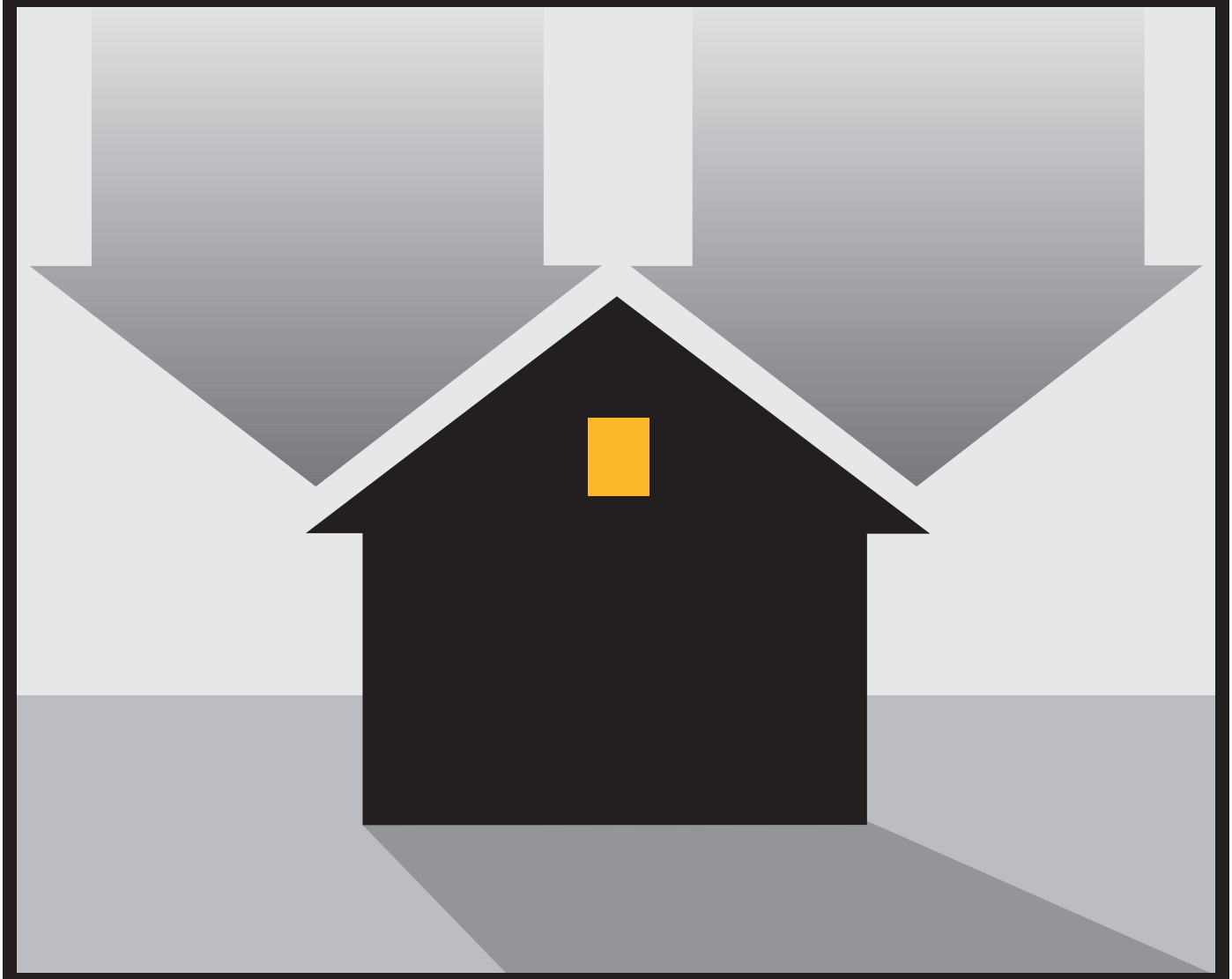
Children, Families *and the* Internet



GA GRUNWALD ASSOCIATES

Children, Families and the Internet 2000

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Only Grunwald Associates (not individual study team members) is responsible for the content and the conclusions in this survey report.

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Introduction

As publisher of *Children, Families and the Internet 2000*, Grunwald Associates is solely responsible for its contents.

Several elements distinguish this study from other industry research. First, we have chosen the family unit as our focus, interviewing and analyzing results from parents and children in the same households. We took this task very seriously, with very detailed interviews of parents and children yielding a wealth of information.

