NEW DIRECTIONS IN CUSTOMER TRAINING

for HP3000

PRODUCTIVITY PRODUCTS

and

OFFICE PRODUCTS

Dr. Donna Senko
Marketing Engineer
Hewlett-Packard Company
Customer Information Products

PRESENTATION OUTLINE

I. Presenting. . . Customer Information Products

II. Analysis of Customer Needs

III. Analysis of User Types

IV. Instructional Modes

V. Media

VI. Measuring Effectiveness

VII. Training Plan

I. Presenting. . . Customer Information Products

As the use of computers and the range of technical expertise of users expands, the role of customer training and documentation is becoming a more vital part of computer system support. In turn, computer course developers and technical writers must establish direct contact with customers to ascertain technical and functional needs, likes and dislikes. This presentation should serve three purposes: 1) define HP's perspective on training and documentation: 2) inform our user base of our plans in this field: 3) solicit input from our users. The intention of this meeting is to inform and to be informed, that is, to open a direct communication link between the factory and the user.

The Customer Information Products staff of Information Networks Division provides training and documentation for two families of HP3000 software products: Productivity Products and Office Products. Productivity Products include all data management tools, such as IMAGE/3000, VPLUS/3000, QUERY/3000, and KSAM/3000. Also included are language compilers. Office Products include graphics packages, text editing/word processing, and office printing systems.

For all products serviced by the Customer Information Products group, there is an underlying philosophy of training. That is, we consider ourselves successful when we make customers successful in using the HP3000. We have found two basic ingredients necessary to do this: 1) carefully analyze customer needs: and 2) research what type of users will use each particular product.

II. Analysis of Customer Needs

The focal point of customer training is the user. In analyzing customer needs and user types, we are attempting to produce training and documentation materials which are totally user-oriented. The new materials we are developing attempt to present only relevant information to each user, in a manner best suited to that user type. We no longer try to present all information to all users, presented in the same fashion. In most cases this has become an impractical method of training.

In our analysis of customer needs we take many issues into consideration. Among these are: quick start-up, task-oriented training, cost-effective training, accurate and detailed product description, readily available training, increased system use, and increased productivity. We are particularly aware of the need for customers to use a product efficiently soon after purchase. By developing training which is task-oriented (in other words, "how to. . .", rather than a strict reference type of presentation), we are able to reach many more users and have users avoid much frustration.

The issue of cost-effective training can be presented from several points of view. Training which is streamlined to the needs of each user demands less time. Also, many of the training classes we are now developing are self-paced. This means there is no travel expense involved, and the user needn't be away from the office for extended periods. This also makes training available to many users who would not have been sent to a class.

II. Analysis of Customer Needs (continued)

Because it is a necessity for our training and documentation to be accurate and detailed, we are implementing a formal evaluation procedure as part of our course development cycle. The evaluation plan will be discussed later in this paper.

By making training accurate, specific to the user, readily available, and cost-effective, we will assist customers in increasing use of their systems and consequently increasing productivity.

III. Analysis of User Types

In analyzing user types, we address two questions: 1) who are the users: and 2) how will they use the product?

The first question (who are the users?) must be viewed from a historical perspective. Traditionally, most computer users were trained and experienced computer professionals. Until recently, most users were programmers. Today's HP3000 users include: experienced and inexperienced programmers, system administrators, data base administrators, data entry clerks, graphic designers, secretaries, office principals, and clerk/typists. Each of these user types has a different level of computer technical background and requires appropriate training.

The second question (how will they use the product?) can best be addressed with sample questions we ask in developing materials. Specifically, we try to ascertain what the tasks of each user will be. For example, will a programmer be responsible only for using a subsystem, or will he be responsible for optimizing its use? Also, is this the only training the user will receive? Will he have assistance in using the product, or should this training make him self sufficient with the product? Is this product similar to other products this user might be familiar with? Are there other subsystems which should be mentioned in the training, because of products likely to be used together? Although specific questions about each user's tasks vary from product to product, the basic questions, such as those listed above, remain the same.

IV. Instructional Modes

After considering customer needs and user types, we are able to decide on an instructional mode. That is, what type of training and documentation should we supply? Once agin it is necessary to take a historical perspective. When the majority of users consisted of experienced programmers, classroom training and reference documentation served the purpose best. Reference manuals usually provide the necessary information for computer professionals to begin using a new product and supply more detailed information as they proceed. Classroom training provides users with technical information about the product, as well as application information for individual users. A well-versed instructor can usually supply necessary technical information for spcific applications.

Now, as the use of computers increases, we are seeing many different types of users, more and more of whom are non-computer technical. These users usually require more training than the users of the past, and a different type of training is required. In most cases, a tutorial approach to new materials better serves the needs of these users than does reference documentation. Also, most users prefer to learn on their own, at their own pace, with new materials presented incrementally. Thus, the current emphasis is on developing more tutorial documentation and interactive self-paced instruction materials.

IV. Instructional Modes (continued)

Since some users have expressed interest in having contact with an instructor although they learn best at their own pace, we also plan to experiment with monitored self-paced instruction. With this type of instruction, students can work and learn at their own pace, but at an HP training center and with an experienced HP instructor present. The instructor will introduce the product, guide students through the self-paced course, and answer application specific questions.

