| Name: | Date: |
|-------|-------|
|-------|-------|

#### **Survey of Teachers' Attitudes Toward Computers**

#### To the Educator:

This questionnaire is composed of well-validated portions of several attitudinal surveys that have been used with teachers in the past. We will use the combined information to help develop a profile of how teachers view technology. Please complete all items even if you feel that some are redundant. This may require 20-30 minutes of your time. Usually it is best to respond with your first impression, without giving a question much thought. Your answers will remain confidential.

Thank you for your cooperation!

Gerald Knezek & Rhonda Christensen, Texas Center for Educational Technology University of North Texas



| 1.  | How long have you been teaching?   |
|-----|--|
|     | 0-1 years 2-5 years 6-10 years   |
|     | 11-15 years 15+ years  |
| 2.  | How would you rate your experience with computers? (Check all that apply)                                |
|     | I have never used a computer and I don't plan to anytime soon.   |
|     | I have never used a computer but I would like to learn.  |
|     | I use applications like word processing, spreadsheets, etc.  |
|     | I use computers for instruction in the classroom.  |
|     | How often? Daily   |
|     | Weekly   |
|     | Occasionally   |
| 3.  | Currently I use the computer approximately hours per week in the classroom.                              |
| 4.  | At the beginning of this school year, I used the computer approximately hours per week in the classroom. |
| 5.  | If you do use computers, what type of training have you received? (Rank order all that apply).           |
|     | No training  |
|     | Basic Computer Literacy (on/off operations, how to run programs)   |
|     | Computer applications (word processing, spreadsheets)  |
|     | Computer integration (how to use in classroom curriculum)  |
| 6.  | Where did you receive your training? (Rank order all that apply).  |
|     | Self-taught  |
|     | School district  |
|     | College or university  |
|     | Other- please specify  |
|     |  |
| Do  | you have a computer at home? Yes No Gender: M F  |
| Λ σ | e: 18-25 26-30 31-35 36-40 41-45 46+   |

# Instructions: Please read each statement and then circle the number which best shows how you feel.

| SD =   | <b>Strongly Disagree</b>                        | D = Disagree        | A = Agree      | SA = | Strong | gly Agı | ree |    |
|--------|---|---------------------|----------------|------|--------|---------|-----|----|
| from C | Computer Attitude Question                      | nnaire, Knezek & Mi | yashita, 1994  |      | SD     | D       | A   | SA |
| (1)    | I enjoy doing things                            | on a computer.      |                |      | 1      | 2       | 3   | 4  |
| (2)    | I am tired of using a                           | computer.           |                |      | 1      | 2       | 3   | 4  |
| (3)    | I will be able to get use a computer.           | a good job if I lea | arn how to     |      | 1      | 2       | 3   | 4  |
| (4)    | I concentrate on a co                           | omputer when I u    | ise one.       |      | 1      | 2       | 3   | 4  |
| (5)    | I enjoy computer ga                             | mes very much.      |                |      | 1      | 2       | 3   | 4  |
| (6)    | I would work harder more often.                 | r if I could use co | mputers        |      | 1      | 2       | 3   | 4  |
| (7)    | I think that it takes a I use a computer.       | a long time to fini | sh when        |      | 1      | 2       | 3   | 4  |
| (8)    | I know that compute to learn many new t         |                     | tunities       |      | 1      | 2       | 3   | 4  |
| (9)    | I can learn many thi                            | ngs when I use a    | computer.      |      | 1      | 2       | 3   | 4  |
| (10)   | I enjoy lessons on th                           | ne computer.        |                |      | 1      | 2       | 3   | 4  |
| (11)   | I believe that the more computers, the more     |                     |                |      | 1      | 2       | 3   | 4  |
| (12)   | I believe that it is ve<br>learn how to use a c | • •                 | me to          |      | 1      | 2       | 3   | 4  |
| (13)   | I think that compute                            | rs are very easy t  | o use.         |      | 1      | 2       | 3   | 4  |
| (14)   | I would like to study using a computer.         | with a teacher ra   | ather than     |      | 1      | 2       | 3   | 4  |
| (15)   | I feel comfortable w                            | orking with a cor   | nputer.        |      | 1      | 2       | 3   | 4  |
| (16)   | I get a sinking feeling to use a computer.      | ng when I think of  | ftrying        |      | 1      | 2       | 3   | 4  |
| (17)   | Working with a com                              | puter makes me i    | nervous.       |      | 1      | 2       | 3   | 4  |
| (18)   | Using a computer is                             | very frustrating.   |                |      | 1      | 2       | 3   | 4  |
| (19)   | I will do as little wo                          | rk with computer    | s as possible. |      | 1      | 2       | 3   | 4  |
| (20)   | Computers are diffic                            | cult to use.        |                |      | 1      | 2       | 3   | 4  |
| (21)   | Computers do not so                             | care me at all.     |                |      | 1      | 2       | 3   | 4  |
| (22)   | I can learn more from                           | m books than from   | n a computer.  |      | 1      | 2       | 3   | 4  |

