Quick Quiz: A Mini-Authoring System

Catalog Number 26-1728

Radio Shack®

TRS-80

Education Management Systems

Quick Quiz: A Mini-Authoring System allows a teacher to create exercises and/or tests in any subject area for use in the classroom. The Quick Quiz program uses a pre-designed multiple-choice format, and includes editing and student record-keeping capabilities. Exercises or tests can be administered at the computer, or multiple copies can be printed out using a line printer.

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Important Note to Model III Users

From time to time, Radio Shack may release new versions of TRSDOS, the TRS-80 disk operating system. Check with your local Radio Shack or the *TRS-80 Microcomputer News* for notices and instructions on these enhanced versions of TRSDOS.

If you receive a new version of TRSDOS, read the following before making any modifications to your existing software packages (applications, languages, or system utilities):

- Do not convert your Radio Shack software packages for use with the new version of TRSDOS unless you are instructed to do so.
- Before converting a Radio Shack supplied Model I software package to a Model III format, check to see if Radio Shack provides a Model III version of the package. If so, you should obtain a copy of that version.
- If you're using several different software packages, press the RESET button whenever you change software.

Thank-You!

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Quick Quiz: A Mini-Authoring System

Radio Shack®
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FORT WORTH, TEXAS 76102

Second Edition

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CHAPTER I COMPUTER CENTER

INTRODUCTION

INTRODUCTION

Radio Shack's Quick Quiz: A Mini-Authoring System is designed to allow a teacher to create exercises and/or tests in any subject area for use in the classroom. As a "mini-authoring system," it provides a basic framework or skeleton in which a teacher can easily create CAI material to meet the specific needs of his/her students.

With the Quick Quiz program, a teacher can:

- choose the topic for an exercise or test
- use the pre-designed multiple-choice format to type up to 40 questions, with up to 4 answer choices per question
- save an exercise or test on a disk file for later use
- edit any question or answer choice
- administer the exercise or test by printing out multiple copies, or by allowing students to work at the computer
- review and print out test results on file at any time.

The Quick Quiz program can be used with the TRS-80 Model I (with Level II BASIC) 32K or 48K disk system, or the Model III (with Model III BASIC) 32K or 48K disk system.

Teachers will find the Quick Quiz program a valuable instructional tool that allows them to create quality teaching materials quickly and easily.

USER'S GUIDE

PART I

WORKING WITH THE TRS-80 COMPUTER

Before loading the Quick Quiz program into the TRS-80, take a moment to familiarize yourself with the computer. Here are the major components you'll need to know:

Note: If you are setting up your TRS-80 for the first time, refer to the user's manual packed with each TRS-80 system for instructions.

Before you load your program, let's take a moment to review some special keys and features.

SPECIAL KEYS AND FEATURES

READY
>_

When the "READY prompt" appears on the screen, the computer is waiting for a command (e.g., [R][U][N]). (If you are using a TRS-80 Model III, you will see a flashing box instead of the short line.)

■

This flashing rectangle is called a "cursor." When it flashes the computer is waiting for you to enter information (e.g., option selection, name).

[ENTER]

This key is used to "enter" information into the computer. Pressing [ENTER] causes the computer to evaluate what you have typed. Remember to press [ENTER] after you have:

- chosen an option
- typed in a response to a question
- selected an answer choice when taking a test
- typed in your name
- typed [R][U][N].

[N]

When you are reviewing and editing test questions, press [N] to move forward to the next question.

[P]

When you are reviewing and editing test questions, press [P] to move backward to the previous question.

[←]

The "left-arrow" [←] key can be used to erase characters when typing a question or answer choice *before* you press [ENTER]. Each press of the key moves the cursor back one space and erases the character in that space. If the "left-arrow" key is pressed at the beginning of the line, the cursor moves back to the end of the previous line and deletes the last character. To delete the entire question or answer choice, press [SHIFT] [←].

[*]

You can return to the option list by typing the asterisk ([SHIFT] [:]). See **RETURNING TO THE OPTION LIST** on page 23 for details.