Secondly, Grunwald Associates takes a step beyond simply presenting the data. We attempted to outline implications from the data that could be important to Internet marketers. Sometimes these flow directly from the data; at other times, inferences are drawn based on our extensive experience in the online children's market.

The report is organized so as to allow readers to quickly pick up high-level results in areas of interest, as well as to drill down on many topics. The findings in this main report are followed by an Appendix describing our methodology, along with a summary of the topics in the adult survey questionnaire.

A separate supplement book contains selections from our internal detailed data printouts; these printouts served as the basis for charts and tables in the text. Charts and tables in this main report cite numbered 'tables' in specific "banner books." These are references to detailed data printouts of survey answers that were cross-tabbed against "banner points" of family demographics and usage patterns. These references are included for readers who wish to review detailed data printouts included in the supplement book.

Even with the length and detail of this report, we have covered only a portion of the results found in the extensive data set generated by the survey. In selecting items for inclusion here, we concentrated on information that would be of interest to the greatest number of our readers. Some companies may have specific interests that require customized cross tabs or other analysis; we would be happy to discuss these needs.

Several organizations and individuals provided important help on this effort. We partnered with the National School Boards Foundation for the public side of this initiative –NSBF's support and savvy were vital in executing this survey and in maximizing its impact. NSBF's report, *Safe and Smart*, contains public policy findings from this survey, along with guidelines for children's online safety. The Children's Television Workshop and Microsoft provided generous partial underwriting for this effort.

The Dieringer Research Group, Inc. helped develop the questionnaire, administered the survey, and tabulated and analyzed results; they also provided generous assistance and advice throughout the project.

Finally, Tom Miller and Drew Richardson provided vital informal advice at a number of critical points.

C H A P T E R O N E

Executive Summary

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Grunwald Associates' survey *Children, Families and the Internet 2000* interviewed a random sample of 1,735 parents of children 2 – 17 and 601 children ages 9 – 17 from the same households.

Our groundbreaking research refutes many of the stereotypes of the children's Internet market. Our results confirm that families and children are coming onto the Internet in explosive numbers, but suggest that companies eager to attract this growing audience may need to rethink their marketing strategies. Likewise, new strategies are needed to attract those not yet on the Internet.

At the beginning of the new millennium, almost half of U.S. family households (49%) include at least one child between the ages of 2 and 17 currently using the Internet from any location such as home or school. Looking at individual children 2-17, 40% or 25.4 million currently use the Internet. Since our last survey in 1997, there has been a remarkably sharp increase in home usage by children, although a substantial number of children, particularly teenagers, also use the Internet at school. Interestingly, the "traditional" Internet user (e.g., teenage boy) is less typical in the children's Internet market today, which includes ever-increasing numbers of younger children and females of all ages.

These dramatic changes are taking place alongside a notable shift in family Internet patterns. The statistics on home computer and Internet use suggest that there is no turning back — we are on an inevitable trajectory to becoming a fully connected culture. The so-called "digital divide" -- the gap between high- and low-income users and non-users -- is narrowing. Despite stereotypes of the Internet as a male-dominated domain, mothers are fast becoming the key Internet-using adults in the household, which will certainly change the face of Internet marketing.

Another point worth noting is that education, both formal and informal, is an integral part of parents' and children's expectations of what they can and will do on the Internet. Learning activities occupy a good deal of children's reported Internet activity.

Other key findings and inferences from our survey include the following:

Chapter 2: Household Computer and Internet Characteristics

The computer and the Internet are fast becoming universal appliances in American family households. Highlights of household computer and Internet use include:

- Sixty-four percent (64%) of all family households have home computers.
- The demographics of home computer ownership are improving: nearly half (45%) of low-income families have a home computer.
- Almost half (46%) of all family households have an Internet connection.
- The demographics of home Internet use lags behind computer ownership, yet there are signs that the Internet "digital divide" may be narrowing.
- Mothers are overtaking fathers as Internet users.

Chapter 3: Children's Overall Internet Use

Patterns in overall Internet use of children include:

- A little over half of the children who use the Internet are teenagers, but teenagers represent a decreasing proportion of all children online.
- Girls and boys use the Internet in equal numbers; however, boys spend more time online at home than girls do.
- For most children, home is the primary access point, although teenagers in particular told us that they access the Internet more at school than at home.