#### Instructions: Mark one space between each adjective pair.

from The Computer Attitude Measure (CAM), Kay, 1993

| Computers are | Compi | uters | are: |
|---------------|-------|-------|------|
|---------------|-------|-------|------|

| 1.  | Unlikable     | <br>Likable     | (41) |
|-----|---------------|-----------------|------|
| 2.  | Unhappy       | <br>Нарру       | (42) |
| 3.  | Bad           | <br>Good        | (43) |
| 4.  | Unpleasant    | <br>Pleasant    | (44) |
| 5.  | Tense         | <br>Calm        | (45) |
| 6.  | Uncomfortable | <br>Comfortable | (46) |
| 7.  | Artificial    | <br>Natural     | (47) |
| 8.  | Empty         | <br>Full        | (48) |
| 9.  | Dull          | <br>Exciting    | (49) |
| 10. | Suffocating   | <br>Fresh       | (50) |

Instructions: Please read each statement and circle the number that best describes how you feel about that statement.

1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = Undecided (U)

4 = Agree(A)

5 = Strongly Agree (SA)

| Com | puter Attitude Scale, Loyd & Gressard, 1984                             |      | SD | D | U | A | SA |
|-----|---|------|----|---|---|---|----|
| 1.  | Computers do not scare me at all.                                       | (51) | 1  | 2 | 3 | 4 | 5  |
| 2.  | I'm no good with computers.   | (52) | 1  | 2 | 3 | 4 | 5  |
| 3.  | I would like working with computers.                                    | (53) | 1  | 2 | 3 | 4 | 5  |
| 4.  | I will use computers many ways in my life.                              | (54) | 1  | 2 | 3 | 4 | 5  |
| 5.  | Working with a computer would make me very nervous.                     | (55) | 1  | 2 | 3 | 4 | 5  |
| 6.  | Generally I would feel OK about trying a new problem on the computer.   | (56) | 1  | 2 | 3 | 4 | 5  |
| 7.  | The challenge of solving problems with computers does not appeal to me. | (57) | 1  | 2 | 3 | 4 | 5  |
| 8.  | Learning about computers is a waste of time.                            | (58) | 1  | 2 | 3 | 4 | 5  |

| Com        | aputer Attitude Scale, Loyd & Gressard, 1984 (Cont,)   |       | SD | D | U | A | SA |
|------------|--|-------|----|---|---|---|----|
| 34.        | I do not think I could handle a computer course.   | (84)  | 1  | 2 | 3 | 4 | 5  |
| 35.        | If a problem is left unsolved in a computer class, I would continue to think about it afterward. | (85)  | 1  | 2 | 3 | 4 | 5  |
| 36.        | It is important to me to do well in computer classes.  | (86)  | 1  | 2 | 3 | 4 | 5  |
| 37.        | Computers make me feel uneasy and confused.  | (87)  | 1  | 2 | 3 | 4 | 5  |
| 38.        | I have a lot of self-confidence when it comes to working with computers.                         | (88)  | 1  | 2 | 3 | 4 | 5  |
| 39.        | I do not enjoy talking with others about computers.  | (89)  | 1  | 2 | 3 | 4 | 5  |
| 40.        | Working with computers will not be important to me in my life's work.                            | (90)  | 1  | 2 | 3 | 4 | 5  |
| from<br>1. | Pelgrum & Plomp, 1989 Computers can help me to learn things more easily.                         | (91)  | 1  | 2 | 3 | 4 | 5  |
| 2.         | With computers it is possible to do practical things.  | (92)  | 1  | 2 | 3 | 4 | 5  |
| 3.         | Knowing how to use computers will help me do well in my career.                                  | (93)  | 1  | 2 | 3 | 4 | 5  |
| 4.         | Knowing how to use computers is a worthwhile skill.  | (94)  | 1  | 2 | 3 | 4 | 5  |
| 5.         | All students should have an opportunity learn about computers at school.                         | (95)  | 1  | 2 | 3 | 4 | 5  |
| 6.         | It is important for students to learn about computers in order to be informed citizens.          | (96)  | 1  | 2 | 3 | 4 | 5  |
| 7.         | Having computer skills helps you get better jobs.  | (97)  | 1  | 2 | 3 | 4 | 5  |
| 8.         | I like to talk to others about computers.  | (98)  | 1  | 2 | 3 | 4 | 5  |
| 9.         | Computers can be exciting.   | (99)  | 1  | 2 | 3 | 4 | 5  |
| 10.        | I like reading about computers.  | (100) | 1  | 2 | 3 | 4 | 5  |
| 11.        | A job using computers would be very interesting.   | (101) | 1  | 2 | 3 | 4 | 5  |
| 12.        | Computer lessons are a favorite subject for me.  | (102) | 1  | 2 | 3 | 4 | 5  |
| 13.        | I want to learn a lot about computers.   | (103) | 1  | 2 | 3 | 4 | 5  |
| 14.        | I like to scan computer journals.  | (104) | 1  | 2 | 3 | 4 | 5  |
| 15.        | When I pass a computer shop, usually I stop for a while.   | (105) | 1  | 2 | 3 | 4 | 5  |
| 16.        | Computers interest me little.  | (106) | 1  | 2 | 3 | 4 | 5  |

