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ABSTRACT

This study examined computer use in southeast Texas schools in 1997. The study population included 110 school districts in Education Service Center Regions IV and VI. These centers serve 22 counties of southeast Texas in the Houston area. Using questionnaires, researchers collected data on brands of computers presently in use, percent of computer literacy among faculty, number of computer labs in the school district, use of networking in labs, and brands of computers by grade level. A total of 56 school districts returned their questionnaires. Similar data were gathered over the past decade in southeast Texas schools. Data analysis indicated that the 56 districts used 38,270 computers with a mean of 683 computers per district in 1997, which was up from 86 per district in 1985, 202 in 1989, 323 in 1991, and 436 in 1994. Of the 38,270 computers, 14,198 were Macintosh, 11,364 were IBM clones, 6,696 were IBM, 5,058 were Apple IIe/IIg's, and 954 were other brands. Apple computers were decreasing in popularity at all grade levels. Over half of the teachers were computer literate. There were 14 computer labs per district, and 84 percent of the labs were networked.
(Author/SM)

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COMPUTERS IN SCHOOLS OF SOUTHEAST TEXAS IN 1997

by

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ABSTRACT

The educational trends in the past 20 years involved computers and various multimedia. The issue of computer use in the schools is not settled. There are those that argue that educational institutions should not be so concerned with types of computers but with problem solving and a return to the 3 R's. The purpose of this study was to provide educators with the data necessary to make a knowledgeable decision in relation to the purchase of computer hardware for education. Data gathered included brands of computers presently in use, percent of computer literacy among faculty, number of computer labs in the school district, use of networking in labs, and brands of computers by grade level. Similar data was gathered over the past decade in the schools of southeast Texas.

8,270 computers were reported in use by the 56 districts with a mean of 683 computers per district in 1997; up from 86 computers per district in 1985, 202 computers per district in 1989, 323 computers per district in 1991, and 436 computers per district in 1994. Of the 38,270 total computers, 14,198 (37%) were Macintosh, 11,364 (30%) were IBM clones; 6696 (18%) were IBM; 5058 (13%) were Apple IIe/IIgs, and 954 (3%) were other brands.

Another question included on the survey was "What computers are you considering to purchase in the future?" The district responses were:

- Clones-31%
- Macintosh-26%
- Compaq-16%
- IBM-10%
- No Answer-10%
- Dell-5%
- Hewlett Packard-1%
- Acer-1%

From the results of the study, several general conclusions can be made. First, it was apparent that Apple Computers are decreasing in popularity at all grade levels in the school districts serviced by Education Service Centers Region IV and VI. Over half of the teachers are computer literate, there are 14 computer labs per district, and 84% of the labs are networked.

COMPUTERS IN THE SCHOOLS OF SOUTHEAST TEXAS IN 1997

Purpose of the Study

The educational trends in the past 20 years involved computers and various multimedia. The issue of computer use in the schools is not settled. There are those that argue that educational institutions should not be so concerned with types of computers but with problem solving and a return to the 3 R's. The purpose of this study was to provide educators with the data necessary to make a knowledgeable decision in relation to the purchase of computer hardware for education. Data gathered included brands of computers presently in use, percent of computer literacy among faculty, number of computer labs in the school district, use of networking in labs, and brands of computers by grade level. Similar data was gathered over the past decade in the schools of southeast Texas.

Review of the Literature

The controversy about Macintosh or Windows has slowly become a moot question. Motorola recently quit making Macintosh clones, Microsoft bought into Apple Computer to get computer code, Apple Computer seems to be in disarray, and Windows based computers are moving into the schools which was an arena once occupied by the Apple machines.