[SHIFT] [→]

Whenever you are creating test questions, holding down the [SHIFT] key and pressing the "right-arrow" [→] key allows you to draw an underline.

↓

Whenever you are typing a question or an answer choice that will be more than one line long on the screen, press the "down-arrow" ↓ key at the end of a word *before* the end of the line is reached. The cursor will move down to the next line and you can continue typing. This procedure insures that the computer will not automatically break a line in the middle of a word when the end of the line on the screen is reached.

Whenever you are editing or answering test questions, each press of the ↓ key causes the numeral to the side of the next item or answer choice to blink.

↑

Whenever you are editing or answering test questions, each press of the "up-arrow" ↑ key causes the numeral to the side of the previous item or answer choice to blink.

LAST QUESTION

Whenever you are reviewing and editing test questions, the message, **"LAST QUESTION,"** appears on the screen with the last test question. At this point, you have the option of pressing P to move back through the test and review the questions once more, or completing your review by examining the last question. (After you have finished your review, press N on the last question to leave the Edit mode.)

FILENAME

The filename is the name of the file of questions you create and store on the diskette for future use. For more information on filenames, see **FILENAMES** on page 24.

RESET button

Pressing the RESET button (located in the left rear of the Model I keyboard, and to the right of the Model III keyboard) causes the Quick Quiz program, together with any test you may be in the process of creating, to be "lost." The program may be loaded again by following the directions on page 10, but any test which was not stored on the diskette can not be recovered.

LOADING THE QUICK QUIZ PROGRAM

TRS-80 Model I

1. Turn on the disk drives, video display, and expansion interface.

2. Place the Quick Quiz diskette with the square notch up and the label to the right in DRIVE Ø (DRIVE Ø is the disk drive closest to the expansion interface), and close the door.

3. Turn on the keyboard by pushing in the power button located on the back to the left of the power jack.

4. When **DOS READY** appears on the screen type [B][A][S][I][C], then press [ENTER].*

5. When **HOW MANY FILES?**_ appears on the screen, press [ENTER]. When **MEMORY SIZE?**_ appears on the screen, press [ENTER] again.

6. Type [R][U][N]["][Q][Q]["] and press [ENTER]. You'll see the title screen appear on the video display.

To begin working with the Quick Quiz program, turn to page 12.

*If your Model I computer is equipped with a lower-case modification, you can enable the lower-case driver when **DOS READY** first appears on the screen. Then type [B][A][S][I][C] [ENTER] and continue with Step 5.

TRS-80 Model III

1. Turn on the computer. (The On/Off switch is under the right side of the keyboard.)

2. When the red light goes off, insert the program diskette in DRIVE Ø (the bottom drive) with the square notch to the left and the label facing up, and close the door.

3. Press the orange RESET button.

4. Type the date, being sure to use two digits each for the month, day, and year, with a slash separating each pair. (Example: [Ø][2][/][Ø][1][/][8][1] for February 1, 1981.) Then press [ENTER].

5. Enter the time OR simply press [ENTER]. (If you enter the time, be sure to use two digits each for the hour, minutes, and seconds, with a colon separating each pair.)

6. When **TRSDOS Ready** appears on the screen, type [B][A][S][I][C] [ENTER].

7. When **How Many Files?** appears on the screen, press [ENTER]. When **Memory Size?** appears on the screen, press [ENTER] again.

8. When the **READY** prompt appears, type [R][U][N]["][Q][Q]["] and press [ENTER]. You'll see the title screen appear on the video display.

To begin working with the Quick Quiz program, turn to page 12.

USING THE QUICK QUIZ PROGRAM

TAKING A TEST

Now that Quick Quiz is loaded and running, you can begin working with the program. The first screen you'll see is the title screen:

After a few seconds, the option screen appears:

Let's start by looking at the sample test stored on the diskette. Press [2] [ENTER] for **"RUN A TEST ALREADY ON FILE."** You'll then be asked, **"WHICH FILE OF QUESTIONS DO YOU WANT TO USE?"**. At this point, the teacher types in the name of the file of questions to be presented (also called the "filename"). For this demonstration, type [V][E][R][B][T][E][S][T] to see the sample test of this name, and press [ENTER].* Next you'll see the question, **"WHAT HEADING DO YOU WANT DISPLAYED ON THE TEST?"**. The heading you choose will appear at the top of every test question the student sees. Now type [V][E][R][B][S] for your heading and press [ENTER].

