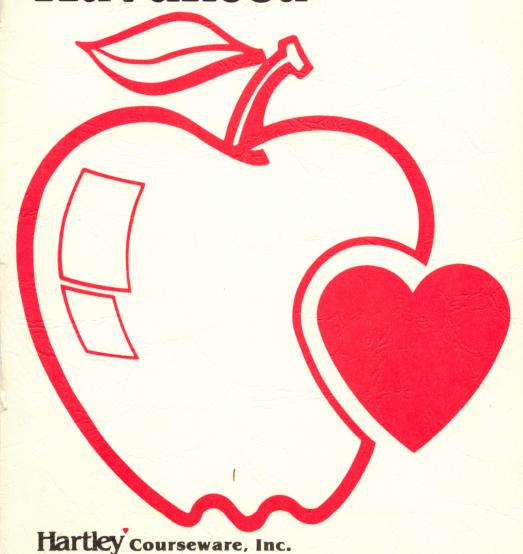# Create Lessons-Advanced

Hartley Courseware, Inc.

Create Lessons-Advanced

This program gives teachers of upper level students
the opportunity to create their own computer lessons
without technical programming experience. Using
this handy utility, teachers can design practice
lessons, tutorials, and tests. Hint and explanation
frames and a variety of Design Options allow the
teacher to tailor each lesson to specific needs.
Students will·profit from immediate feedback while
complete recordkeeping of their progress is kept for
the teacher.

Create Lessons--Advanced

requires the following hardware:

*a 48K Apple II+, IIe, or IIc

or Franklin ACE 1000

and one disk drive (two preferable)

©1986 Hartley Courseware, Inc.
Dimondale, MI 48821

***

CONTENTS

***

This disk uses a high speed operating system,
Diversi--DOS,[T.M.] which is licensed for use with this
program only. To legally use Diversi--DOS, you may
send $30.00 directly to DSR, Inc., 5848 Crampton
Ct., Rockford, IL 61111. You will receive a
Diversi--DOS utility disk with documentation.

***

The small upper/lower case alphabet used on this
disk was developed by and is used with permission of
MECC, 2520 Broadway Dr., Lauderdale, MN 55113.

INTRODUCTION TO CREATE LESSONS--ADVANCED

This program is especially useful for upper
elementary, junior high and senior high school
students, and adult education because of its small
letter set and many options for lesson design.

The letter set permits teachers to present as many
as ten lines of content in one frame. This space
may be used in any way that best suits the subject
matter --- common uses are information frames,
question frames, hints and explanations.   A wide
variety of content may be used from every part of
the curriculum, as well as enrichment subjects.

Create Lessons--Advanced has a Master disk and a Data
disk.   The Master disk has space for 10 lessons, and
the Data disk will hold 20 or more lessons,
depending on their size.

The Master disk is used to create and run the
lessons.   The Data disk is for storage of completed
lessons; it will not boot without the Master.
Lessons (files) may be transferred back and forth
between the two disks.   File transfer may be done
with just one disk drive, but is more easily done
with two drives.

You may copy (back up) your data disks, eventually
creating a large library of files that can be
transferred and run on the Master.   To copy the data
disks, use the COPYA program on your Apple System
Master disk.

It is a good idea to make backup copies of your data
disks for safekeeping.   You may initialize new disks
using the option on the File Transfer Menu.

The reserved lesson space is now empty, except for two sample lessons. Go through the sample lessons as a student would to see how the program runs. Use the next section, RUNNING THE PROGRAM, as a guide. Deliberately select some wrong answers in order to see the hint and explanation frames. (Later you can delete the frames in these two lessons and reuse the space.)

Then you should be ready to enter your own lesson content. You will first decide how many frames to put in a lesson, then make several decisions about the presentation to the student, and finally type in the lesson. As your objectives and students change, you may modify existing lessons or create more new ones.

Refer to the Suggestions for Use at the end of this manual for some ideas in designing your lessons.

Read on for simple directions on entering content, checking the recordkeeping of student progress, and using the many instructional options on Create Lessons-Advanced.
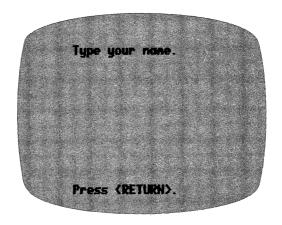
RUNNING THE PROGRAM

This program will boot on a 3.3 Disk Operating System.
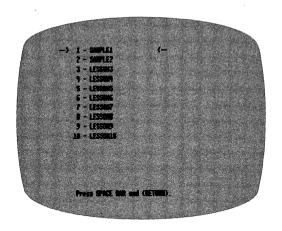
Leave your CAPS LOCK key in the up position.

Put the Master disk in Drive #1; close the door. The disk will boot automatically when you turn on the computer.

The credits will vanish and this frame will appear:

Type your name.

Press <RETURN>.

The best way to learn the program is to go through it as a student would. You (or the student) would type in your name and press <RETURN>.

The next frame lists the available lessons:

Press the <SPACE BAR> to move the arrow. Select one
of the first two lessons, which show sample content.
(Sample lessons are taken from another Hartley
program.* You may substitute your own lessons
later.) Press <RETURN> to enter your selection.

---

*Sample Lessons from: Analogies Advanced,
Hartley Courseware, Inc., ©1984

After the lesson has been selected, the first screen to appear will be the INSTRUCTIONS for that lesson.

Sample Screens
in this section
are from Lesson 1

INSTRUCTIONS
HOT:COLD::WET:DRY
This is an analogy.
An analogy is a special kind of word
problem that asks you to discover the
relationships between pairs of words.
Analogies make you think. They are
used to test your knowledge of vocab-
ulary, or your understanding of ideas
in science, history, or literature.

Press <RETURN>.

The teacher selects whether students may refer to the INSTRUCTIONS frame at any time by pressing "H" (and <RETURN>) when a response is called for. This is one of the Design Options accessed through the Teacher's MENU. If the student goes to the INSTRUCTIONS, the program will automatically return to the appropriate frame.

The frames in the lesson will then be presented.

