 2001, CEA commissioned a consumer electronics “Service Function of the Future” study that confirmed the industry is, and will continue to undergo change. Lack of technicians entering the field was one of the primary issues identified. Lack of training opportunities, image of vocational education and the consumer repair industry as a whole were primary reasons identified for this shortage.

Gary Shapiro spoke to the TES Executive Committee in February 2002, and noted that CEA could not continue to fund technical education. He suggested that an industry-wide coalition may provide the most appropriate solution to the technical training problem.

Beginning in March 2002, the TES Technical Education Chairman and a representative from CEA developed a Mission Statement, defined Objectives, identified Challenges, established Short-term and Long-term Goals and identified Strengths, Weaknesses and Opportunities on a preliminary basis for such a coalition. The “National Coalition for Electronics Education (NCEE)” was born. Members of numerous industry organizations were contacted and requested to participate in a conference call to introduce the concept and begin the process of formalizing the coalition.

On April 30, 2002, a conference call with Six (6) participants, representing a cross section of the Consumer Electronics Service Industry, took place and the concept was introduced and discussed. The group decided the Coalition was a worthwhile endeavor and agreed to contribute to the ongoing development.

Participants further developed and approved NCEE Articles of Incorporation and Bylaws. Participation expanded as others became interested and involved. The Coalition became a not for profit corporation on February 24, 2003 with the primary objectives to:

- Expand training opportunities and increase the number of technicians in the field.
- Promote electronics servicing as a desirable professional career.
- Promote electronics and appliance repair professions.
- Work with industry and educational groups to improve electronics training courses.
- Assist both public and private educational systems in assessing electronic education needs.
- Help mold and standardize electronics training courses to provide the needed technical workers for the public good and potential national defense.
- Seek financial assistance to promote the above from industry, education and government within the meaning of Section 501(c) (6) of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent federal tax laws.

The NCEE determined that an appropriate first step would be to develop course outlines for various types and levels of Electronic Training. Manufacturers and Educational institutions could use these “Industry Approved” outlines to develop course curriculum providing students with knowledge the industry requires for success. In every case, the Coalition followed specific steps to develop the various outlines: 

- Establish major Categories of required knowledge.
- Create a syllabus of specific Items for each category, identifying topics to be included in the training.
- Document competencies explaining what the student should be able to do with each item learned.
To date, the Coalition has developed and approved 8 course Outlines and are working on more.

**Approved Course Outlines:**
- Basic Electronics
- Consumer Electronics Service Technician
- Computer Service Technician
- Satellite Systems Service Technician
- Appliance Service Technician
- Wireless Communications Technician
- Customer Service Specialist
- Mobile Electronics Service Technician

**Course Outlines in progress:**
- Appliance Installer Certification
- Service Manager Certification

**Subject Matter in Planning Stage:**
- Alarm-Security Technician
- Audio-Video Installer/Technician.

Each course outline is reviewed annually by a group of Subject Matter Experts to ensure course content is current and accurate.

The NCEE is enjoying positive response from educational and commercial organizations. Some are developing course curriculum based on approved course outlines. Some are anxious to begin using the additional course outlines we are creating. Some are participating as Subject Matter Experts to develop or review course content.

Monthly meetings are held via teleconference and participation has expanded from six (6) to thirty (30) members of Service Associations, Educational Associations and Institutions, CE Manufacturers, Appliance Manufacturers and Repair Parts Distributors. The NCEE has 13 Dues Paying members representing a cross-section of these participants. A membership drive is underway.

NCEE has a fully functional web-site ([www.NCEE-EDU.org](http://www.NCEE-EDU.org)) hosted by a member organization.

It is one of the Coalition goals to have a positive impact on the image of vocational and technical education and the fields of electronics and appliance repair. We plan to convince educators in elementary, secondary and post secondary institutions, leaders in business and government, parents and guidance counselors of our effort's value to today’s student. We hope to change public perception of Electronic and Appliance Technician fields and foster broad acceptance of these occupations.

The NCEE has made significant strides in the short time since inception. Success of the NCEE will ensure technical manpower is available to meet the repair needs of consumers, manufacturers and retailers.

Submitted by David Prince – Panasonic Services Company -- Chairman, CEA Technical Education Subcommittee