

A PROPOSAL FOR THE DEVELOPMENT OF THE
HOME COMPUTER SYSTEM
AS A FAMILY EDUCATIONAL AND MANAGEMENT TOOL

by

RUTH RAYMOND HASTERT

B.S., Kansas State University, 1967

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

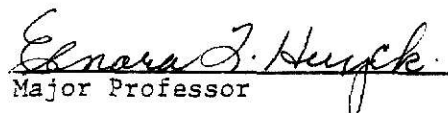
MASTER OF SCIENCE

College of Home Economics

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1984

Approved by:


Major Professor

LD
2668
.R4
1984
H38
c. 2

A11202 659929

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iii
INTRODUCTION	1
Objectives	4
Definitions	5
DISCUSSION	7
Incidence of Home Computers	8
How Home Computers Are Used	9
Developmental Educational Needs of Families	18
Managerial Function of the Family	19
Personal Function of the Family	20
Computer-Related Educational Needs of Families	22
Potential of the Home Computer to Meet Family Needs	24
Appropriate Formats for Home and Family Programs	26
Software Evaluation Standards	28
Resources for Home Computer Owners	29
Selecting Hardware	30
Selecting Software	32
Proposal for Future Development	36
Increasing Computer Literacy	38
Increasing Program Content Quality	39
Developing a Delivery System for Home Use Programs	43
SUMMARY	45
Objective 1	46
Objective 2	46
Objective 3	47
Objective 4	48
Objective 5	49
Objective 6	50
REFERENCES	52
APPENDIX	
A Workshop Guide--Authoring Software for Family Education in the Home	55

ACKNOWLEDGMENTS

The enthusiasm of others motivated my initiative throughout the development of this report. The encouragement from my committee members, Dr. Elnora Huyck, Dr. Meredith Smith, and Dr. C. E. Kennedy, was most helpful.

A special appreciation is expressed to fellow graduate students and faculty, especially Dr. Beth Davis, who believed in the value of this project.

The support and encouragement from my husband, Glenn, cannot be measured.

INTRODUCTION

Home computer sales are booming (1). Small scale versions of machines that revolutionized business management are projected to enter millions of households during this decade (2). Trends are decreasing prices for hardware and software, increasing capacity and flexibility in hardware, and increasing variety and quality of software. American Family predicts that projections showing one-half of American families having home computers by the end of the decade are conservative (3). Most previous estimates of home computer use have fallen short.

Collins (1) predicts that the personal computer is following the pattern of the automobile, television and hand-held calculator, ceasing to be a novel tool and becoming an accustomed part of daily life. Toffler, in The Third Wave, justifies the need for society to become computer literate to prepare for the computer's impact upon the new electronic information society (4). A computer literate populace is viewed as a resource to society, and our society is moving toward that end (5).

Computers confront society with the most rapid changes ever encountered and call for new attitudes, skills, and actions (6). Technology is one tool that can be used to meet family educational needs and enhance family life (7). Computers are becoming a valuable technological tool for the family and are changing the way we work, live and learn (8).

Home economists, educators, cooperative extension specialists and professionals within the computer industry agree the home computer and professionally produced programs can aid the family with its two main functional roles--personal and managerial (9). Developmental tasks related to these functions change as a family progresses through the life cycle (10). Family educational needs vary

according to the problem-solving developmental tasks faced at a given time and societal demands.

Using an educational computer program in the home to prepare for decision making or aid in problem solving related to developmental tasks is compatible with adult education principles. Adults are voluntary learners, goal or problem oriented, who usually benefit by reinforcement and feedback about possible decisions, and prefer to learn in informal, unstructured settings (11). Computer programs used in the home allow for all of these adult preferences. The programs may be directed toward achieving a goal, solving a problem, exploring alternative decisions, or finding resources for family needs. The programs may be used when the family has the need, when readiness is high.

Young families in today's society have the largest educational needs among adult groups because they are faced with many first time decisions and have the least experience in making them (10). Havighurst (12) describes the concept of teachable moments as coming with great urgency as a result of need at a given stage in life. Of all periods of life, early adulthood is the fullest of teachable moments. It is a time of increased sensitivity and unusual readiness to learn. It is usually the time of marriage, choosing a career, having the first child, acquiring the first home, furnishing a home, dealing with childhood illnesses, providing for a family's dietary needs, sending the first child to school, managing family resources, seeking child care, and creating a home environment. This period produces motivation to learn and to learn "now" (12).

Availability of programs directed at family educational needs and the level of computer literacy among the masses will determine the future computer benefits to families. The educational institution recognizes the need to prepare students for the role computers will play in their adult lives (9). In the past, students taking a computer course learned to write programs. Now, courses are designed to aid the students in learning to use the computer as a tool, integrated into the