### SD = Strongly Disagree D = Disagree A = Agree SA = Strongly Agree

## $Measurement\ of\ Computer\ Attitudes,\ Comparison\ by\ Gardner,\ Discenza\ \&\ Dukes,\ 1993$

| from | from BELCAT (Blomberg, Erickson, Lowery Computer Attitude Task), Erickson, 1987      |       | SD | D | U | A | SA |
|------|--|-------|----|---|---|---|----|
| 1.   | Knowing about computers will help me earn a living.                                  | (109) | 1  | 2 | 3 | 4 | 5  |
| 2.   | I get a sinking feeling when I think of trying to do something hard with a computer. | (110) | 1  | 2 | 3 | 4 | 5  |
| 3.   | A computer test would scare me.  | (112) | 1  | 2 | 3 | 4 | 5  |
| 4.   | I'll need computers for my future work.  | (113) | 1  | 2 | 3 | 4 | 5  |
| 5.   | I'm really going to need computer skills after I finish school.                      | (115) | 1  | 2 | 3 | 4 | 5  |
| 6.   | I'd be proud to be the outstanding student in a computer class.                      | (116) | 1  | 2 | 3 | 4 | 5  |
| 7.   | I'd like people to think I was smart with computers.                                 | (121) | 1  | 2 | 3 | 4 | 5  |
| 8.   | I see the computer as something I will rarely use in my daily life as an adult.      | (123) | 1  | 2 | 3 | 4 | 5  |
| 9.   | It would make me happy if people thought I was really good with computers.           | (128) | 1  | 2 | 3 | 4 | 5  |
| 10.  | I don't like people to think I'm smart with computers.                               | (129) | 1  | 2 | 3 | 4 | 5  |
| from | ATC (Attitudes Toward Computers), Raub, 1981   |       |    |   |   |   |    |
| 11.  | Computers have the potential to control our lives.                                   | (134) | 1  | 2 | 3 | 4 | 5  |
| 12.  | Our country relies too much on computers.  | (135) | 1  | 2 | 3 | 4 | 5  |
| 13.  | I will use a computer in my future occupation.                                       | (137) | 1  | 2 | 3 | 4 | 5  |
| 14.  | Computers dehumanize society by treating everyone as a number.                       | (138) | 1  | 2 | 3 | 4 | 5  |
| 15.  | Computers will create more jobs than they eliminate                                  | (140) | 1  | 2 | 3 | 4 | 5  |
| 16.  | I feel apprehensive about using a computer terminal.                                 | (141) | 1  | 2 | 3 | 4 | 5  |
| 17.  | Computers are changing the world too rapidly.  | (142) | 1  | 2 | 3 | 4 | 5  |
| 18.  | Computers isolate people by inhibiting normal social interactions among users.       | (144) | 1  | 2 | 3 | 4 | 5  |
| 19.  | I hesitate to use a computer for fear of making mistakes I cannot correct.           | (145) | 1  | 2 | 3 | 4 | 5  |