The Harte-Hanks Texas Poll (Fall 1996) was conducted by the University of Texas with 1001 telephone interviews. The margin of error was plus or minus three points. The results were:

1. 55% use a computer
2. 72% use a computer at work
3. 71% use a computer at home
4. Main use of home computer
 - a) job 33%
 - b) school work 26%
 - c) home finance 18%
 - d) entertainment 13%
5. 46% have access to the internet
6. 42% are very concerned about sexual content on the internet, 19% somewhat concerned
7. How many hours a week do you spend on the internet?
 - a) less than 1 hour--36%
 - b) 1 to 2 hours--25%
 - c) 3 to 4 hours--12%
 - d) 5 to 10 hours--16%

Methods and Procedures

The population of this study included 110 school districts in Education Service Center Regions IV and VI. These centers serve twenty-two counties of southeast Texas in the Houston area. Fifty-six questionnaires were returned from 110 school districts for a return rate of 51%.

Results of the Study

Table 1 shows the results of the study. Table 2 shows the results of other questions on the survey. Figure 1 is a graph of the data from 1985 to 1997. Figure 2 is the graph for computers in 1997.

Table 1
1997 Survey of Computers in Schools in ESC Regions IV and VI

COMPUTER	ELEMENTARY	JUNIOR HIGH	HIGH SCHOOL	TOTAL	PERCENT
Apple II	3887	817	354	5058	13.2%
Macintosh	7705	3486	3007	14,198	37.1%
IBM	1922	1976	2798	6696	17.5%
IBM Clone	3259	2943	5162	11,364	29.7%
Others	77	118	759	954	2.5%
TOTALS	16,850	9340	12,080	38,270	100%

38,270 computers were reported in use by the 56 districts with a mean of 683 computers per district in 1997; up from 86 computers per district in 1985, 202 computers per district in 1989, 323 computers per district in 1991, and 436 computers per district in 1994. Of the 38,270 total computers, 14,198 (37%) were **Macintosh**, 11,364 (30%) were **IBM clones**; 6696 (18%) were **IBM**; 5058 (13%) were **Apple IIe/IIs**, and 954 (3%) were **other brands**.

(INSERT FIGURE 1 HERE)

(INSERT FIGURE 2 HERE)

Another question included on the survey was "What computers are you considering to purchase in the future?" The district responses were:

- Clones-31%
- Macintosh-26%
- Compaq-16%
- IBM-10%
- No Answer-10%
- Dell-5%
- Hewlett Packard-1%
- Acer-1%

Table 2
Results of Additional Questions

Question	1997	1994	1991
Literacy Rate of Teachers	57%	48%	54%
Number of Labs in District	14	11	10
District Networked?	84%	87%	70%
Connected to Internet	45%	*	*
Have LAN	43%	*	*
Have WAN	68%	*	*

Conclusions

From the results of the study, several general conclusions can be made. First, it was apparent that Apple Computers are decreasing in popularity at all grade levels in the school districts serviced by Education Service Centers Region IV and VI. Over half of the teachers are computer literate, there are 14 computer labs per district, and 84% of the labs are networked.

There are other questions that deserve answering. Is one brand of computer better suited for the required Texas junior high computer literacy course? Is one brand of computer better for higher level programming and computer science courses? What brand of computers need to be used to teach business courses in high school with Word Perfect, MS Word, etc? Do Education Service Centers tip the scale in favor of one particular brand of computer? Is there value in having the same brand of computers throughout the district or is exposure to a variety of brand preferred?

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Figure 1
 Computer Brands in Schools of Southeast Texas (1985-1997)