A sample INFORMATION frame looks like this:

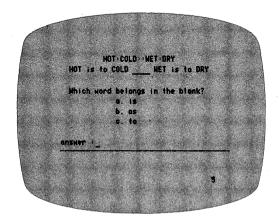An INFORMATION frame does not ask the student for a response.

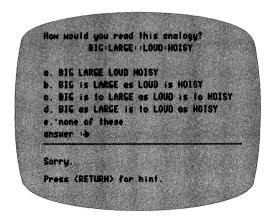A typical QUESTION frame looks like this:

The teacher may decide, via the Design Options, if the students will be able to back up with the left arrow key to re-read an INFORMATION frame before answering a question.

Answers may use numbers 1 - 5, letters A - E, or use words (up to 25 characters). If the question is answered correctly, the computer will present the next INFORMATION or QUESTION frame.

Incorrect answers may be followed by either a HINT or an EXPLANATION frame. The content and the preference of the teacher determine which is used, if any. These feedback frames help students with difficult material and may be worded in several ways.

A HINT frame is generally used in tutorials to guide the student to the correct answer.

How would you read this analogy?
        BIG:LARGE::LOUD:NOISY

a. BIG LARGE LOUD NOISY
b. BIG is LARGE as LOUD is NOISY
c. BIG is to LARGE as LOUD is to NOISY
d. BIG as LARGE is to LOUD as NOISY
e. none of these
answer :b

Sorry.

Press <RETURN> for hint.

When you read an analogy, : means 'is to' and :: means 'as'.

After displaying a HINT frame, the computer then
returns to the frame just missed to give the student
another chance. The number of chances a student is
given may be set by the teacher via the Design
Options.

An EXPLANATION frame is frequently used in a testing
sequence or when an explanation of the correct
answer is needed.

How would you read this analogy?
        BEET:RED::SKY:BLUE

a. BEET is to RED as SKY is to BLUE.
b. BEET is RED and SKY is BLUE.
c. BEET is to SKY as RED is to BLUE.
d. BEET as to RED is SKY as to BLUE.
e. none of these
answer :d
_____
Sorry. Press <RETURN>
to see the answer.

The correct answer is:
a. BEET is to RED as SKY is to BLUE.

_____
BEET has the same relationship to RED
that SKY has to BLUE.

_____
Press <RETURN>.

When students answer questions correctly, a
reinforcer will appear (at teacher option) as a
reward. You may select from four options: no
reinforcer, words only, a little man only, or both
words and man. The exact words are selected by the
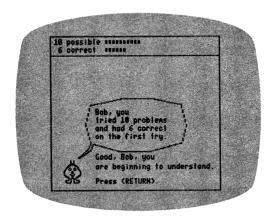teacher; the percentage of correct answers for which
the man moves can also be set by the teacher.

There is an ESCape option on this program. If for
some reason you wish to terminate the lesson, press
<ESC> any time a response is called for. What has
been attempted up to that point will be recorded.

Unless a lesson is stopped by pressing the <ESC> key
when a response is called for, all items in the
lesson will be presented. All items missed are
stored in the Student Planning file for later review
by the teacher.

At the end of the lesson, the student will be shown
the following screen indicating the number correct
out of the number attempted:

If the teacher has used the Design Options to terminate a lesson after the student answers a certain number of questions in a row correct, the graph will change slightly when the student achieves this criterion.

For example, if there are 16 questions in the lesson, the screen will say:

"Out of 16 questions, you answered 10 and had 10 correct on the first try."

The computer will then return the student to the "Type your name" frame, ready for another student or another lesson.

Student Problems

After a student has begun work on a lesson, use the Student Planning file to help you diagnose problem areas. This file keeps track of specific frames a student misses. If a student consistently misses certain items, you may want to add HINT frames or more practice frames. Use the CREATE/CHANGE A LESSON option (from the Teacher's MENU) to modify any of the frames, add HINT or EXPLANATION frames, or simply add more practice frames. The following pages explain how to use these features.

Branching

This program has not been designed to automatically branch to an easier or more difficult lesson. It is the philosophy of the teachers who designed it that the teacher is better qualified to prescribe the next lesson based on his/her knowledge of the student's needs and the planned classroom activity.

By using the Design Options, the teacher can define the criteria under which the program will terminate any lesson if the content is too easy or too difficult for the student and to alert the teacher that a new prescription is needed.

11

THE TEACHER'S MENU

Programs available from the Teacher's MENU allow the
teacher to modify lesson content, gain access to the
recordkeeping files, and change many options which
affect the running of the student lessons.


```
Type your name.


menu
   _
```

Type MENU instead of your name
to access the Teacher's MENU.

The following screen will appear.


```
DO YOU WANT TO:

  1 - CREATE/CHANGE LESSONS

  2 - CHECK STUDENT PLANNING

  3 - RUN LESSONS

  4 - CATALOG DISK

  5 - PRINT LESSONS

  6 - TURN SOUND ON/OFF

  7 - CHANGE REINFORCERS

  8 - FILE TRANSFER UTILITY
WHICH?
```

The following pages describe exactly how to use each
of the features on the Teacher's MENU.

CREATE/CHANGE A LESSON

If you wish to create a new lesson or change an existing lesson, select 1 - CREATE/CHANGE A LESSON from the Teacher's MENU.

The LESSON MENU will be displayed on the screen. Use the <SPACE BAR> to move the arrows to the lesson you wish to work on; press <RETURN> to enter your selection.

```
SELECT THE LESSON:

    ==>1 - LESSON1        <==
       2 - LESSON10
       3 - LESSON2
       4 - LESSON3
       5 - LESSON4
       6 - LESSON5
       7 - LESSON6
       8 - LESSON7
       9 - LESSON8
      10 - LESSON9
      11 - DATA DISK
            IN DRIVE 2
```
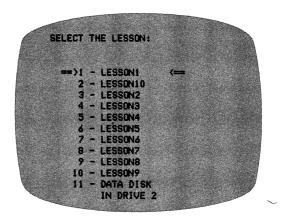
The lesson will be loaded into the computer. You can enter new frames, add more frames, or change existing ones.

```
LESSON: LESSON1


YOU HAVE 0 FRAMES

IN THIS LESSON.


WANT TO ADD MORE FRAMES? N
```

If you want to create or increase the number of frames, type Y. You are limited to 25 frames per lesson.