Chapter 4: Children's Internet Activities at Home

Families tell us that education and learning dominate children's Internet use at home. Though it is also clear from the survey that children use the Internet for much more than schoolwork and learning, respondents told us that education is:

- The single biggest motivator for children of all ages to use the Internet at home.
- The main use of the Internet at home for children of all ages.
- The most frequent weekly Internet activity for all children.
- Entertainment and games are popular among younger children, whereas email and surfing join with education as the main Internet activities for older children.

Chapter 5: Children's Web Site Use at Home

According to our survey, children's web usage is fragmented. Among the trends that emerge from the data:

- Younger children discover web sites through their parents and TV. Word-of-mouth marketing is the predominant means by which older children learn about web sites.

- Television strongly influences younger children's web usage, though not, it seems, through direct suggestion or advertising, but through the association between favorite children's TV shows and their web sites.

- Among older children, there seems to be little brand loyalty to any particular web sites. Surfing characterizes older children's web activity.

- Although on a macro level families told us that children's education is a major motivator and purpose for use of the Internet, no education web sites emerge as dominant.

The Internet is a non-traditional medium and requires non-traditional marketing strategies. Among the implications of our data:

- The importance of content cannot be overstated, especially in attracting children ages 9-17. Older children don't identify with sites as much as they do with surfing for things to do.

- Tactics relying on the inherent capability of the Internet to create grassroots, word-of-mouth, guerilla, and one-to-one marketing campaigns are far more likely to succeed in reaching older children than traditional marketing programs.

- Younger children can be reached through their parents. Parents of 2-8 year olds report they are interested in two things for their children's Internet use: education and engagement.

Chapter 6: Children's Internet Use From School

The number of children online at school has risen more than 240% over the last two years. Important findings about the school Internet market include:

- Despite the increase in connectivity in instructional rooms, students still predominantly use the Internet in labs or libraries.

- High school students spend more time online than middle or elementary school students.

- Despite the inroads in Internet access in schools, sizable numbers of students are still not using the Internet at school.

- Children are more positive than their parents about the job their teachers and schools are doing with the Internet.

- School presents a critical opportunity for low-income children to use the Internet.

The school Internet market is ripe with opportunity, particularly to reach populations that are otherwise not accessible through the home. Among other things, this is likely to require:

- Creating content that teachers can easily integrate into the curriculum.

- Helping schools better communicate to parents what schools are doing with the Internet.

Chapter 7: School-Home Connection

Cross-influences between school and home markets appear to offer opportunities to media and technology companies. But a key digital "connection" between home and school — the school web site — is still in nascent form:

- A strong majority of parents are interested in online communication with teachers.

- Parents are also interested in viewing their children's schoolwork online.

- One-third of parents believe their child's school has a web site, while about 40% do not know whether the school has one or not.

- Older children report their school has a web site much more frequently than do their parents.

- Of the parents who acknowledge a school web site, most do not use it as it exists today.

Chapter 8: Purchasing, Purchasing Influences, and Premium Services

Key findings in our survey related to online e-commerce and premium services include:

- Parents today are relatively heavy product searchers for their children, but engage in much less online purchasing.

- Parents who do purchase online for their children make significant expenditures doing so.

- Direct purchasing online by children is rare, and "electronic wallet" or "virtual allowance" technologies may not change this in the near future.

- Children who search for product information online for their families are potentially powerful influencers of household purchases, and many children are already doing these searches for their families.

- An important subset of parents tell us they are already subscribing to premium online services for their children, and most of these services are educational.

- Online tutoring provides an instructive example of the issues and opportunities facing would-be providers of online premium services for children.

Multiple strategies are suggested by our results, among them:

- Substantial e-commerce revenue opportunities may be available for marketers who can raise the conversion rate from parent product searches to parent purchases in line with the rest of the consumer market.

- Children can be approached as influencers and supported to become better seekers of product information for their families.

- Significant opportunities to gain home customers exist for companies that can successfully piggyback on established school sales programs and/or develop relatively inexpensive grassroots school marketing campaigns.

Chapter 9: Family Attitudes/Roles and Media Trade-Offs

Based on families reporting to us, two media trade-offs stand out:

- Not only is Internet use not socially isolating, but both children and parents report that since children have come online they have engaged in more social activities.

- Children who use the Internet are more likely to decrease the amount of time they spend watching television than children who don't use the Internet.