But what exactly is interactive self-paced instruction? Interactive refers to using the HP3000 to learn about the HP3000. That is, all interactive instruction involves direct hands-on use of the system in the learning stages. The system is not only the object of the instruction, it is also the means. Self-paced refers to a method of allowing the user to learn at his own pace. The user can determine when he will take modules of a course, how long he will spend on each module, and whether or not he should repeat modules before going on to subsequent lessons.

V. Media

The next question is: What constitutes interactive self-paced training? Depending on the needs and users, we pick a mixture of available media. Media we are currently using or exploring are: workbooks, audio cassettes, video tape/disc, on-line HELP facilities, and total on-line training. Even media such as workbooks and audio cassettes are part of interactive training, since we always couple them with use of the system. For example, a student will use a workbook or audio cassette while sitting in front of his/her terminal and will actually use the system while reading or listening. Explicit step-by-step instructions walk the user through the procedure of using the particular subsystem.

Examples of interactive self-paced instruction with workbooks are: A Guided Tour of the HP3000 and Using DSG/3000. A self-paced course using audio cassettes is Using COBOL II. Video disc and total on-line training are currently being explored. One module of on-line training is already available as part of the System Manager classroom course. We are also currently working closely with the IND lab in designing the on-line HELP facility which accompanies many of our products.

VI. Measuring Effectiveness

In evaluating our courses, we focus on the user once again. There are two methods we employ to gather input from our customer base. The first is by meeting formally or informally to exchange general information and opinions. This is what we are attempting to do today. The second method is by including direct interface with customers in the course development cycle.

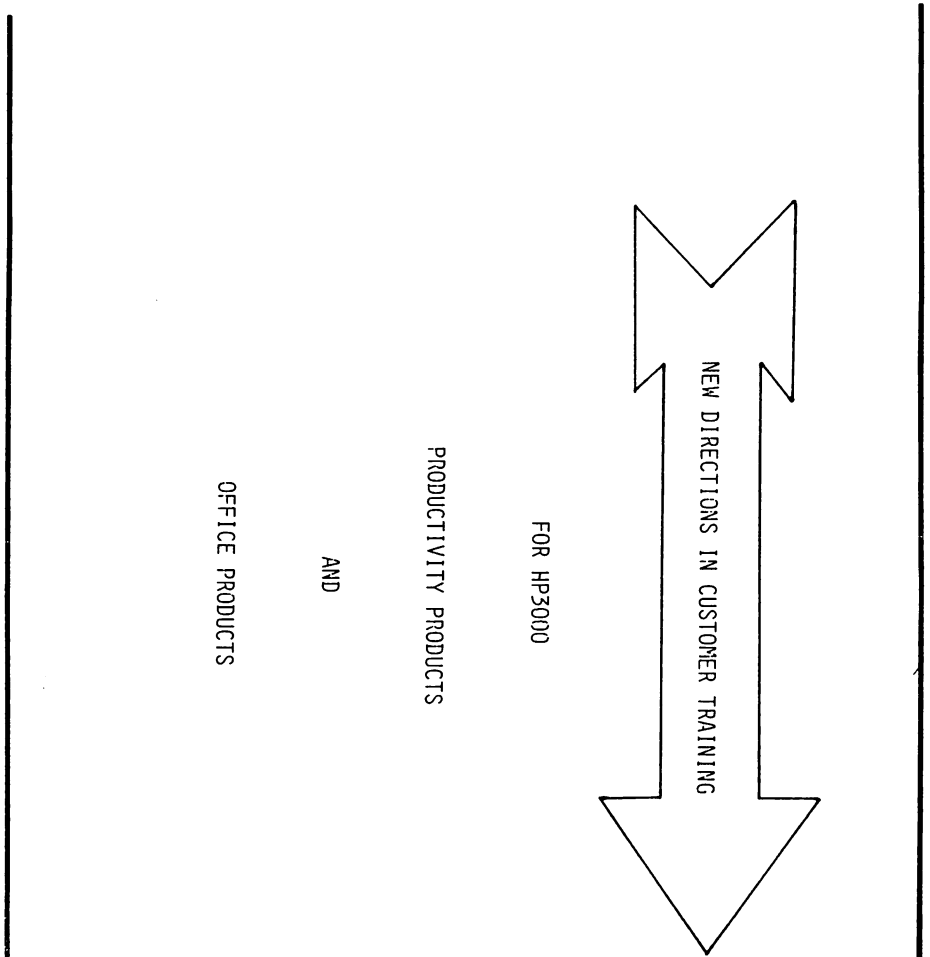
The major steps in the course development cycle are outlined in a flowchart on slide VI.3. Notice that we include three stages of materials evaluation once development has been completed: 1) materials are tested for technical accuracy and functionality at internal HP sites: 2) materials are tested for technical accuracy and functionality with customers: and 3) we check known support problems to gather information for revising materials and for planning future training. The boxes with shading on this flowchart represent the stages of course development during which customers are involved. Notice that we work with customers in the investigation stages, as well as in the test and follow-up stages. We are making an effort to work directly with customers as much as possible.

VII. Training Plan

Finally, it is time to introduce our entire training plan. The best way to do this is to present the courses available according to user type. For the sake of simplicity we have chosen to outline our courses here around five different types of users. Naturally these courses can be useful to other than the user types presented here.