You will then be asked:

ADD HOW MANY FRAMES?

Type the number of frames you wish to add to the lesson and press <RETURN>.

After indicating the number of frames you wish to add, the program asks you to enter the concept being taught:

CONCEPT: ADJECTIVES

The concept you select will appear when students' records are displayed in STUDENT PLANNING. It will be helpful if each lesson has a different descriptive concept name. The concept may be 30 characters long. When you have entered the concept name, the DESIGN OPTIONS for that lesson will be displayed.

DESIGN OPTIONS

Each of the Design Options gives you the opportunity to influence the way the lesson is presented to the students. A question and a choice of answers are displayed on the screen; select the answer you wish, press <RETURN>, and the next option will be shown.

DESIGN OPTIONS

DO YOU WANT THE STUDENT TO BE ABLE

TO BACK-UP AND RE-READ THE INFORMA-

TION AT ANY TIME BEFORE ANSWERING A

QUESTION?

ENTER 'Y' OR 'N' ==> ?

DESIGN OPTIONS

DO YOU WANT THE STUDENT TO BE ABLE

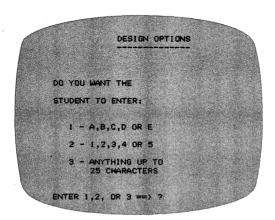TO PRESS 'H' AND RE-READ THE INSTRUC-

TION FRAME AT ANY TIME?

ENTER 'Y' OR 'N' ==> Y

Note that the second option has a flashing "Y"
answer. This is the answer already entered in the
program. If you wish to answer "Y," simply press
<RETURN>. If you wish to answer "N," press that key
followed by <RETURN>.

15

```
                DESIGN OPTIONS
                --------------



     DO YOU WANT THE QUESTIONS TO

     BE PRESENTED IN A RANDOM

     ORDER OR THE SEQUENTIAL ORDER IN

     WHICH THEY WERE ENTERED?

     ENTER 'R' OR 'S' ==> S
```

For instructional lessons that are carefully
sequenced, you would want the frames presented in
the same order. For drill or tests, you may want
random order.

The next option allows you to choose the way in
which students will enter their answers. Select the
number that best fits the content and your
instructional goals:

```
                DESIGN OPTIONS
                --------------


     DO YOU WANT THE
     STUDENT TO ENTER:

        1 - A,B,C,D OR E

        2 - 1,2,3,4 OR 5

        3 - ANYTHING UP TO
            25 CHARACTERS

     ENTER 1,2, OR 3 ==> ?
```

```
                    DESIGN OPTIONS
                    --------------



        HOW MANY TRIES WOULD YOU LIKE

        TO GIVE THE STUDENT BEFORE THE

        CORRECT ANSWER IS DISPLAYED?



        ENTER A NUMBER FROM 1 TO 9  ==>
```

If you are using HINT frames, you will want to give
the student at least two tries.

The following "Student Safeguards" allow you to set
the criteria upon which the computer will branch to
the end of the lesson. It is the philosophy of the
teachers who designed this program that if a lesson
is too easy or too difficult, the computer should
terminate the lesson. The TEACHER should decide
what to teach and how to respond to the student's
work.

```
        STUDENT SAFEGUARDS
        ------------------



    IF THE STUDENT IS DOING POORLY,

    THE LESSON WILL TERMINATE IF HE/SHE

    HAS LESS THAN 20% CORRECT ON THE

    FIRST TRY.

    (ENTER A NUMBER FROM 1 TO 49)
```
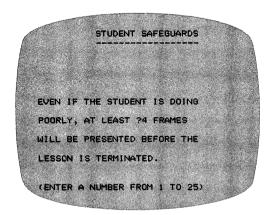
The next question relates to the above decision.

```
            STUDENT SAFEGUARDS
            ------------------



    EVEN IF THE STUDENT IS DOING

    POORLY, AT LEAST ?4 FRAMES

    WILL BE PRESENTED BEFORE THE

    LESSON IS TERMINATED.

    (ENTER A NUMBER FROM 1 TO 25)
```

You will need to include at least several frames.
If you don't, the lesson will terminate on the first
frame if there is an error (0% being below any % you
set in the previous option).

```
              STUDENT SAFEGUARDS
              ------------------



     IF A STUDENT IS DOING WELL, THE
     LESSON WILL TERMINATE AFTER ?5
     CONSECUTIVE CORRECT ANSWERS
     ON THE FIRST TRY.

     (ENTER A NUMBER FROM 1 TO 25)
```

If there is a variety of skills taught or reviewed
in one lesson, you may want the student to complete
all the work no matter how well he/she does on the
first questions. If so, change this option to
include the number of questions in the lesson.

Note: By using the random order option and the
Student Safeguards, this disk was designed to allow
you to create a modifiable item pool. Rather than
drawing a specific number of items, the items will
be used until the student meets the criterion you
specified (in terms of the number of items in a row
correct).

This type of criterion was considered preferable to a percentage because it takes into account the fact that the child may do poorly in the beginning but learn the concept during the lesson and begin to answer all items correctly.

The Student Safeguards do not apply to the next two Design Options. It is assumed that the teacher would want all missed items reviewed.

```
              DESIGN OPTIONS
              --------------



    AFTER THE STUDENT HAS GONE THROUGH

    ALL THE FRAMES IN A LESSON, DO YOU

    WANT THE QUESTIONS HE/SHE MISSED TO

    BE PRESENTED AGAIN?

    ENTER 'Y' OR 'N'  ==> Y
```
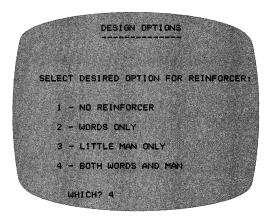
```
              DESIGN OPTIONS
              ---------------



    WHEN THE QUESTIONS ARE PRESENTED

    AGAIN, HOW MANY TRIES WOULD YOU

    LIKE TO GIVE THE STUDENT BEFORE

    THE CORRECT ANSWER IS DISPLAYED?

    ENTER A NUMBER FROM 1 TO 9  ==> 1
```
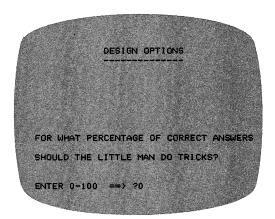
The last two Design Options control the reinforcers
that appear when a correct answer is given. They
enable you to fit the reinforcers to your students
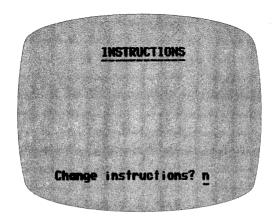and to the content being taught.

```
                  DESIGN OPTIONS
                  --------------


      SELECT DESIRED OPTION FOR REINFORCER:

          1 - NO REINFORCER

          2 - WORDS ONLY

          3 - LITTLE MAN ONLY

          4 - BOTH WORDS AND MAN

             WHICH? 4
```

```
                  DESIGN OPTIONS
                  --------------




      FOR WHAT PERCENTAGE OF CORRECT ANSWERS

      SHOULD THE LITTLE MAN DO TRICKS?

      ENTER 0-100  ==> ?0
```