When the question, **"WHAT IS YOUR NAME?"**, appears on the screen, type your name and press [ENTER]. (This is the point at which a student would start working with the program.) You'll immediately see this screen on the display:

The heading, question number, and student's name appear at the top of the screen, followed by a question and four answer choices. Notice that the numeral 1 to the left of "THREE" is blinking. If this is the answer choice you want, press [ENTER] to "enter" it into the computer. If you wish to select one of the other choices, press the down-arrow key until the numeral by the answer of your choice is blinking, and then press [ENTER]. (Each press of the down-arrow [↓] key causes the next numeral to blink; each press of the up-arrow [↑] key causes the previous numeral to blink.)

*When typing text onto the screen, you can correct errors *before* you press [ENTER] by backspacing with the left-arrow [←] key to the point of the error, and then retyping to the end of the line.

If your response is incorrect, you'll see the message, **"PLEASE TRY AGAIN."** You'll need to answer the question correctly to proceed to the next question. (To do this, press [ENTER] when the numeral 3 to the left of "FOUND" is blinking.)

Note: The computer will not accept typed numbers for answers; use the [↓] and [↑] keys to choose your answer and press [ENTER].

Continue answering the test questions until all five are completed. You'll then see your report:

Pressing the [ENTER] key at this point allows another student to enter his/her name and take the same test. Right now, let's press the asterisk key ([SHIFT] [:]) to return to the option list. (See **RETURNING TO THE OPTION LIST** on page 23 for information on how to use the asterisk key.)

CREATING A TEST

Now that you've seen how a sample test appears to the student, you're ready to create your own file of questions. Press [1] [ENTER] for **"CREATE A FILE OF QUESTIONS."** First you'll be asked, **"HOW MANY QUESTIONS FOR THE TEST?"**. In Quick Quiz, you can create a test of up to forty questions; however, for demonstration purposes, let's limit the test to three questions. To answer the question on the screen, type [3] [ENTER]. Next, you'll be asked to indicate the number of choices for each question. Again, type [3] and press [ENTER]. (The maximum number of choices per question is 4.)

You'll then see this screen:

You can now type in the first question, which may be up to 3 lines in length. If you see that the question will be more than one line long, press the down-arrow [↓] key at the end of a word *before* the end of the line on the screen has been reached (the horizontal bar under the heading indicates the length of a line). This will cause the cursor to move down to the beginning of the next line on the screen.* Continue typing, using the left-arrow [←] key if necessary to correct mistakes.

When you have finished typing your first question, press [ENTER]. You'll see the number 1 and a flashing cursor appear. You can now type in your first answer choice. Answer choices may be up to two lines long; if yours takes more than one line, use the [↓] key as described above to move the cursor down to the next line. When your answer is completely typed, press [ENTER] and type in answer choices 2 and 3 using the same procedure.

Once you have completed your answers, the question, **"WHICH CHOICE IS CORRECT?"**, appears at the bottom of the screen. Type the number of the correct answer and press [ENTER]. You'll then be asked, **"QUESTION 1 OK (Y/N)?"**. At this point, you can look over the question and answers you have just typed to make sure they're all right. If you want to move on to the next question, press [Y] for YES and then [ENTER]. If you'd like to re-do the question, press [N] for NO, and then [ENTER]. The question is erased and you can type the question again.

*If you do not use the [↓] key, the cursor will automatically move down to the next line on the screen when the previous one is filled. This can cause such undesirable results as a line being broken in the middle of a word. You might want to try this yourself so that you'll see more clearly what to avoid.

Continue typing in your test questions until you have completed all three. You'll then be asked, **"WHAT FILENAME DO YOU WANT TO USE FOR THE TEST ON THE DISKETTE?"**. Make sure your filename contains no more than eight characters and starts with a letter. (See **FILENAMES** on page 24 for details on filenames.)