At present there are two courses for the end user, that is, the non-computer technical user. These are: A Guided Tour to the HP3000, which introduces the novice user to the major subsystems of the HP3000, and Using DSG/3000, which provides the non-programmer instruction in using the interactive interface of Decision Support Graphics/3000. For the system administrator there are currently two classroom courses: System Operator and System Manager. For the data base administrator there is currently one classroom course: IMAGE/3000. The application programmer has several courses available. Among them are: the self-paced course for COBOL II, and the classroom courses: Programmer's Introduction, IMAGE/3000, VPLUS/3000, DSG/3000 Programmatic Use, 2680 Laser Printing System. The programmer analyst currently has one classroom course available: Application Design.

At this point we would like to get your input on existing customer courses and what you would like to see in the future.



E4 14

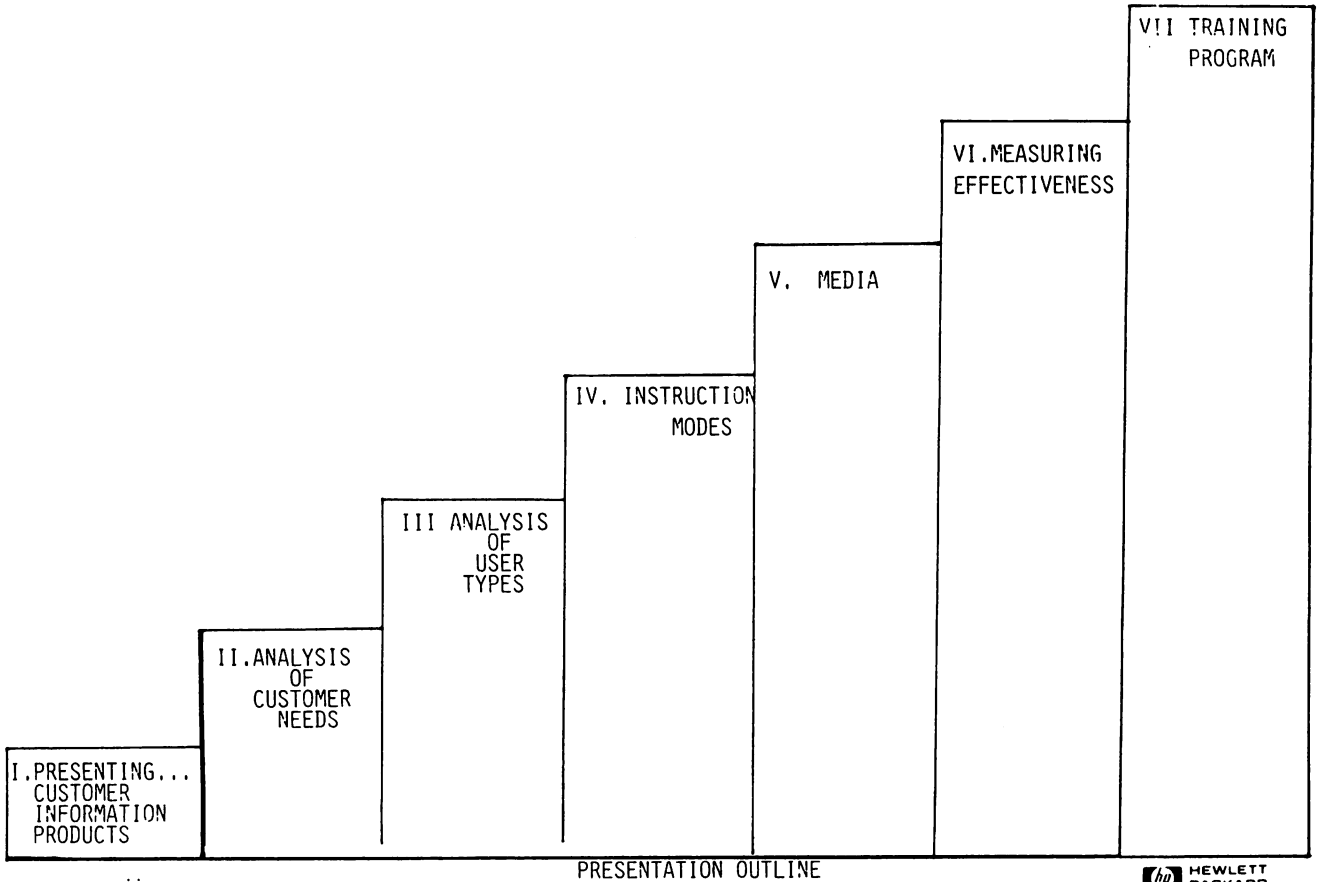
PRESENTING . . .

CUSTOMER INFORMATION PRODUCTS

I.1.