Note: If the reinforcer is set to show the little
man but the frequency is set at 0, he will appear
when an answer is correct but will not move.

21

After all the Design Options have been set, the
INSTRUCTIONS frame will be shown.

CHANGE INSTRUCTIONS? N

If you do not want to change the INSTRUCTIONS frame,
simply press <RETURN>; if you do wish to create or
change this frame, you must type Y and <RETURN>.

When you create or change the INSTRUCTIONS, the
cursor will appear on the first line.   An
INSTRUCTION frame looks like this:

(Remember that the Design Options allow you to
select whether the students may access the
INSTRUCTIONS frame at any time by pressing "H" when
a response is called for.)

You may type new INSTRUCTIONS or change the existing
ones.   If you don't wish to change a line, just
press <RETURN> to move the cursor to the next line.
If you have an Apple IIe or IIc, letters may be
capitalized in the usual way using the shift key.
The DELETE key functions like the back arrow.   The
up and down arrow keys have no function in this
program.

If you have an Apple II+, capitalize letters by pressing the ^ key just <u>before</u> the letter to be capitalized. Pressing it twice locks the CAPS mode on. Press it again to return to lower case.

If you make a mistake while typing in your content, use the ← arrow to erase on the same line. (At the left margin the ← arrow also will move the cursor up, line by line.) To erase a whole line, use the space bar or type new content over the old. At the end of a line, use <RETURN> to move to the next line.

When the instructions are finished, again press <RETURN>.

CREATING, ADDING AND CHANGING FRAMES

The procedure for creating, adding, or changing frames is the same, except that when changing a frame, you begin with the contents previously entered in that frame. In changing a frame, begin as if you were typing over the old content. The first letter you type will erase the rest of the line.

If you are adding frames, you will be shown the first frame you wish to add. (If the lesson already had 19 frames, frame #20 will appear blank, the cursor on the first line, ready for you to type.)
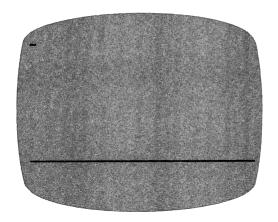
To back up and review the previous frames, use the ← key. The use of the ← and → keys allows you to page through the lesson.

Letters may be capitalized using the directions given above for the INSTRUCTIONS frame. To make a blank (_____) in a question, use the @ sign at the beginning and end of the blank. To underline, press the # just before and just after typing the material to be underlined.

Note: It is possible to delete frames after the lesson has been typed in and saved. Instructions for deleting frames are at the end of this section.

If you do not want to page through all the remaining frames when you have finished making your changes, type END at the beginning of the first line of a question or information frame. This will branch you to the end of the lesson. This seems a little scary, but don't worry; the changes made up to (but not including) this frame will be saved ALONG WITH THE REMAINING UNCHANGED FRAMES IN THE LESSON.

Frames may be either INFORMATION frames or QUESTION frames. Here is a blank INFORMATION/QUESTION frame:
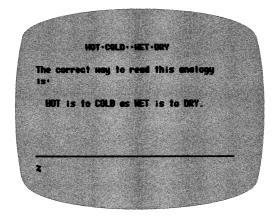
INFORMATION frame

INFORMATION frames require no response from the
student. They are used to present lesson material.
Use the % in the answer's place to indicate to the
computer that there will be no answer.

When an INFORMATION frame precedes a question, the
student can (using the ← key) go back to the
INFORMATION frame for help in answering the
question.

Enter up to 10 lines of information with up to 39
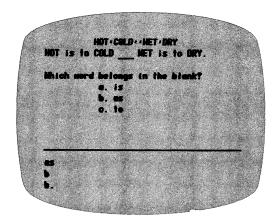characters each.

QUESTION frame

This kind of frame requires a response from the
student, usually relating to the content in the
previous frame. It may take any format you would
like.

You may enter up to 10 lines for the question. Each
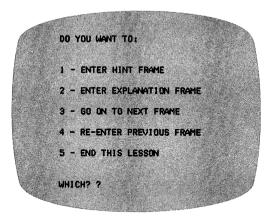line may be 39 characters long.

Then enter no more than 4 correct answers for each
question (four forms of the same answer). Be sure
that the answer you want students to see (if they
miss the question) is the first answer you enter.

This is how a question frame looks after contents
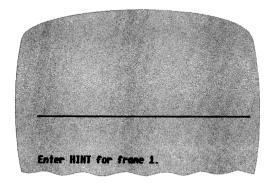have been typed in:

HINTS and EXPLANATIONS

After entering a new frame or changing an existing
one, you will then branch to the "Secondary" Menu:


```
DO YOU WANT TO:

1 - ENTER HINT FRAME

2 - ENTER EXPLANATION FRAME

3 - GO ON TO NEXT FRAME

4 - RE-ENTER PREVIOUS FRAME

5 - END THIS LESSON

WHICH? ?
```

This allows you to enter a HINT or EXPLANATION
frame. The HINT frame will be shown to the student
after s/he misses the question. If you wish to
enter a HINT frame for the first question, select 1
- ENTER HINT FRAME and this will appear:
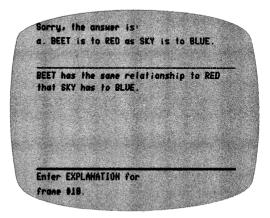


```
Enter HINT for frame 1.
```

You may enter up to 6 lines of text, 39 characters
per line, in a HINT frame.