Once you have decided on a filename, type it in and press [ENTER]. The computer will then "save" your test on the diskette under that file name and return you to the option list:

EDITING A TEST

Now type [3] [ENTER] to **"REVIEW AND EDIT A TEST ALREADY ON FILE."** When you see the question, **"WHICH FILE OF QUESTIONS DO YOU WANT TO USE?"**, type the filename you chose for the test you just created, and press [ENTER]. On the screen you will see Question Number 1 of your test, together with the three answer choices. Notice the line, **"CHANGE THE QUESTION,"** below the last answer choice, followed by **"CHANGE CORRECT ANSWER CHOICE"** with the current correct answer choice indicated in parentheses.

Now you can edit the question in several ways:

- To change an answer choice, press the up-arrow [↑] key until the numeral to the left of the desired choice blinks, and press [ENTER]. The current answer choice disappears, and you can type in a new one. (Remember to press [ENTER] when you have finished typing the answer choice.)

- To change the question, press the [↑] key once so that the numeral to the left of **"CHANGE THE QUESTION"** is blinking, and press [ENTER]. The question at the top of the screen disappears and you can type and enter a new one.

- To change the correct answer choice, press [ENTER] when the numeral next to that line is blinking. The current correct answer choice disappears. Then type in the numeral of the new correct answer choice and press [ENTER].

When you are finished editing Question Number 1, press [N] to go on to the next question. You can now:

- edit this question as desired, then press [N] to go to the next question (Question Number 3).

- simply press [N] to go to the next question if you do not wish to edit this one.

- press [P] to return to the previous question, if you should decide to make further changes to it.

When you arrive at Question Number 3, the message, **"LAST QUESTION,"** flashes in the lower right corner of the screen. Whenever you reach the last test question in the Edit mode, this message flashes to remind you that you have one last chance to review and edit previous questions before leaving the Edit mode. So if you want to review your questions once more, each press of the [P] key will return you to the previous question. When you are completely finished editing your test, press [N] when Question 3 is displayed.

The next screen which appears tells you the filename of the test you just edited. The question, **"WHAT FILENAME DO YOU WANT TO USE FOR THE TEST ON THE DISKETTE?"**, asks you to name the edited version of your test. If you want to *replace* the old version with the new edited version, type in the old version's filename and press [ENTER]. If you want to keep *both* versions on the diskette, then type in a new filename for your edited test and press [ENTER].

Now the option list screen appears once more, and you can continue to practice using Quick Quiz, or choose Option 7 to end the program. (For a brief description of Options 4, 5, 6, and 7, see the corresponding sections which follow.)

When you are ready to stop, make sure you remove the diskette from the disk drive before turning off the computer.

USER'S GUIDE

PART II

OPTION 4 — REVIEW TEST RESULTS

As each student completes a test, his/her score is stored in a results file on the diskette. You can look at the test results for your students by choosing Option 4 when the option list screen is displayed. The student's name, the name of the test, and the percentage of correct responses for each student are then listed in chart form for your review.

IMPORTANT: The name of the test, as it appears on the test results display, is the same as the *heading* you chose for the test when it was administered (not the filename you chose when the test was created). So be sure to specify the same heading on each different occasion that a particular test is administered.

If a line printer is attached to the TRS-80 and you want to have a printed copy of the test results, respond with [Y] for YES to the question, **"PRINT TEST RESULTS ON LINE PRINTER (Y/N)?"**, at the bottom of the results screen, and press [ENTER]. If you do not want to print out the results or if a line printer is not attached, press [N] for NO and [ENTER].

The results of up to 50 test sessions can be recorded in the results file. If a student completes a test and sees the message, **"THE TEST RESULTS FILE IS FULL,"** on his report screen, then you should:

1. Copy down the student's score on that test.

2. Use Option 4 if desired to review the test results file and make a printed copy.

3. Use Option 5 to erase the test results, so that more student results can be stored on the diskette.

The results file should be printed out (or copied down) and erased periodically, to ensure that there is always enough room left in the file to record your students' scores.