HEWLETT PACKARD

E4 13



PRESENTATION OUTLINE

HEWLETT PACKARD

E4 16

PRODUCTIVITY PRODUCTS:

- DATA MANAGEMENT TOOLS
- LANGUAGES/COMPILERS

OFFICE PRODUCTS:

- GRAPHICS PACKAGES
- TEXT EDITING/WORD-PROCESSING
- OFFICE PRINTERS

E4 15

IND CUSTOMER INFORMATION PRODUCTS

PROVIDES:

HP3000 TRAINING AND DOCUMENTATION

FOR

- PRODUCTIVITY PRODUCTS
- OFFICE PRODUCTS

E4 18

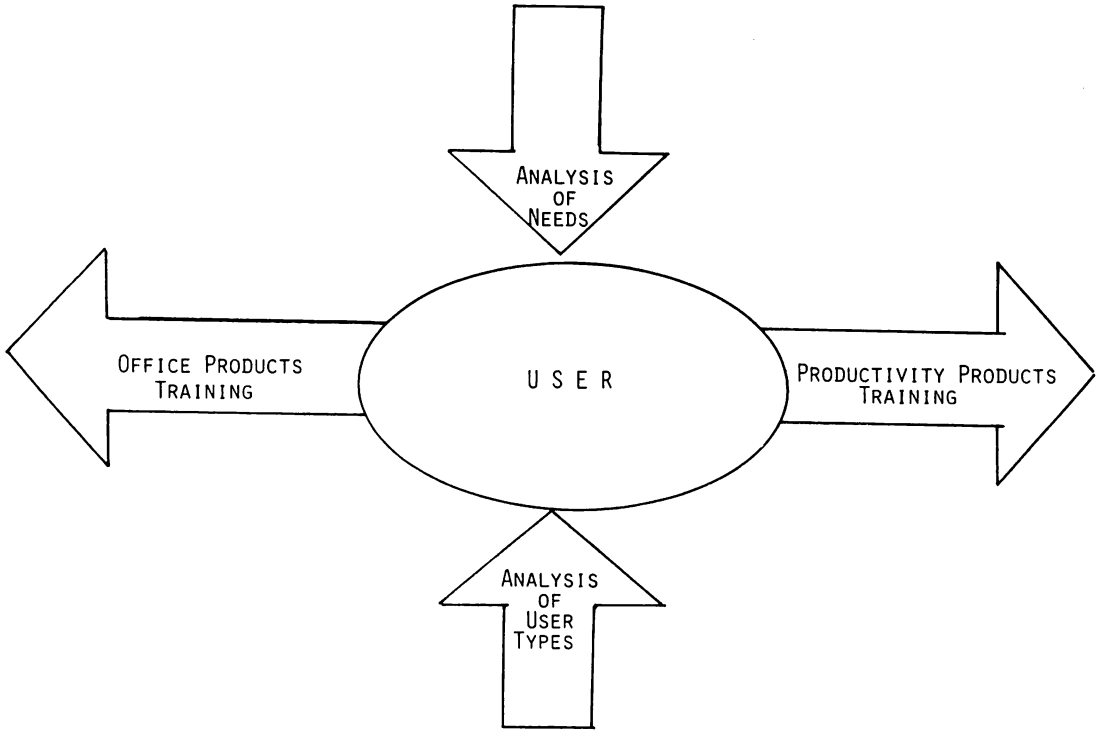
ANALYSIS

OF CUSTOMER NEEDS

HEWLETT PACKARD

E4 17

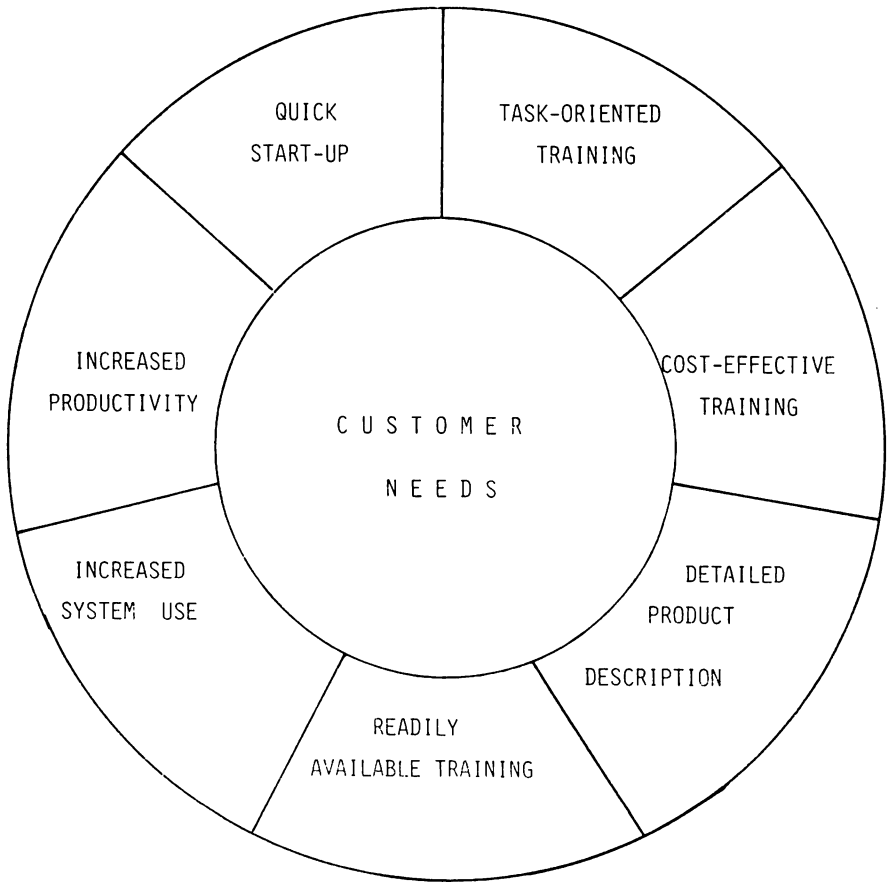
PHILOSOPHY OF CUSTOMER TRAINING



HEWLETT PACKARD

ANALYSIS

OF USER TYPES



E4 22

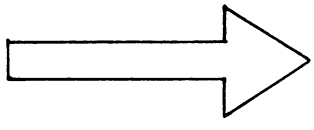
WHO ARE THE USERS?