After entering the HINT and pressing <RETURN>, the
computer will automatically place you at the next
frame, ready for the next information frame or
question.

2 — ENTER EXPLANATION FRAME is used when a HINT
might not be appropriate, but you want to give the
student more feedback than just the answer. The
EXPLANATION frame will be shown to the student after
s/he has missed the question on the last try. (The
number of tries has been set by the teacher at the
beginning of the lesson in the Design Options.)

The EXPLANATION frame
as you create/edit:

Sorry, the answer is:
a. BEET is to RED as SKY is to BLUE.

BEET has the same relationship to RED
that SKY has to BLUE.

Enter EXPLANATION for
frame #10.

The same EXPLANATION
frame as the student
sees it when running
the lesson:

Sorry, the answer is:
a. BEET is to RED as SKY is to BLUE.

BEET has the same relationship to RED
that SKY has to BLUE.

Press <RETURN>.

Note that the EXPLANATION frame will display the
FIRST answer alternative entered on the related
question frame.

28

You may enter up to 6 lines of 39 characters each in
EXPLANATION frames.

If you select 3 -- GO ON TO NEXT FRAME, you will be
taken to the next consecutive frame without entering
a HINT or EXPLANATION frame for the previous
question.

You may use 4 -- RE--ENTER PREVIOUS FRAME if you have
entered a HINT or EXPLANATION frame and want to
review the question frame you just entered.

Selecting 5 -- END THIS LESSON will take you to the
last question in the lesson:

<div align="center">SAVE THIS LESSON? Y/N</div>

If you type Y, the changes you have made will be
incorporated into the lessons on the disk. If you
type N, the lesson will be saved in its original
form. (If you wish, you may also change the lesson
name at this time if it is relevant to the lesson
changes you have made.)

Now that the lesson has been created and saved, you
may delete a frame (or frames) if you wish. Remain
in the CREATE/CHANGE A LESSON mode and go back to
the same lesson. Use the <RETURN> key and the →
arrow to go through the frames until you find the
one(s) you wish to delete. To delete, type <CTRL D>
(the CONTROL key and the D key simultaneously) on
the first space of the first line. Remember, you
can delete frames only after the lesson has been
typed in and saved. After deleting, go to the end
of the lesson and save it in its revised form.

You will then be returned to the Teacher's MENU.

STUDENT PLANNING

As a student works through a lesson, the errors that
s/he makes are recorded in the STUDENT PLANNING
file. To see this file, type MENU to bring up the
Teacher's MENU.

Select 2 -- STUDENT PLANNING from the Teacher's MENU.
The first frame to appear is:

WANT TO DELETE ALL STUDENTS

AND CLEAR THE FILE? (Y/N)

Type N if you want to see the file; Y if you want to
completely erase all student records. Press
<RETURN>.

If you typed N, indicating you would like to see the
file and not erase it, the Student Planning Menu
will appear:

YOU HAVE 4 STUDENTS IN FILE.

THERE IS ROOM FOR 46 MORE.

DO YOU WANT TO:

        1 - SEE ALL STUDENTS

        2 - SEE SOME STUDENTS

        3 - STUDENT SUMMARY

        4 - DELETE ALL STUDENTS

        5 - DELETE INDIVIDUAL STUDENTS

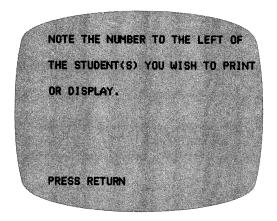   6 - GO BACK TO MENU
    WHICH? ?

If you choose 1 - SEE ALL STUDENTS, the computer
asks:

ARE YOU USING A PRINTER? (Y/N)

If Y, it will ask for the slot number, which is
usually 1 or 2. If you're not sure, take off the
cover and check the location of your printer card.
After entering the slot number, all the records will
be printed.

If you are not using a printer, records will be
displayed on the screen. Scrolling of records is
under control of the teacher by pressing <RETURN>.

If you want to see only some of the students, select
2 - SEE SOME STUDENTS. This frame appears:

NOTE THE NUMBER TO THE LEFT OF

THE STUDENT(S) YOU WISH TO PRINT

OR DISPLAY.

PRESS RETURN

As you select the students whose records you wish to
view, you will be typing just the number of the
student.

```
2 - <SAMPL> ANGIE Y
                         1 TO PRINT
(TYPE 'END' TO QUIT ENTERING STUDENTS)
```

Type the number of the student you want to see and
press <RETURN>. For example: If you type 2, the
lesson name and student name will appear at the
bottom of the frame. This is a check. Press
<RETURN> if that is the student you wish to see.
This gives you a chance to change your mind and
enter N if you don't want to see that particular
student.


```
ENTER STUDENT NUMBERS

1 - <SAMPL> MIKE
2 - <SAMPL> ANGIE
3 - <SAMPL> angie
4 - <SAMPL> tom




:
                         4 TO PRINT
(TYPE 'END' TO QUIT ENTERING STUDENTS)
```

The computer keeps a running tally on the number of
students you have selected.

Continue selecting students whose records you want
to see. When you have entered the numbers of all
the students you wish to see, type END (in place of
another number).

The following question is asked:

ARE YOU USING A PRINTER? (Y/N)

If you type N, the records will come up on your
monitor. If you type Y, you will be asked:

WHICH SLOT?

It will usually be 1 or 2, but if you're not sure,
take off the cover and check the location of your
printer card. The display and printout will be in
the following format:

```
STUDENT:MIKE
LESSON :SAMPLE1                  (70%)
-----------------------------------------
THERE ARE 10 QUESTIONS IN THE LESSON.

STUDENT ATTEMPTED ALL 10.
STUDENT HAD 7 CORRECT ON 1ST TRY.

FRMW   INCORRECT        SHOULD BE
----   ---------        ---------
 05    A                b
 09    B                e
 17    E                b
-----------------------------------------


PRESS RETURN
```

Press <RETURN> to see records for all the students
you have selected.