Part 5

| from | CAIN, Maurer, 1983  |       | SD | D | U | A | SA |
|------|---|-------|----|---|---|---|----|
| 20.  | Having a computer available to me would improve my productivity.                          | (146) | 1  | 2 | 3 | 4 | 5  |
| 21.  | If I had to use a computer for some reason, it would probably save me some time and work. | (147) | 1  | 2 | 3 | 4 | 5  |
| 22.  | If I used a computer, I could get a better picture of the facts and figures.              | (148) | 1  | 2 | 3 | 4 | 5  |
| 23.  | Having a computer available to me would improve my general satisfaction.                  | (149) | 1  | 2 | 3 | 4 | 5  |
| 24.  | If I had a computer at my disposal, I would try to get rid of it.                         | (150) | 1  | 2 | 3 | 4 | 5  |
| 25.  | Computers are probably going to be an important part of my life.                          | (151) | 1  | 2 | 3 | 4 | 5  |
| 26.  | I sometimes get nervous just thinking about computers.                                    | (153) | 1  | 2 | 3 | 4 | 5  |
| 27.  | I will probably never learn to use a computer.  | (154) | 1  | 2 | 3 | 4 | 5  |
| 28.  | I sometimes feel intimidated when I have to use a computer.                               | (157) | 1  | 2 | 3 | 4 | 5  |
| Con  | nparison of Four Computer Attitude Scales, Woodrow, 1991                                  |       |    |   |   |   |    |
| from | Computer Use Questionnaire, Griswold, 1983  |       |    |   |   |   |    |
| 1.   | Computers will improve education.   | (162) | 1  | 2 | 3 | 4 | 5  |
| 2.   | If there was a computer in my classroom it would help me to be a better teacher.          | (163) | 1  | 2 | 3 | 4 | 5  |
| 3.   | Someday I will have a computer in my home.  | (164) | 1  | 2 | 3 | 4 | 5  |
| 4.   | Computers can teach mathematics.  | (165) | 1  | 2 | 3 | 4 | 5  |
| 5.   | Computers are beyond the understanding of the typical person.                             | (166) | 1  | 2 | 3 | 4 | 5  |
| 6.   | Computers could enhance remedial instruction.   | (168) | 1  | 2 | 3 | 4 | 5  |
| 7.   | Computers will relieve teachers of routine duties.  | (169) | 1  | 2 | 3 | 4 | 5  |
| 8.   | Computers can be used successfully with courses which demand creative activities.         | (170) | 1  | 2 | 3 | 4 | 5  |
| from | The Computer Survey Scale, Stevens, 1982  |       |    |   |   |   |    |
| 9.   | High school students should understand the role computers play in society.                | (172) | 1  | 2 | 3 | 4 | 5  |
| 10.  | High school students should have some understanding about computers.                      | (173) | 1  | 2 | 3 | 4 | 5  |
| 11.  | Computers can be a useful instructional aid in almost all subject areas.                  | (175) | 1  | 2 | 3 | 4 | 5  |

|      |   |       | SD | D | U | A | SA |
|------|---|-------|----|---|---|---|----|
| 12.  | Use of computers in education almost always reduces the personal treatment of students. | (176) | 1  | 2 | 3 | 4 | 5  |
| 13.  | I feel at ease when I am around computers.  | (177) | 1  | 2 | 3 | 4 | 5  |
| 14.  | Teacher training should include instructional applications of computers.                | (179) | 1  | 2 | 3 | 4 | 5  |
| from | Attitude Toward Computer Scale, Francis, 1993   |       |    |   |   |   |    |
| 15.  | Learning about computers is boring to me.   | (180) | 1  | 2 | 3 | 4 | 5  |
| 16.  | I like learning on a computer.  | (181) | 1  | 2 | 3 | 4 | 5  |
| 17.  | Working with a computer would make me very nervous.                                     | (182) | 1  | 2 | 3 | 4 | 5  |
| 18.  | The challenge of solving problems with computers does not appeal to me.                 | (185) | 1  | 2 | 3 | 4 | 5  |
| 19.  | I think working with computers would be enjoyable and stimulating.                      | (186) | 1  | 2 | 3 | 4 | 5  |
| 20.  | Learning about computers is interesting.  | (187) | 1  | 2 | 3 | 4 | 5  |
| 21.  | Computers are boring.   | (189) | 1  | 2 | 3 | 4 | 5  |
| 22.  | Computers are not exciting.   | (191) | 1  | 2 | 3 | 4 | 5  |
| 23.  | Studying about computers is a waste of time.  | (192) | 1  | 2 | 3 | 4 | 5  |
| 24.  | It is fun to figure out how computers work.   | (193) | 1  | 2 | 3 | 4 | 5  |
| 25.  | I enjoy learning how computers are used in our daily lives.                             | (195) | 1  | 2 | 3 | 4 | 5  |
| from | CAM (Computer Attitude Measure), Kay, 1993  |       |    |   |   |   |    |
| 26.  | Computers would motivate students.  | (196) | 1  | 2 | 3 | 4 | 5  |
| 27.  | Computers would significantly improve the overall quality of my students' education.    | (197) | 1  | 2 | 3 | 4 | 5  |
| 28.  | Computers would help students improve their writing.                                    | (198) | 1  | 2 | 3 | 4 | 5  |
| 29.  | Computers would stimulate creativity in students.                                       | (199) | 1  | 2 | 3 | 4 | 5  |
| 30.  | Computers would help students work with one another.                                    | (200) | 1  | 2 | 3 | 4 | 5  |
| 31.  | Computers would help me organize my work.   | (201) | 1  | 2 | 3 | 4 | 5  |