UNTIL RECENTLY:	THE TREND:
TECHNICAL,	MORE FIRST-TIME USERS
COMPUTER PROFESSIONALS	AND
	NON-EDP PROFESSIONALS

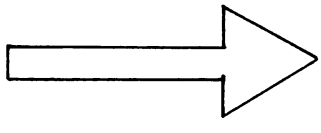
HEWLETT PACKARD

F4 21

USER TYPES



WHO ARE THE USERS?



HOW WILL THEY USE THE PRODUCT?

HEWLETT PACKARD

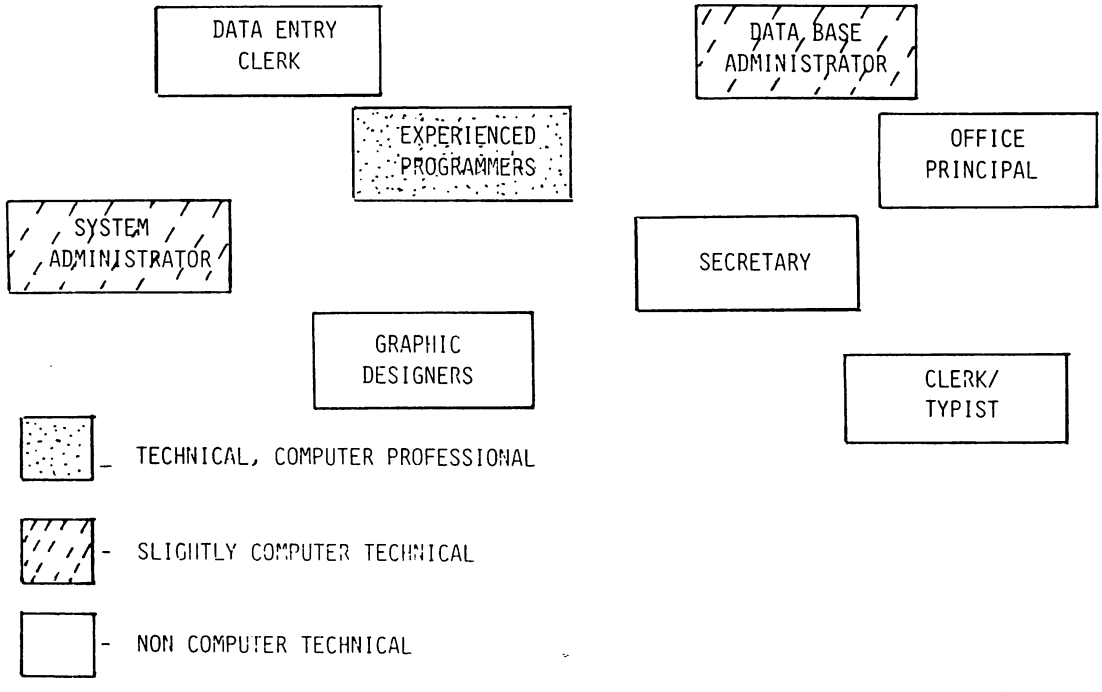
E4 24

HOW WILL USERS USE THE PRODUCTS?

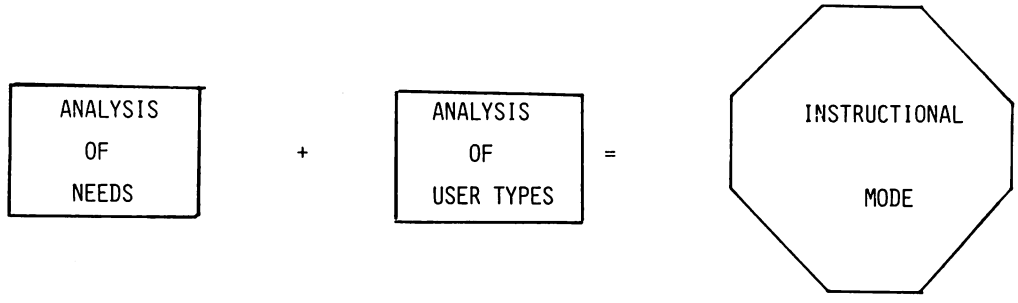
- WILL PROGRAMMERS BE RESPONSIBLE FOR OPTIMIZING SYSTEM USE AS WELL AS USING THE SYSTEM?
- DOES THIS PRODUCT REPLACE A PRODUCT THE PROGRAMMER ALREADY KNOWS?
- HOW DOES THIS PRODUCT RELATE TO OTHER PRODUCTS?
- IS THIS TRAINING STAND-ALONE?
- WILL THE DATA BASE ADMINSTRATOR DESIGN NEW DATA BASES, OR SIMPLY MAINTAIN EXISTING ONES?
- WILL THE OFFICE PRINCIPAL NEED ACCESS TO DATA BASES?
- WILL THE DATA ENTRY CLERK NEED TO USE PROGRAMS OR UTILITIES, OR JUST ENTER DATA?