OPTION 5 — ERASE TEST RESULTS FROM DISKETTE

The test results file on the diskette holds the results of up to 50 student test sessions. You will need to "empty" the test results file after every 50th test session (or sooner, if desired) in order to continue using the program with your students. Before erasing them, you may first want to review and print out the test results (using Option 4).

When you choose Option 5, the question, **"ERASE TEST RESULTS FROM DISKETTE (Y/N)?"**, appears at the bottom of the screen. Press [Y] for YES or [N] for NO (if Option 5 was chosen accidentally). If you choose [Y], all test results currently stored on the diskette are erased, making room for the storage of more test results.

OPTION 6 — PRINT OUT TEST ON LINE PRINTER

Option 6 allows you to make printed copies of tests already stored on the diskette. After you choose Option 6 on the option list screen, the computer will ask you, **"WHICH FILE OF QUESTIONS DO YOU WANT TO USE?"**. Type and enter the filename of the test you wish to print out. Then type and enter the heading you want printed on the test (up to 15 characters in length) and the number of copies to be printed. The specified number of test copies, plus a copy of the answer key for that test, will then be printed out.

IMPORTANT: Before printing out a test, make sure that the printer head is positioned at the beginning of a new page. This insures that your test copies will be properly formatted.

OPTION 7 — END PROGRAM

When you choose Option 7, the program is ended and the title screen with the **READY** prompt reappears. To run the Quick Quiz program again, simply type [R][U][N] [ENTER].

RETURNING TO THE OPTION LIST

You can return to the option list screen at almost any point in the program by using the asterisk key ([*]) in one of the following two ways:

- Whenever the computer is waiting for a response and the cursor is flashing, type [*] [ENTER], and the option list will appear on the screen. (To type the asterisk, press SHIFT [:].)

- At all other times when the computer is waiting for a response, simply press [*].

Note: The asterisk key will *not* return you to the option list at the question, **"WHAT IS YOUR NAME?"**, or when the computer asks a question that must be answered with a number (such as, **"HOW MANY QUESTIONS FOR THE TEST?"**).

If you are creating a test and return to the option list using the asterisk key, all test questions that you have typed so far will be lost. This is fine if, for example, you decide while creating the test that you want to start over with new material. But if you want the test to be saved on the diskette for future use, you must finish typing the entire number of questions you specified earlier for the test, and then type a filename for the test when you are asked for it.

FILENAMES

After you have created your test questions using Quick Quiz, you will be asked to enter a filename for the test. To create a filename, follow the guidelines below.

- The first part of the filename can consist of one to eight letters, numbers, or a combination of letters and numbers, with the restriction that the first character in the filename must be a letter.

- After the first part of the filename, you can add an optional extension consisting of a slash (/) followed by up to 3 letters, numbers, or a combination of letters and numbers; again, the first character in the extension must be a letter.

- It is possible to include a drive specification and/or password in the filename. TRS-80 Model I owners should consult the *Disk Operating System/Disk Basic* manual that comes with the system; Model III owners, see the *Disk System Owner's Manual.*

- There can be no spaces or special characters in the filename; use letters and numbers only.

If you encounter the message, **"AN INVALID FILENAME WAS USED,"** after entering your filename, check to see that you have followed the above guidelines and enter the filename again.

The following are examples of valid filenames:

HISTORY/IV	**SPELLING/OCT**	**ENGL5**
MATHTEST	**HEALTH/GR4**	**SCIENCE7**

ERASING TESTS FROM THE DISKETTE

As you continue creating tests and adding them to the ones already stored on your Quick Quiz diskette, the amount of available storage space on the diskette becomes smaller and smaller, until eventually there is no room left for new tests. This problem can be avoided by proper use of the DIR, KILL, and FREE commands, discussed individually below.

The DIR, KILL, and FREE commands can be used only when **DOS READY** is on the screen. **DOS READY** appears when the computer is first turned on, and each time the RESET button is pressed. (See **SPECIAL KEYS AND FEATURES**, page 9, for a description of the RESET button.)

(On the TRS-80 Model III, **DOS READY** is replaced by **TRSDOS Ready**. **TRSDOS Ready** appears after the date and time have been entered when the computer is first turned on, and each time the RESET button is pressed.)