|      |  |       | SD | D | U | A | SA |
|------|--|-------|----|---|---|---|----|
| 32.  | Computers would increase my productivity.  | (202) | 1  | 2 | 3 | 4 | 5  |
| 33.  | Computers would save me time.  | (203) | 1  | 2 | 3 | 4 | 5  |
| 34.  | Computers would help me learn.   | (204) | 1  | 2 | 3 | 4 | 5  |
| 35.  | Computers would help me organize my finances.  | (205) | 1  | 2 | 3 | 4 | 5  |
| 36.  | Computers improve the overall quality of life.   | (207) | 1  | 2 | 3 | 4 | 5  |
| from | CARS, Chu & Spires, 1991   |       |    |   |   |   |    |
| 1.   | I look forward to using a computer on my job.  | (209) | 1  | 2 | 3 | 4 | 5  |
| 2.   | The challenge of learning about computers is exciting.   | (211) | 1  | 2 | 3 | 4 | 5  |
| 3.   | Learning to operate computers is like learning any new skill - the more you practice, the better you become.             | (214) | 1  | 2 | 3 | 4 | 5  |
| 4.   | I am afraid that if I begin to use computers I will become dependent upon them and lose some of my reasoning skills.     | (215) | 1  | 2 | 3 | 4 | 5  |
| 5.   | I am sure that with time and practice I will be as comfortable working with computers as I am working with a typewriter. | (216) | 1  | 2 | 3 | 4 | 5  |
| 6.   | I dislike working with machines that are smarter than I am.  | (218) | 1  | 2 | 3 | 4 | 5  |
| 7.   | I feel apprehensive about using computers.   | (219) | 1  | 2 | 3 | 4 | 5  |
| 8.   | If given the opportunity, I would like to learn about and use computers.   | (224) | 1  | 2 | 3 | 4 | 5  |
| 9.   | I have avoided computers because they are unfamiliar and somewhat intimidating to me.                                    | (225) | 1  | 2 | 3 | 4 | 5  |
| 10.  | I feel computers are necessary tools in both educational and work settings.  | (226) | 1  | 2 | 3 | 4 | 5  |
| from | CASS, Jones & Clarke, 1994   |       |    |   |   |   |    |
| 11.  | Computers intimidate and threaten me.  | (227) | 1  | 2 | 3 | 4 | 5  |
| 12.  | Working with a computer makes me feel tense and uncomfortable.   | (230) | 1  | 2 | 3 | 4 | 5  |
| 13.  | Computers are difficult to understand.   | (231) | 1  | 2 | 3 | 4 | 5  |
| 14.  | I feel important when others ask me for information about computers.   | (236) | 1  | 2 | 3 | 4 | 5  |
| 15.  | Using the computer has increased my interaction with other students.   | (237) | 1  | 2 | 3 | 4 | 5  |