E4 23

HP3000 USERS INCLUDE:



E4 26



HEWLETT PACKARD

E4 25

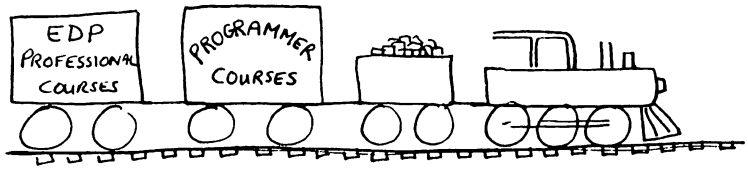
INSTRUCTIONAL MODES

HEWLETT PACKARD

E4 28

INSTRUCTIONAL MODES

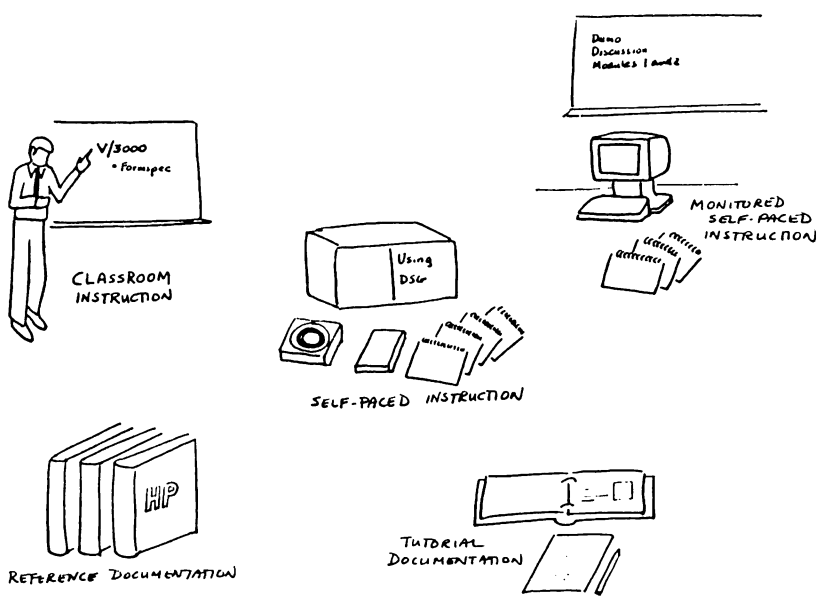
WHERE WE'VE BEEN:



HEWLETT PACKARD

E4 27

INSTRUCTIONAL MODES



HEWLETT PACKARD

E4 30

WHAT IS INTERACTIVE SELF-PACED INSTRUCTION?

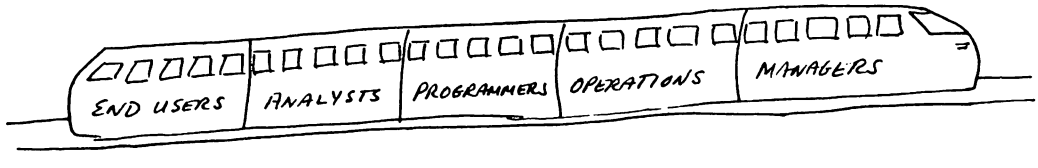
INTERACTIVE - USING YOUR HP3000 TO LEARN ABOUT THE HP3000

SELF-PACED - THE USER SETS HIS/HER OWN PACE OF LEARNING

E4 29

INSTRUCTIONAL MODES

WHERE WE'RE GOING:

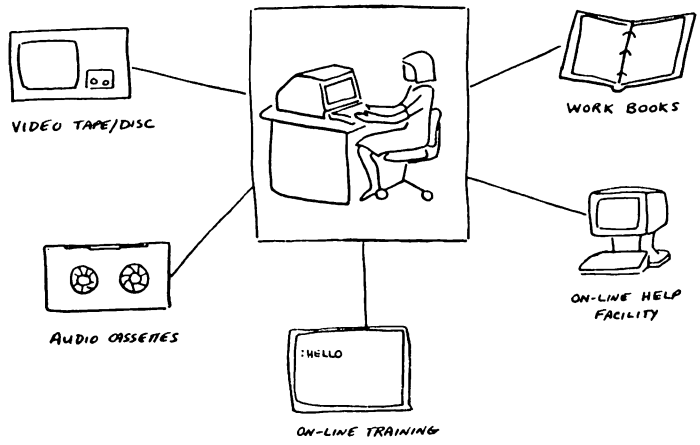


E4 32

MIXED MEDIA

FOR

INTERACTIVE SELF-PACED INSTRUCTION



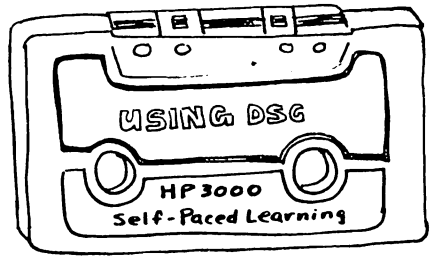
E4 31

MEDIA

E4 34

MEDIA

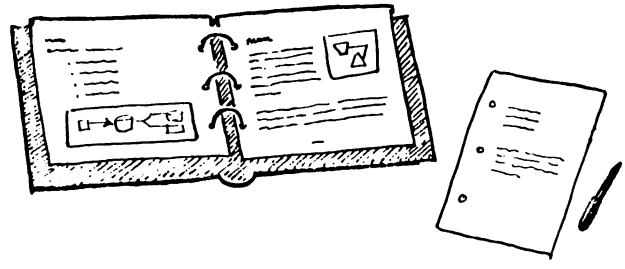
AUDIO CASSETTES



E4 33

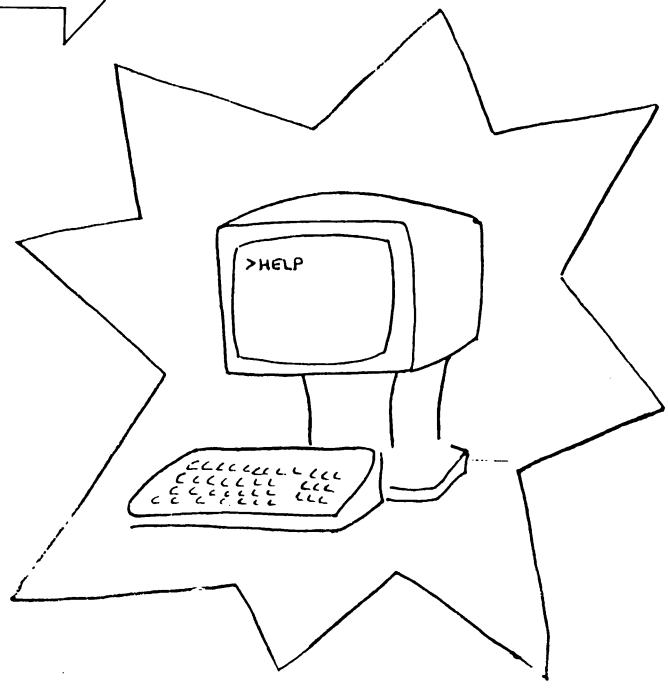
MEDIA

WORKBOOKS



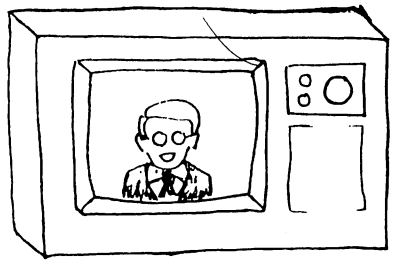
MEDIA

ON-LINE HELP FACILITY



MEDIA

VIDEO TAPE/DISK



E4 38

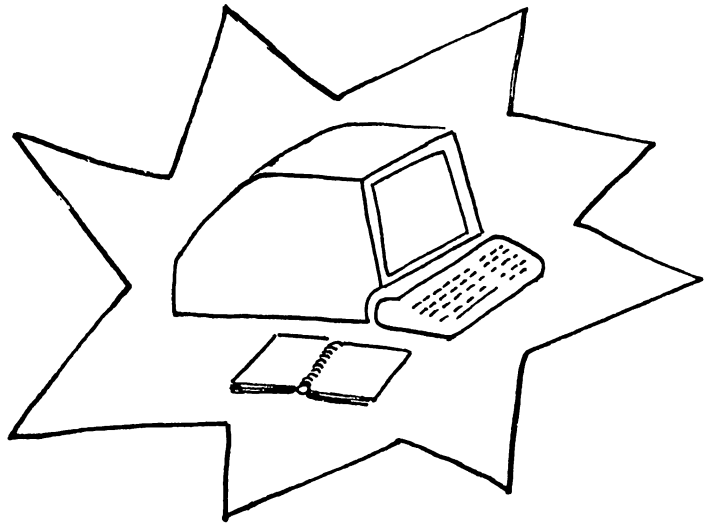
MEASURING

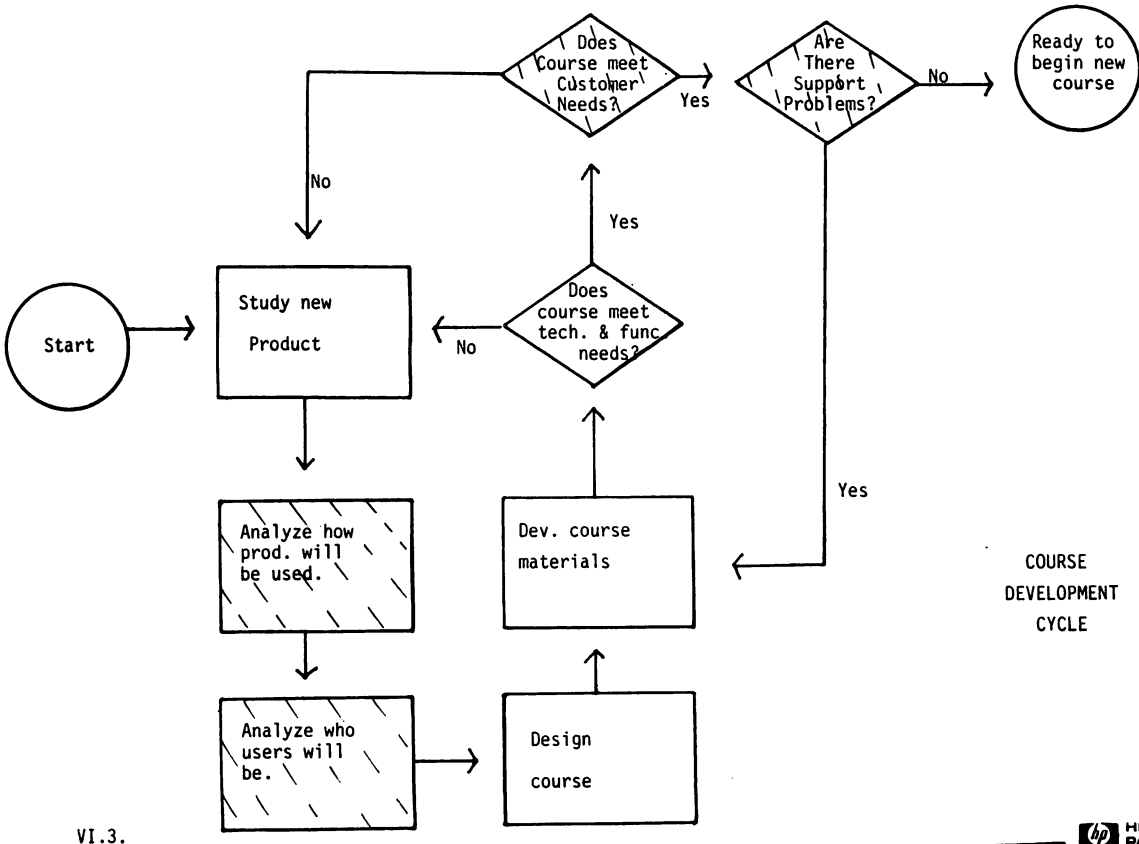
EFFECTIVENESS

E4 37

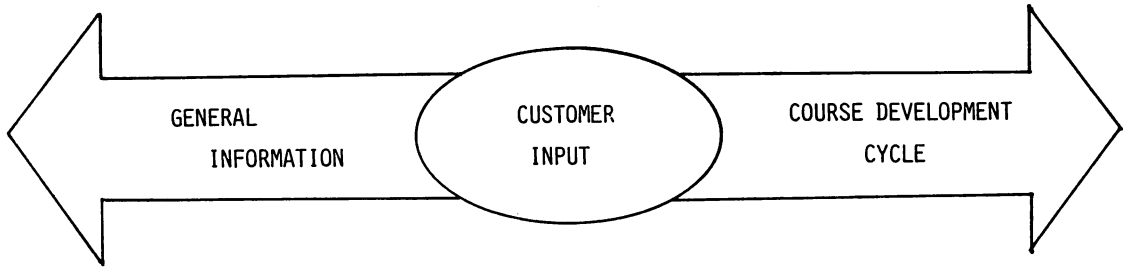
MEDIA

ON-LINE TRAINING





HEWLETT PACKARD



HEWLETT PACKARD

E4 42

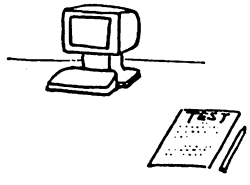
WE NEED YOUR

INPUT!

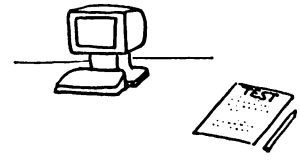
HEWLETT PACKARD

E4 41

EVALUATION PLAN



(1) INTERNAL TECHNICAL
AND FUNCTIONAL TESTING



(2) CUSTOMER TECHNICAL
AND FUNCTIONAL TESTING