After all information is displayed, you will be
asked:

```
WANT TO DELETE ALL STUDENTS

AND CLEAR THE FILE? (Y/N)
```

The <ESC> key may be pressed at any time to
terminate display or printout of student records. A
maximum of 50 records can be stored in this Student
Planning file. Space must then be cleared before
additional records can be stored. To clear space,
answer Y to the question at the end of the
display/printout, use option 4 from the Student
Planning Menu -- DELETE ALL STUDENTS, or use option 5
-- DELETE INDIVIDUAL STUDENTS.

3 -- PRINT STUDENT SUMMARY

This option from the Student Planning Menu allows
you to see or print out a summary of records for the
entire class. If you are viewing records on a
monitor, the summary is in the following format:

```
STUDENT NAME              LESSON    1ST TRY
--------------------      ------    --------
MIKE                      SAMPLE1   70 %
ANGIE                     SAMPLE1   50 %
angie                     SAMPLE2   71 %
tom                       SAMPLE1   70 %




+ = CONSISTENTLY RIGHT. E = (ESCAPED)
            PRESS RETURN
```

If you have a printer, the printout of the Student Summary will include more information than you can see on the screen. The printout includes the skill statement, the number correct, and the number of questions.

4 - DELETE ALL STUDENTS

If you want to clear all the student records, use this option.

5 - DELETE INDIVIDUAL STUDENTS

A number of teachers have asked for this option. This is most valuable when several teachers are using the same disk. It allows you to print the records of just a few of your students and then erase only those selected records from the file. The procedure is the same as in SEE SOME STUDENTS; selected records will be deleted.

6 - GO BACK TO MENU

If you are finished viewing the student records and wish to be returned to the main Teacher's MENU, use this option.

RUN LESSONS

After you have created a lesson, go through it as a student would. This will allow you to check the grammar, spelling, format, and word and picture reinforcers. It will also show you the way the student records are displayed.

CATALOG DISK

This file holds the list of all lessons on the disk. This can also be accessed by typing a ? when the "Type the name of the lesson you will be working on" frame appears.

PRINT LESSONS

This feature allows you to print out any of the lessons on this disk so that you can edit them more easily. The first screen to appear is:


```
THIS PROGRAM IS DESIGNED TO PROVIDE
YOU WITH A PRINTOUT OF YOUR LESSONS.

THE FORMAT SHOULD BE SUITABLE FOR
MOST PRINTERS WHICH HAVE THE ABILITY
TO PRINT BOTH UPPER AND LOWER CASE
CHARACTERS.

THERE MAY BE SOME VARIATIONS WITH
OTHER MODELS.



PRESS <RETURN>
```

After the name of the lesson is entered, you will be asked to enter the printer slot number and the date.

When the printout is completed, you can enter another lesson, if desired.

TURN SOUND ON/OFF

This option allows you to turn the sound which accompanies the graphics in this program ON and OFF. After making your selection, you will be returned to the Teacher's MENU.

CHANGE REINFORCERS

REINFORCERS are phrases which appear on the screen to provide feedback to students when they select correct answers. You may edit the reinforcers in this program by using this option.

There is also a picture reinforcer in this program. The Design Options (in CREATE/CHANGE A LESSON) allow you to choose the specific reinforcers for each lesson: no reinforcer, words only, picture only, or both words and pictures.
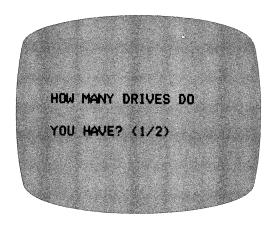
FILE TRANSFER UTILITY

When you type in your lesson content, you will be using the Master disk. There is space for ten lessons on the Master and approximately 20 on the Data disk. When the ten lessons (files) on the Master have been filled, you will need to transfer them to the Data disk, and move empty lesson space from the Data disk to the Master so that you can type in more lessons.

The first two lessons on the Master have sample content. Before you begin entering your own material, you may want to move the sample content. (This is up to you; the space is yours to use as you wish.) If you want to move it, you could transfer the files to the data disk and/or print them (if you have a printer) using option 5 from the Teacher's MENU, PRINT LESSONS.
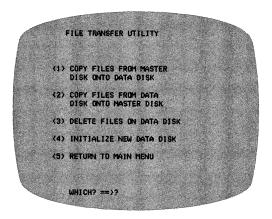
The process of transferring files seems more
complicated than it is. You will soon be moving
files with ease. Try it!

When you select 8 — FILE TRANSFER UTILITY, the
program will first ask:


```
HOW MANY DRIVES DO

YOU HAVE? (1/2)
```

Moving files is easier if you have two disk drives,
since the program will automatically access the
correct drive. The instructions below assume you
have two drives. If you have one drive, just follow
the directions on the screen for moving your Master
and Data disks.

When you have indicated the number of drives you
have, press <RETURN> and the next screen appears:


```
        FILE TRANSFER UTILITY


    <1> COPY FILES FROM MASTER
        DISK ONTO DATA DISK

    <2> COPY FILES FROM DATA
        DISK ONTO MASTER DISK

    <3> DELETE FILES ON DATA DISK

    <4> INITIALIZE NEW DATA DISK

    <5> RETURN TO MAIN MENU


        WHICH? ==>?
```

Below are explanations of the FILE TRANSFER MENU.
As you work with file transfer, press ESCape at any
time to stop the process and return to the MENU.

1 -- COPY FROM MASTER TO DATA

The first screen appears:


```
        FILE TRANSFER UTILITY




    INSERT MASTER DISK IN DRIVE #1.

    INSERT DATA DISK IN DRIVE #2.



    PRESS <RETURN>.
```

The next screen tells you how much space is
available on the Data disk:


```
THIS DATA DISK HAS 523 FREE SECTORS.

THERE IS ROOM FOR APPROXIMATELY

18 MORE FILES.




PRESS <RETURN>.
```

Then the message:


```
ALL FILES ON THE MASTER DISK
WILL BE DISPLAYED.


YOU MAY SELECT A MAXIMUM OF
10 FILES TO BE COPIED FROM THE
MASTER DISK TO THE DATA DISK.


THE FILES ON THE MASTER DISK WILL
REMAIN INTACT ON THE MASTER DISK AS
WELL AS ON THE DATA DISK.


PRESS <RETURN>.
```

The only way you will delete files from the Master
disk is in a later step, when you can "overwrite"
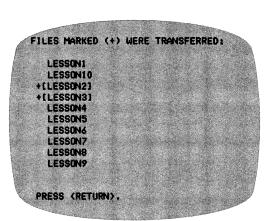them by transferring files to the Master from the
Data disk.