Overall, parents are positive about the benefits of the Internet on their children. Despite the prevalent stereotype that Internet use may compromise the social lives of online children, our findings suggest that this is not the case.

- Demographics, particularly the age of the child, have a significant effect on the attitudes of parents toward the Internet.

- Parents (except those of the very young) believe the Internet has more value than television; parents see the computer itself as more valuable than both the Internet and television.

- Parents see themselves more as guides to their children's Internet use than as watchdogs.

Chapter 10: Children Who Don't Use the Internet

Getting offline children to use the Internet is a complex undertaking, because children are not usually self-governing. Some key findings include:

- Substantial proportions of the offline parent and child populations believe they will be online in the next 12 months, regardless of demographics.
- Children's education is the dominant motivation for offline families who plan to come online in the next 12 months.
- Bringing offline children onto the Internet will require a variety of messages targeted at different demographic clusters and online histories.
- Time constraints are the most commonly reported reason online children don't use the Internet more, and also the most common explanation for a decline in Internet usage.
- Significant pockets of "desirable" family demographics have resisted the Internet, while many of lower socioeconomic status express interest in online products.

Chapter 11: Projections

For the next few years, the main influences over children's Internet use will continue to be household computer use and school connections to the Internet. After that, we think a variety of platforms may allow children to access the Internet, including emerging handheld devices.

We estimate that 17.7 million children ages 2-17 were using the Internet from home as of the end of 1999, and project that this number will increase to 36.3 million in 2005. This represents an increase from 28% of children ages 2-17 currently using the Internet from home to 57% online by 2005. Looking specifically at 13-17 year olds, we estimate that 9.7 million are online from home now; a percentage that we predict will rise to 18.0 million in 2005. This represents an increase from the current 49% of this age group to 85% by 2005.

We estimate that 14.3 million children ages 2-17 were using the Internet from school as of the end of 1999, and that this number will increase to 38.7 million in 2005. This represents an increase from 23% of children ages 2-17 using the Internet from school now to 61% online from school by 2005. Looking specifically at 13-17 year olds, we estimate that 8.6 million teens are online from school, a percentage which will likely rise to 19.5 million in 2005. This represents an increase from a current 44% of this age group to 92% by 2005.

Looking at total children online from any location, we estimate that 25.4 million were online as of the end of 1999; a figure which we predict will rise to 43.6 million by 2005. This represents an increase from a current 40% of 2-17 year olds to 68% in 2005.

C H A P T E R T W O

Household Computer and Internet Characteristics

Chapter Outline

2a. Growth in Household Computer Ownership
2b. Demographics of Home Computer Ownership
2c. Main Uses of the Home Computer
2d. Growth in Internet Use in Households
2e. Demographics of Household Internet Use
2f. Types of Household Internet Access
2g. Original Reasons for Household Obtaining Internet
2h. Parental Use of the Internet
2i. Personal Web Sites in Households

Introduction

The computer and the Internet are fast becoming universal appliances in American family households. Highlights of household computer and Internet use include:

- Sixty-four percent (64%) of all family households have home computers.
- The demographics of home computer ownership are improving: nearly half (45%) of low-income families have a home computer.
- Almost half (46%) of all family households have an Internet connection.
- The demographics of home Internet use lag behind computer ownership, yet there are signs that the Internet "digital divide" may be narrowing.
- Mothers are overtaking fathers as Internet users.

2a. Growth in Household Computer Ownership

Household computer ownership has grown steadily over the past five years. At the end of 1999, 23.9 million, or 64% of all family households, reported having a computer at home. That's up from 16.7 million, or 47%, in 1997, and 12.8 million, or 38% in 1995. Figure 2-1 shows this four-year, 86.7% growth in market — an increase of about 11 million families, representing 30% of family household computer ownership.