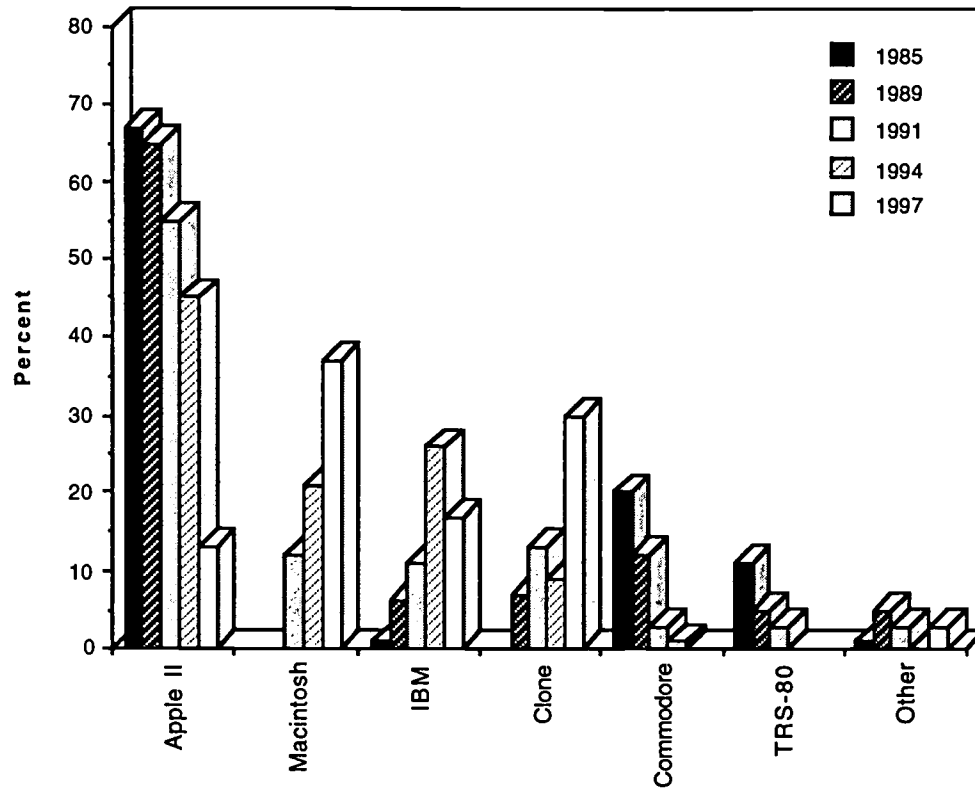
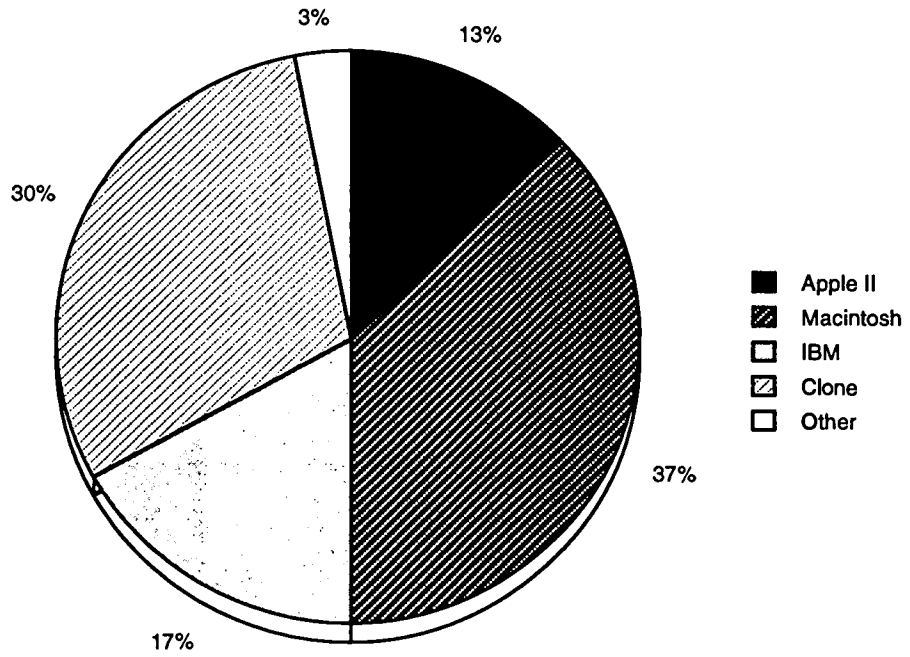


Figure 2
Computer Brands in Schools of Southeast Texas (1997)





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