Appendix A

ASSOCIATION FOR THE EDUCATION OF TEACHERS IN SCIENCE
MEMBERS SURVEY OF TECHNOLOGY USAGE AND NEEDS

Directions: Each statement should be rated in two different ways using two sets of numbers. The first set of numbers describes your present level of knowledge with respect to the statement. The second set of numbers describes the desired level or knowledge you would like to have. (If you have as much knowledge as you would like to have, the same number should be circled in each column.)

Scale: 1 Very Low 2 Low 3 Moderate 4 High 5 Very High

I. As an Instructional Tool within Your Teaching:
a. word processing.
b. spreadsheet application.
c. database application.
d. desktop publishing.
e. making presentations (e.g., via PowerPoint).
f. teach students at a distance.
g. telecommunications (i.e., email).
h. using spreadsheets to maintain records and grades.
i. demonstrating, using commercial instructional software.
j. deliver individual learning (computer aided learning).

II. To Support Educational Research Efforts:
a. editing video.
b. statistical analyses (e.g., SPSS, SAS, Excel).
c. working with qualitative data (e.g., HyperQual, NUDIST).
d. accessing on-line indexes (e.g., ERIC, Educational Abstracts).

III. For Enhancing Productivity:
a. word processing.
b. creating graphs and other visual displays of data.
c. time management and personal scheduling.
d. publishing (newsletters, CDs, PDF files).
g. design of instructional materials.
f. aid in class management (i.e., monitor attendance, track grades).

IV. Effects of computer use on:
a. classroom management.
b. class preparation.
c. class presentations.
d. professional presentations.

V. How to use a computer in science for:
a. collecting data using peripherals.
b. database storage of lab data.
c. graphing.
d. demonstrations and modeling.
e. interfacing.
f. problem solving.
g. science/technology/society issues.
h. spreadsheet for analysis of lab data.

VI. How to use the internet to:
a. communicate via email.
b. web-based instruction (e.g., WebCT or Blackboard.com).
c. post readings electronically.
d. co-author manuscripts using email attachments.
e. create dialogue among students through list serves, electronic bulletin boards, threaded discussions, chat rooms.
f. make use of a customized course website.
g. exchange ideas and/or data with students at other sites.
h. access the Internet for lesson planning resources.
i. read and/or retrieve on-line articles, books, manuscripts.
j. search for information on the Internet.
k. What are other things you would like to learn about the Internet? Write-in below.

VII. How to use a disk operating system.

VIII. How to write an original computer program.

IX. How to use other technology in the classroom:
a. video.
b. film.
c. interactive video.
d. hypermedia.
e. overhead transparencies.
f. slides.
g. concrete manipulatives (models).
h. calculators.
i. microscopes.
j. digital camera (still/video).
k. science kits.
l. personal digital assistants (e.g., PalmPilots).
m. electronic white boards.
n. global positioning system (GPS).
o. MP3 players.
p. geographical information systems(GIS)   .

X. What topics would be of most interest to you during an AETS Pre-conference workshop on technology in science teacher education?

XI. Demographics
1. Highest Degree Earned
2. Write-in undergraduate degree area.
3. Write-in masters degree area (if applicable).
4. Write-in doctoral degree area (if applicable).
5. Level(s) you are currently teaching.
6. Certification area.
7. Primary grade level you taught when in public or private k-12 school.
8. Does you institution have a media center?
9. Major teaching responsibilities. Write in boxes below.
10. Current rank. Specify other.
11a. What year did you last attend a national science education convention?
11b. Please indicate the conventions you attend most often.
12. Have you presented a paper, workshop, or other scholarly work at a national science education conference?
13. Have you written a journal article in the past two years?
14. Where did you receive most of your internet training?
15. Where do you use the internet most often?
16. Do you have or maintain a website related to science or science education?
16a. If yes, indicate your URL.
17. What was the last year you completed a science course?
18. What was the last year you complete