Type the numbers of the lessons you wish to move to
the Data disk and press <RETURN> after each one.
(When you have entered your own content and renamed
the lessons, those names will be on the list of
files ready for transfer.) Type 99 and <RETURN>
when you are finished selecting files and are ready
to transfer. The screen will say:

          PRESS <RETURN> TO BEGIN TRANSFER.

The drives will automatically read and copy the
files you selected to the Data disk. (Remember, if
you have just one drive, follow the screen prompts
to move your disks.)

The screen
tells you
which files
were transferred.
Press <RETURN> to
go back to the
FILE TRANSFER MENU.

2 - COPY FILES FROM DATA DISK TO MASTER DISK

Insert your
disks as the
screen directs.

```
        FILE TRANSFER UTILITY



    INSERT MASTER DISK IN DRIVE #1.


    INSERT DATA DISK IN DRIVE #2.


    PRESS <RETURN>.
```

Now the message:

```
ALL FILES ON THE DATA DISK
WILL BE DISPLAYED.


YOU MAY SELECT A MAXIMUM OF
10 FILES TO BE MOVED FROM THE
DATA DISK TO THE MASTER DISK.


THE FILES ON THE DATA DISK WILL
REMAIN INTACT ON THE DATA DISK AS
WELL AS ON THE MASTER DISK.

PRESS <RETURN>.
```
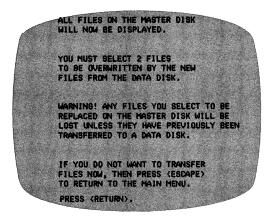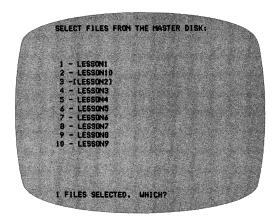
Again select the files you wish to transfer by
typing their numbers, followed by <RETURN>. Type 99
and <RETURN> when you have finished selecting files
to transfer.

Now you need to select the files on the Master disk
which will be replaced by the Data disk files. Note
the warning that the files selected will be <u>lost</u>
unless they have been moved to the Data disk.

ALL FILES ON THE MASTER DISK
WILL NOW BE DISPLAYED.

YOU MUST SELECT 2 FILES
TO BE OVERWRITTEN BY THE NEW
FILES FROM THE DATA DISK.

WARNING! ANY FILES YOU SELECT TO BE
REPLACED ON THE MASTER DISK WILL BE
LOST UNLESS THEY HAVE PREVIOUSLY BEEN
TRANSFERRED TO A DATA DISK.

IF YOU DO NOT WANT TO TRANSFER
FILES NOW, THEN PRESS <ESCAPE>
TO RETURN TO THE MAIN MENU.

PRESS <RETURN>.

SELECT FILES FROM THE MASTER DISK:

1 - LESSON1
2 - LESSON10
3 -[LESSON2]
4 - LESSON3
5 - LESSON4
6 - LESSON5
7 - LESSON6
8 - LESSON7
9 - LESSON8
10 - LESSON9

1 FILES SELECTED. WHICH?

Type the number of each file to be replaced and
press <RETURN> after each; then the screen will say
"PRESS <RETURN> TO BEGIN TRANSFER."

43

The disk drives will automatically replace the files
you chose on the Master with those you wish to
transfer from the Data disk. Watch the screen for
messages that the program is removing, copying, and
saving the files, and finally updating the MENU.

Next you will be shown the MENU from the Master
disk, which indicates the files that have been newly
transferred from the Data disk. Press <RETURN> to
go back to the FILE TRANSFER MENU.

3 -- DELETE FILES ON DATA DISK

Periodically you may wish to make a backup copy of
your Data disk using your Apple COPYA program. This
gives you the ability to create unlimited data files
to meet different teaching and student needs. If
you have copied your data files, or if you no longer
need them and wish to delete them from the Data
disk, use this utility.

Once again you will be instructed to insert the
Master disk in drive #1 and the Data disk in drive
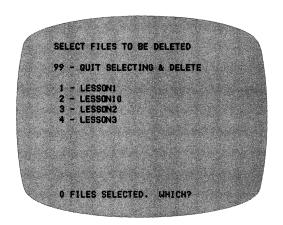#2. Press <RETURN> to see this screen:


```
YOU MAY DELETE FILES FROM THE
DATA DISK ONLY!

THE FILES ON THE DATA DISK WILL BE
SHOWN TO YOU SO YOU MAY SELECT THE
ONES TO BE DELETED.




PRESS <RETURN>.
```

Type the numbers
of the files to
be deleted; type
99 and press
<RETURN> to
delete.

```
SELECT FILES TO BE DELETED

99 - QUIT SELECTING & DELETE

1 - LESSON1
2 - LESSON10
3 - LESSON2
4 - LESSON3




0 FILES SELECTED.  WHICH?
```

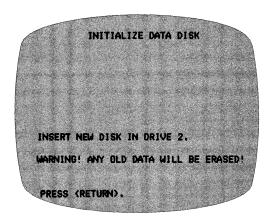Remember: To
stop the delete
process, press
ESCape.

The screen messages will print the lesson numbers as
they are being deleted. When the files have been
erased, pressing <RETURN> takes you back to the FILE
TRANSFER MENU.

4 - INITIALIZE NEW DATA DISK

Use this handy utility to create additional data
disks when all your lesson space is full or if you
wish to group certain lessons together on one disk.

A blank disk that is initialized this way can be
substituted for the Data disk that is included in
your package.

When you select this option, the first screen is:


```
              INITIALIZE DATA DISK




    INSERT NEW DISK IN DRIVE 2.

    WARNING! ANY OLD DATA WILL BE ERASED!


    PRESS <RETURN>.
```

As the disk is being initialized (formatted), the
screen messages keep you informed. Finally, you
will see:

DATA DISK IS INITIALIZED.

PRESS <RETURN>.