DIR

You can review the list of filenames of all tests stored on your diskette by typing [D][I][R] [ENTER] when **DOS READY** is on the screen. (DIR stands for "Directory.") It is also a good idea to keep an updated written list of the test filenames so that you do not "lose" the program in order to use the DIR command. (See RESET button description on page 9.)

KILL

You can erase tests individually from the diskette by typing [K][I][L][L] followed by a space and the filename of the test you wish to erase (e.g., [K][I][L][L]□ [B][I][O][L][O][G][Y] [ENTER]) when **DOS READY** is on the screen.

FREE

You should periodically check the amount of space (measured in granules, abbreviated "grans") left on the Quick Quiz diskette, so that you will know when it is time to erase current tests to make room for new ones. If you are using a TRS-80 Model I, type [F][R][E][E] [ENTER] when **DOS READY** is on the screen, and the number of grans remaining on the diskette will be indicated on the far right side of the screen. On the TRS-80 Model III, the number of remaining granules appears as the bottom line of the directory when the DIR command is used. When the number of remaining granules has diminished to between 5 and 10, you should erase one or more tests from the diskette using the KILL command, before trying to create and store any additional tests.

APPENDIX I

MAKING A BACKUP COPY OF THE QUICK QUIZ DISKETTE

It is good practice to make a backup copy of the Quick Quiz program diskette to use with your students. The original Quick Quiz diskette supplied with the program should be stored to protect it from damage. To make a backup copy, follow the steps below.

I. Model I Two-Drive System

1. Turn on everything except the TRS-80 keyboard. If this is the first time you've ever used the Radio Shack Disk System, refer to the *Disk Operating System/Disk Basic* manual for detailed instructions.

2. Insert a new, blank diskette in DRIVE 1 (second from the expansion interface on the cable) with the square notch up and the label to the right, and close the door.

3. Place a white tab (provided with new diskettes) over the square notch in the Quick Quiz program diskette. If you do not have any tabs, use a small piece of cellophane tape.

4. Insert the program diskette in DRIVE Ø (closest to expansion interface on the cable) with the covered notch up and the label to the right, and close the door.

5. Turn on the TRS-80 keyboard. (The On/Off button is on the right rear of the keyboard.)

6. When the screen shows: You type:

When the screen shows:	You type:
DOS READY	[B][A][C][K][U][P] [ENTER]
SOURCE DRIVE NUMBER?	[Ø] [ENTER]
DESTINATION DRIVE NUMBER?	[1] [ENTER]
BACKUP DATE (MM/DD/YY)?	[Ø][2][/][Ø][1][/][8][1] [ENTER] (Example for February 1, 1981)

The drives will come on and the computer will proceed to make the backup. If, after the drives stop spinning, the screen shows:

BACKUP COMPLETE
HIT <ENTER> TO CONTINUE

then press [ENTER].

If, after the drives stop spinning, the screen shows an error message of any kind, or does not say **BACKUP COMPLETE**, then press the RESET button and go back to Step 6. If an error still occurs, then get a

new blank diskette or bulk erase the diskette you have been using as destination disk. Then insert the blank diskette in DRIVE 1, press [ENTER], and go to Step 6.

II. Model I One-Drive System

1. Turn on everything except the TRS-80 keyboard. If this is the first time you've ever used the Radio Shack Disk System, refer to the *Disk Operating System/Disk Basic* manual for detailed instructions.

2. Place a white tab (provided with new diskettes) over the square notch in the Quick Quiz program diskette. If you do not have any tabs, use a small piece of cellophane tape.

3. Insert the program diskette in the disk drive with the covered notch up and the label to the right. Close the door.

4. Turn on the TRS-80 keyboard. (The On/Off button is on the right rear of the keyboard.)

5.