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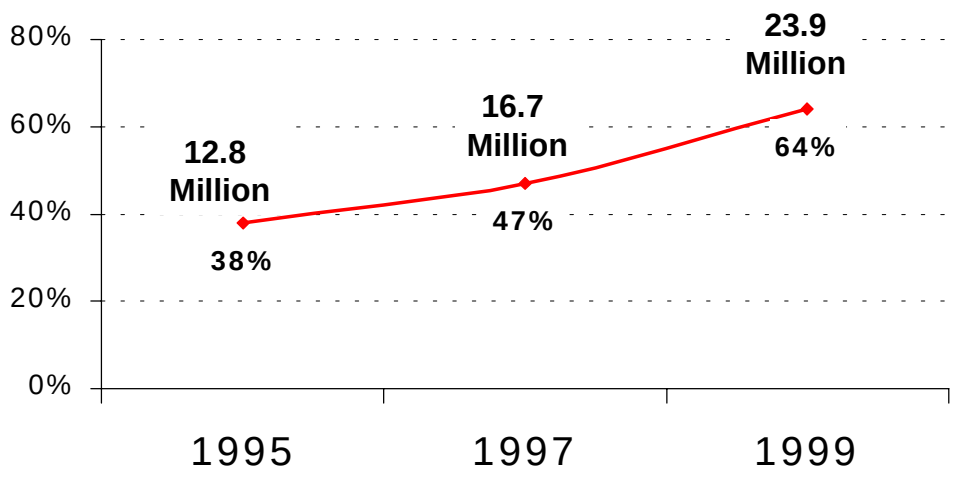
Figure 2-1. Households With Children Ages 2-17 That Have One or More Computers at Home (1995 to 1999)

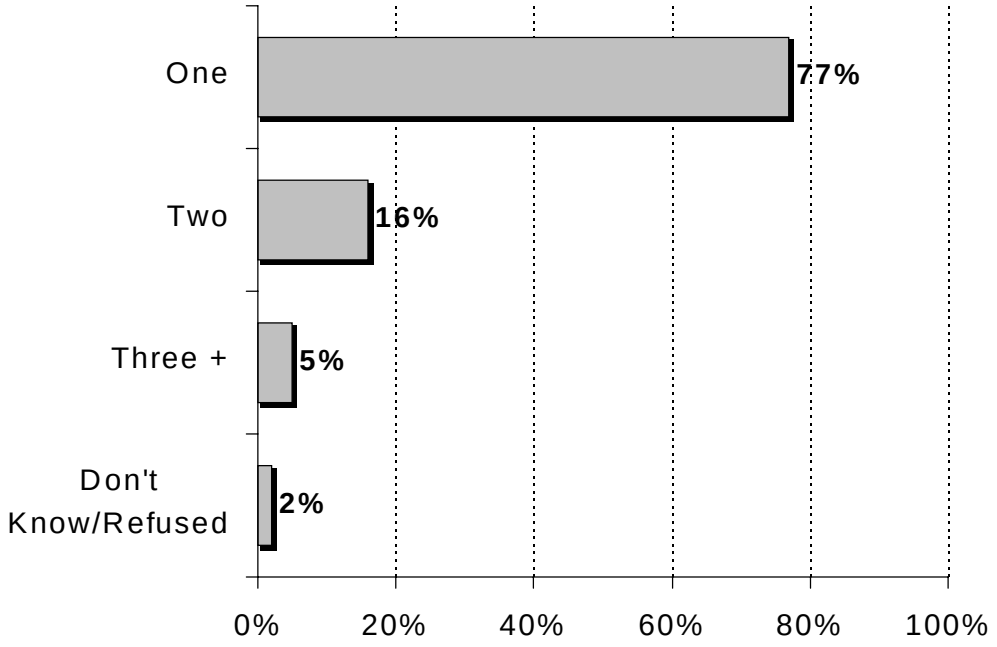


(All households with children ages 2-17 that have one or more computers at home)
Source: 95 Report, Page 9; 97 Report, Page 96; Banner 1; Data Table 37 Grunwald Associates

As we see in Figure 2-2, slightly more than three-quarters (77%) of these same households have only one computer. Sixteen percent (16%) have two computers, and only 5% have three or more.

The recent growth spurt in the home computer market is largely due to first time computer purchases. Approximately 40% of all computer family households bought their first computer since 1997 — nearly one quarter of those families (24%) bought in 1998 and 1999. In other words, according to our results, since 1997 a greater percentage of computer sales have been to first time buyers than to consumers purchasing additional or replacement computers

Figure 2-2. Number of Personal Computers in the Household



(Parent respondents who own a computer)
Source: Banner 1; Data Table 51

Grunwald Associates

2b. Demographics of Home Computer Ownership

As Table 2-1 shows, ownership of home computers is still closely linked to socioeconomic factors. Family households with more education, professional jobs, and higher incomes are much more likely to have computers in their homes than other households. For example, 85% of college graduates own computers, compared to 49% of those without any college experience. Similarly, 76% of professional households, compared to 62% of non-professional households, have at least one computer. In

addition, 92% of households with annual incomes of $75,000 or more have a computer, compared to 45% of those households with annual incomes of less than $40,000.