You will be sent back to the FILE TRANSFER MENU.

5 -- RETURN TO MAIN MENU

When you have finished transferring or deleting
files and initializing disks, use this option to
return to the Teacher's MENU.

SUGGESTIONS FOR USE

This disk is a culmination of suggestions from teachers across the country who have been using the Hartley Create-Lessons series.

Secondary and adult education teachers have been enthusiastic about this program, since it allows ample space on the screen for lesson content and uses a small letter set. It may also be used for some upper elementary and gifted students who will respond to challenging material.

DRILL AND PRACTICE

You may use the instructions followed by 25 frames of questions. These may be randomly or sequentially presented. The Design Options may be used to terminate the lesson when the student reaches the specified performance level.

Because the car wouldn't
start, we called a tow truck.

Which follows 'because' (and
is the CAUSE)?
  1) The car wouldn't start.
  2) We called a tow truck.

answer :

We could not finish the game
because it was getting dark.
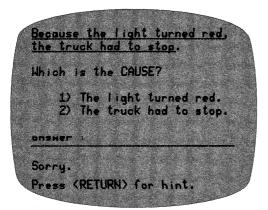Which is the CAUSE?
Which comes after 'because'?
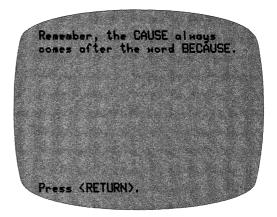   1) We could not finish the
       game.
    2) It was getting dark.

answer :

TUTORIALS

By having students progress through the frames in
the same manner in which they were entered, you can
build a carefully sequenced tutorial, complete with
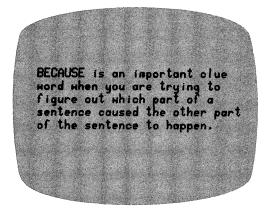HINTS to guide your students to the correct answers.

Sample screens in this section from Cause and
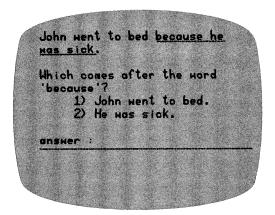Effect, Hartley Courseware, Inc., ©1985

TO IMPROVE SIMPLE COMPREHENSION

If an INFORMATION frame is followed by a QUESTION
frame, the student can go back to the INFORMATION
frame by pressing the ← key.

Information Frame

Question Frame

OTHER USES

This program format has also been used for such
diverse things as:

    --teaching students to use the library
    --working with LD students to develop
      sequencing skills
    --matching vocabulary with definitions

Any instructional sequence which could be more
effectively presented with the information broken
down into small steps would fit nicely into this
format.

TROUBLESHOOTING

Some common problems and possible solutions are
discussed here. Every care has been taken to
produce and verify quality programs. If you are
having technical difficulty with your disks, check
here first! If these solutions do not seem
applicable or do not correct the problem, call our
toll-free number, 1-800-247-1380. We will try to
help!

ERROR #4: If the disk boots and runs one lesson but
"hangs up" at the end of the lesson (usually with an
error meassage like Err #4 - BREAK IN LINE 12248"),
remove the "write-protect tab"! The program is
designed to store the student name and score on the
disk at the end of each lesson; a tab covering the
notch on the disk will not let the program "write"
on the disk. If you get this message but no tab is
on the disk, the switch inside the drive may be
faulty.

I/O ERROR: The disk drive was physically unable to
read the data on the disk. I/O errors can occur
because the disk went through a magnetic field,

static discharge, or something actually damaged the media. This error message may also mean that the drive needs to be adjusted. (Try the disk on a different computer. If the same error appears, the problem is probably the disk, not the drive.) To replace the disk, please call for a return authorization number.

PRINTER WON'T PRINT: First check the printer slot number. (Take the cover off the computer and check the location of the printer card, which should be in slot 1 or slot 2.) Go to the Teacher's MENU, choose STUDENT RESULTS or PRINT LESSONS again. Be sure to enter the correct slot number when requested! Also, refer to your printer manual to be sure your printer is set up properly.

FILE FULL: If fifty student records have been stored on the disk, the fifty-first student will be able to boot the disk and run a lesson but will see a "FILE FULL. SEE YOUR TEACHER" message at the end of the lesson. This will alert you to the full file. Use the Teacher's MENU to go to STUDENT PLANNING. View or print out the records and then delete some of the records to clear space for more.

CREATE/CHANGE A LESSON does not work: If you think you have created a lesson but, in running the lesson, found your changes were not there, you probably did not go to the end of the lesson when creating it. When editing a lesson, type "END" after all the changes are made. The program will ask you a series of questions, including the important "SAVE THIS LESSON? Y/N." To save changes, you must answer Y to this question! Do not escape or reboot the disk before you do!

To receive another copy of this diskette, send the certificate below and your payment to Hartley Courseware, Inc., or to your local Hartley dealer. **YOU MUST RETURN YOUR OWNER REGISTRATION CARD BEFORE YOU CAN OBTAIN A SPARE DISK.**

BACK-UP
DISK
CERTIFICATE

THIS CERTIFICATE GRANTS THE ORIGINAL PURCHASER THE RIGHT TO BUY ONE (1) COPY OF THE DISK FOR BACK-UP USE.

NAME_____

ADDRESS_____

CITY_____

STATE_____ZIP_____

PROGRAM 16 - 00 _____

VERSION #_____

COST: $10.00

(Add sales tax where appropriate)

S/H: 2.00

$12.00

Hartley Courseware, Inc.
Dimondale, MI 48821

Create Lessons-Advanced

Grade Level: 4th Grade-College

This program contains all of the special features of our **Create-Lessons** program (except large leatters) plus a lot of new features that secondary teachers will find really useful.

The program makes use of the full forty (40) character upper/lower case keyboard. You can enter data as fast as you want. Both hints and explanations can be used for incorrect answers. Lessons can also be developed in sections which allow students access to previous instruction frames or stories. You can page back and forth in any information section that is longer than one frame. Add frames, delete frames, print your lessons, make up your own reinforcers and much more.

This is a really simple-to-use program if you want to develop some of your own practice lessons or tutorials. Lessons may be stored on a data disk. (Make as many as you need!)