When the screen shows:	You type:
DOS READY	[B][A][C][K][U][P] [ENTER]
SOURCE DRIVE NUMBER?	[Ø] [ENTER]
DESTINATION DRIVE NUMBER?	[Ø] [ENTER]
BACKUP DATE?	[Ø][2][/][Ø][1][/][8][1] [ENTER] (Example for February 1, 1981)
INSERT SOURCE DISK	Press [ENTER]
INSERT DESTINATION DISK	After the red light on the disk drive goes off, remove the program diskette and insert a new, blank diskette with the uncovered square notch up and the label to the right. Close the door and press [ENTER].
INSERT SOURCE DISK	Continue to switch back and forth between the program diskette (**SOURCE DISK**, notch covered) and the new diskette (**DESTINATION DISK**, notch uncovered) as instructed on the screen. Do not open the disk drive door while the red light is on.

If the screen shows:

BACKUP COMPLETE
HIT <ENTER> TO CONTINUE

then press [ENTER].

If the screen shows an error message of any kind, or does not say **BACKUP COMPLETE**, then put the program diskette back in the drive, press the RESET button, and go back to Step 5. If an error still occurs, get a new blank diskette or bulk erase the diskette you have been using as destination disk. Put the program diskette back in the drive, press [ENTER], and go to Step 5.

III. Model III Two-Drive System

1. Turn on the computer. (The On/Off switch is under the right side of the keyboard.)

2. Insert a new, blank diskette in DRIVE 1 (the top disk drive) with the square notch to the left and the label facing up, and close the door.

3. Place a white tab (provided with new diskettes) over the square notch in the Quick Quiz program diskette. If you do not have any tabs, use a small piece of cellophane tape.

4. Insert the program diskette in DRIVE Ø (the bottom drive) with the covered notch to the left and the label facing up, and close the door.

5. Press the orange RESET button.

6. When the screen shows: — You type:

When the screen shows:	You type:
Enter Date (MM/DD/YY)?	[Ø][2][/][Ø][1][/][8][1] [ENTER] (Example for February 1, 1981)
Enter Time (HH:MM:SS)?	Press [ENTER]
TRSDOS Ready	[B][A][C][K][U][P] [ENTER]
SOURCE Drive Number?	[Ø] [ENTER]
DESTINATION Drive Number?	[1] [ENTER]
SOURCE Disk Master Password?	[P][A][S][S][W][O][R][D] [ENTER]

The drives will come on and the computer will proceed to make the backup. If, after the drives stop spinning, the screen shows:

****Backup Complete ****

then remove the original Quick Quiz diskette from DRIVE Ø and store it in a safe place. You can now place your backup copy in DRIVE Ø and continue working with the program.

If, after the drives stop spinning, the screen shows an error message of any kind, or does not say **Backup Complete**, then press the orange RESET button and go back to Step 6. If an error still occurs, then get a new blank diskette or bulk erase the diskette you have been using as destination disk. Then insert the blank diskette in DRIVE 1, press the RESET button, and go to Step 6.

IV. Model III One-Drive System

1. Turn on the computer. (The On/Off switch is under the right side of the keyboard.)

2. Place a white tab (provided with new diskettes) over the square notch in the Quick Quiz program diskette. If you do not have any tabs, use a small piece of cellophane tape.

3. Insert the program diskette in the disk drive with the covered notch to the left and the label facing up. Close the door.

4. Press the orange RESET button.

5.

When the screen shows:	You type:
Enter Date (MM/DD/YY)?	[Ø][2][/][Ø][1][/][8][1] [ENTER] (Example for February 1, 1981)
Enter Time (HH:MM:SS)?	Press [ENTER]
TRSDOS Ready	[B][A][C][K][U][P] [ENTER]
SOURCE Drive Number?	[Ø] [ENTER]
DESTINATION Drive Number?	[Ø] [ENTER]
SOURCE Disk Master Password?	[P][A][S][S][W][O][R][D] [ENTER]
Insert SOURCE Diskette <ENTER>	Press [ENTER]
Insert DESTINATION Diskette <ENTER>	After the red light goes off, remove the program diskette and insert a new, blank diskette with the uncovered notch to the left and the label facing up. Close the door and press [ENTER].

Insert SOURCE Diskette <ENTER>

Continue to switch back and forth between the program diskette (**SOURCE diskette**, notch covered) and the new diskette (**DESTINATION diskette**, notch uncovered) as instructed on the screen. Do not open the disk drive door while the red light is on.