Table 2-1. Presence of Home Computers by Education, Occupation, Income and Ethnicity

		Percent Ownership
Education	HS graduate or less	49%
	Some college/trade school	68%
	College graduate	85%
Occupation	Professional	76%
	Other	62%
Household Income	Less than $40,000	45%
	$40,000 - $74,999	80%
	$75,000 or more	92%
Ethnic Background	White	73%
	African-American	39%
	Other	44%

(Parent respondents)
Source: Banner 1; Data Table 4
Grunwald Associates

Although there is an undeniable link between socioeconomic status and computer ownership, there has nonetheless been tremendous progress since 1995 in ownership among lower income families. Five years ago, only 21% of families with annual incomes under $40,000 owned a personal computer. In 1999, that number more than doubled to 45% of lower income households.

Other Household Characteristics
The likelihood of owning a home computer is also linked to other household characteristics, as seen in Table 2-2.

Table 2-2. Presence of Home Computers by Age, Family Size and Household Type

		Percent
Age of Respondent	18 – 29	45%
	30 – 44	66%
	45 or older	75%
Number of Children Ages 2-17	1	63%
	2 – 3	67%
	4 or older	55%
Household Type	Couple Head of Household	71%
	Single Head of Household	54%

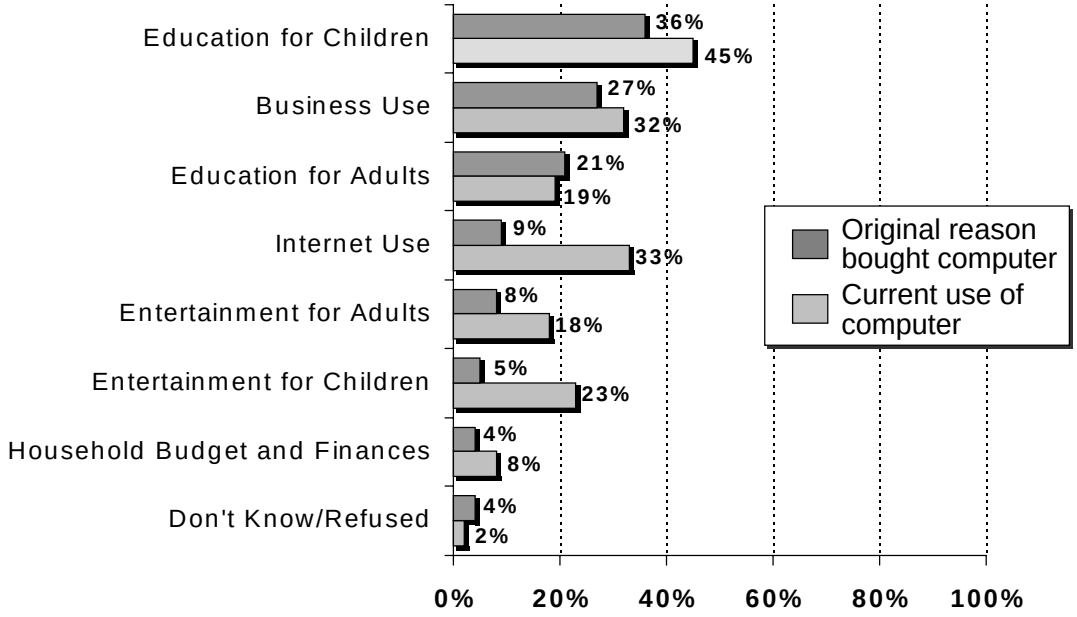
(Parent respondents)
Source: Banner 1; Data Table 4
Grunwald Associates

Specifically, older respondents and those in two-parent households are more likely to own computers. The higher levels of computer ownership among older parents may be explained by simple socioeconomic factors, age generally correlating positively with wealth. But it seems likely that another factor is the presence of children, specifically older children, particularly since parents of older children are the most likely to have bought their computers for their children's education. Almost half of parents of teens (48%) report having purchased their computers for this purpose, versus 36% of parents of 9-12 year olds and only 23% of parents of 6-8 year olds.