(3) CUSTOMER FOLLOW-UP FROM
SUPPORT POINT-OF-VIEW

HEWLETT PACKARD

E4 44

NEW PRODUCT TRAINING PROGRAM

FOR:

END USER

A Guided Tour
To The HP3000

Using
DSG/3000

HEWLETT PACKARD

E4 43

TRAINING PROGRAM

HEWLETT PACKARD

E4 44

NEW PRODUCT TRAINING PROGRAM

FOR:

DATA BASE ADMINISTRATOR

IMAGE/3000

E4 45

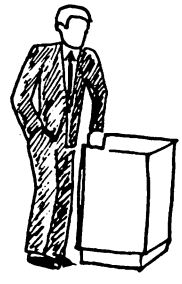
NEW PRODUCT TRAINING PROGRAM

FOR:

SYSTEM ADMINISTRATOR

System Operator

System Manager



NEW PRODUCT TRAINING PROGRAM

FOR:

ANALYST

Application Design

HEWLETT PACKARD

NEW PRODUCT TRAINING PROGRAM

FOR:

APPLICATION PROGRAMMER

SPL/File System

Special Capabilities

Introduction To MPE

Measuring System Performance

IML/3000

2680 Laser Printing System

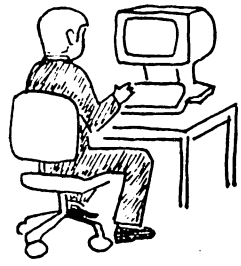
CSG/3000 Programmatic Use

VPLUS/3000

IMAGE/3000

Programmer's Introduction

Learning COBOL II



HEWLETT PACKARD