SD D U A SA

|       |   |       |   |   | _ |   |   |
|-------|---|-------|---|---|---|---|---|
| 16.   | Anything that a computer can be used for, I can do just as well in another way. | (239) | 1 | 2 | 3 | 4 | 5 |
| 17.   | Working with computers makes me feel isolated from other people.                | (241) | 1 | 2 | 3 | 4 | 5 |
| 18.   | Working with computers will not be important to me in my career.                | (242) | 1 | 2 | 3 | 4 | 5 |
| 19.   | I would like to spend more time using a computer.                               | (243) | 1 | 2 | 3 | 4 | 5 |
| 20.   | If I can, I will take subjects that will teach me to use computers.             | (246) | 1 | 2 | 3 | 4 | 5 |
| 21.   | People who work with computers sit in front of a computer screen all day.       | (248) | 1 | 2 | 3 | 4 | 5 |
| 22.   | I would like to learn more about computers.                                     | (249) | 1 | 2 | 3 | 4 | 5 |
| 23.   | Working with computers means working on your own, without contact with others.  | (251) | 1 | 2 | 3 | 4 | 5 |
| 24.   | If I need computer skills for my career choice, I will develop them             | (252) | 1 | 2 | 3 | 4 | 5 |
| 25.   | Working with a computer makes me feel very nervous.                             | (256) | 1 | 2 | 3 | 4 | 5 |
| 26.   | Using a computer prevents me from being creative.                               | (257) | 1 | 2 | 3 | 4 | 5 |
| 27.   | Computers are confusing.  | (259) | 1 | 2 | 3 | 4 | 5 |
| 28.   | Computers make me feel uncomfortable.   | (260) | 1 | 2 | 3 | 4 | 5 |
| 29.   | You have to be a "brain" to work with computers.                                | (261) | 1 | 2 | 3 | 4 | 5 |
| 30.   | Not many people can use computers.  | (262) | 1 | 2 | 3 | 4 | 5 |
| 31.   | I get a sinking feeling when I think of trying to use a computer.               | (263) | 1 | 2 | 3 | 4 | 5 |
| 32.   | Computers frustrate me.   | (264) | 1 | 2 | 3 | 4 | 5 |
| from. | Attitudes Toward Computers Scale, Reece & Gable, 1982                           |       |   |   |   |   |   |
| 33.   | I will use a computer as soon as possible.                                      | (266) | 1 | 2 | 3 | 4 | 5 |
| 34.   | I will take computer courses.   | (267) | 1 | 2 | 3 | 4 | 5 |
| 35.   | Computers can be used to save lives.  | (268) | 1 | 2 | 3 | 4 | 5 |
| 36.   | I enjoy computer work.  | (270) | 1 | 2 | 3 | 4 | 5 |
| 37.   | I would never take a job where I had to work with computers.                    | (272) | 1 | 2 | 3 | 4 | 5 |
|       |   |       |   |   |   |   |   |

Instructions: Please circle the appropriate number to indicateyour agreement or disagreement with each statement.

1 = Strongly Disagree (SD) 2 = Disagree (D)

3 = Undecided(U)

4 = Agree(A)

5 = Strongly Agree (SA)

| from D'Souza, 1992 |  | SD    | D | U | A | SA |   |
|--------------------|--|-------|---|---|---|----|---|
| 1.                 | Electronic mail (E-mail) is an effective means of disseminating class information and assignments. | (274) | 1 | 2 | 3 | 4  | 5 |
| 2.                 | I prefer E-mail to traditional class handouts as an information disseminator.                      | (275) | 1 | 2 | 3 | 4  | 5 |
| 3.                 | More courses should use E-mail to disseminate class information and assignments.                   | (276) | 1 | 2 | 3 | 4  | 5 |
| 4.                 | E-mail provides better access to the instructor.   | (277) | 1 | 2 | 3 | 4  | 5 |
| 5.                 | The use of E-mail creates more interaction:  |       |   |   |   |    |   |
|                    | between students enrolled in the course  | (278) | 1 | 2 | 3 | 4  | 5 |
|                    | between student and instructor   | (279) | 1 | 2 | 3 | 4  | 5 |
| 6.                 | The use of E-mail increases motivation for the course.   | (280) | 1 | 2 | 3 | 4  | 5 |
| 7.                 | The use of E-mail makes the course more interesting.   | (281) | 1 | 2 | 3 | 4  | 5 |
| 8.                 | The use of E-mail makes the student feel more involved.  | (282) | 1 | 2 | 3 | 4  | 5 |
| 9.                 | The use of E-mail helps the student to learn more.   | (283) | 1 | 2 | 3 | 4  | 5 |
| 10.                | The use of E-mail helps provide a better learning experience.                                      | (284) | 1 | 2 | 3 | 4  | 5 |

(End)

Thank you!

Ver 2.22 4/97