If the screen shows:

**** Backup Complete ****
Insert SYSTEM Diskette <ENTER>

then press [ENTER].

If the screen shows an error message of any kind, or does not say **Backup Complete**, then put the program diskette back in the drive, press the RESET button, and go back to Step 5. If an error still occurs, get a new blank diskette or bulk erase the diskette you have been using as destination diskette. Put the program diskette back in the drive, press the RESET button, and go to Step 5.

APPENDIX II

PLANNING YOUR APPLICATION

Appropriate Applications

There seems to be an endless variety of ways to use a computer with students. Some that are appropriate for use with the Radio Shack Quick Quiz program are:

- A number of computers or "student stations" are placed in a special room or learning lab, where students attend scheduled sessions. A special teacher or teacher aide may be in charge of the lab to help students with operation of the system. This scheduled approach provides maximum computer utilization and makes possible the lowest obtainable cost per hour of usage.

- Individual computers are placed in regular classrooms, where they are available to the teacher for use with individual students at the teacher's discretion. This use is becoming more common with the new microcomputers due to the low cost for each system and due to the portability of these systems (no special telephone lines or modems are required).

- Computers are provided for general student use in a library — during school, or after hours — for periods of time that a student can reserve in advance.

- Computers are provided for use by teachers at a central service center or audio-visual library. A teacher can check out a system for use in his/her class. Again, the portability of the microcomputer and its freedom from telephone communication lines makes this use convenient.

There are numerous combinations of these and other uses that are possible. Your own unique circumstances — number of students, or number of computers available — will influence your plans. The following information should help you in obtaining a satisfactory installation in your school.

Choosing a Location: Environmental Considerations

Large computer systems require temperature- and humidity-controlled environments with air filtration systems to eliminate dust and other contaminants. Fortunately, the TRS-80 is not so demanding.

At the same time, certain considerations in the location you choose for your microcomputer will have a direct effect upon its operation and reliability. For best results, you should keep these in mind when choosing the location.

Static Electricity

In dry climates and certain seasons, you can walk across a carpet and feel the static discharge when you touch a metal object. Under some climatic conditions, even your clothing can build up this kind of charge, normally too small for you to feel. These static charges can damage magnetically-stored computer data. Larger charges can even wipe out your computer's memory or cause it to appear to "lock up." If you are in a part of the country where humidity is lower than about 40%, be wary! The ideal humidity level for the operation of a computer is 50% or above. The safest bet is to use a non-carpeted room for your computer, and if you find a really stubborn problem, a humidifier should do the trick. An anti-static floor mat at the computer operator's position can also help.

This is a rather infrequent problem in actual practice, so rest assured we are not trying to imply that you will have this or any of the other problems we have mentioned. We are simply explaining why choice of your installation location should be given consideration and what to do just in case you do encounter a problem.

Power Line Interference

Any complex electronic equipment is sensitive to power line conditions affecting the voltage and current coming out of your wall socket. Computers are probably more sensitive than other electronics because the loss of even one bit (one tiny electrical charge) of information can cause a problem to "bomb out" or a data file to be lost. This is rarely a problem unless you are operating in an environment where heavy electrical machinery is in operation. Yet you might experience trouble if an appliance or office machine has a defective switch which arcs when turned on or off. If this happens, you will have to (1) repair the appliance, or isolate the power going to the computer by either (2) installing a separate line or (3) using a line filter. (Radio Shack sells a low-cost line filter that will cure the problem in 90% of these cases.) In a severe case, both (2) and (3) may be required. "Brownouts" (periodic drops in line voltage to unusually low levels) or power line "spikes" (transient surges of very large voltage levels lasting only a fraction of a second) may require the addition to your system of a "constant voltage transformer."

Power line problems are rare and many times can be solved before they occur by proper choice of installation location for your computer system. The more complex the system, the more consideration you should give to your installation.

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NOTE: Good data processing procedure dictates that the user test the program, run and test sample sets of data, and run the system in parallel with the system previously in use for a period of time adequate to insure that results of operation of the computer or program are satisfactory.

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