2c. Main Uses of the Home Computer

When we asked parents about their original reasons for purchasing a computer, children's education and business use headed the list, with 36% and 27% of responses, respectively. In Figure 2-3 we can see that current use of the computer for children's education has surpassed its original intended use (45% current use vs. 36% intended use) and remains the single biggest use of the home computer. In addition, Internet use, which was mentioned by only 9% of respondents as an original reason for their computer purchase, soared on the list of current uses — 33% cited it as one of the primary computer uses, second only to children's education, and just nosing out business use (32%).

Figure 2-3. Main Uses of Home Computer



Note: Only answers given by 4% or more respondents are included individually in this figure.
(Parent respondents who own a computer)
Source: Banner 1; Data Tables 54 and 55

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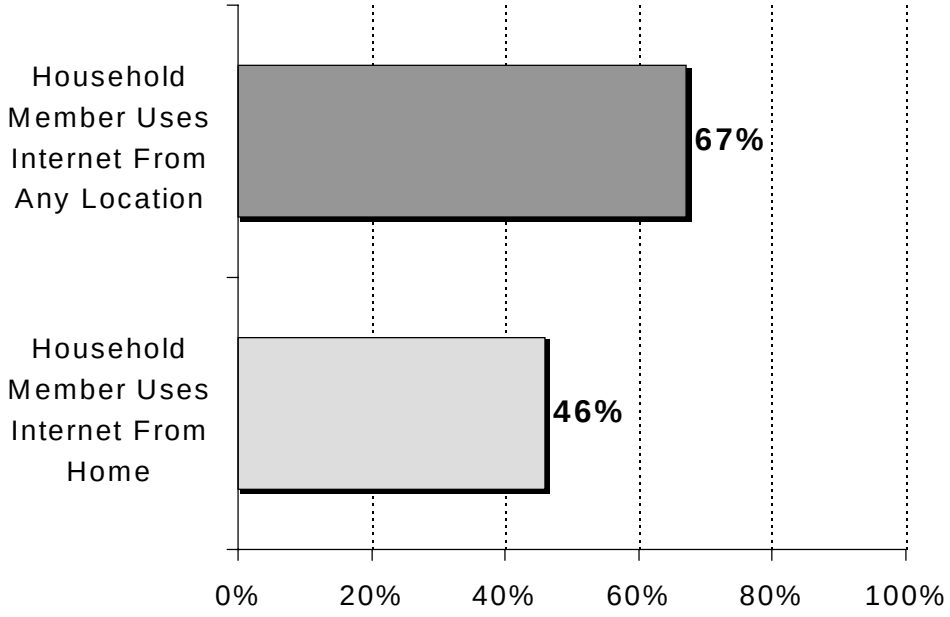
2d. Growth in Internet Use in Households

Twenty-five million or 67% of family households include at least one family member who uses the Internet from some location. In 18 million households (49%), at least one child goes online from some location — that's almost triple the 6.5 million households with online children reported in 1997.

Looking exclusively at home use, by the end of 1999 17 million family households included at least one member who used the Internet from home. This represents 46% of all family households.

Figure 2-4. Household Internet Use



Source: Banner 1, Data Table 42a (Combining Data Tables 38, 39, 42)
Data Table 42b (Combining Data Tables 8, 9, 26)

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2e. Demographics of Household Internet Use

The demographic gaps between parent users and non-users are striking, as seen in Table 2-3. In 36% of lower-income households, one or more adults use the Internet from some location, compared to 86% of upper income families. As with home computer ownership, the strongest socioeconomic variable seems to be income — the gap between low- and high-income families is much greater (50%) than any other socioeconomic gap, including education (42%), ethnicity (30%), or occupation (17%).

Table 2-3. Parent Internet Use From Any Location by Education, Occupation, Income and Ethnicity

	Socioeconomic Indicator	Percent Use
Education	HS graduate or less Some college/trade school College graduate	37% 58% 79%
Occupation	Professional Other	66% 49%
Household Income	Less than $40,000 $40,000 - $74,999 $75,000 or more	36% 68% 86%
Ethnic Background	White African-American Other	60% 30% 44%

(Parent respondents)
Source: Banner 1; Data Table 6
Grunwald Associates

However, if we calculate children's Internet use from any location as a part of the household Internet use, we see the numbers among low-income, less-educated households rise rather dramatically, as seen in Table 2-4.

Table 2-4. Household Internet Use (Either Parent or Any Children) From Any Location by Education, Occupation, Income and Ethnicity

	Socioeconomic Indicator	Percent Family Households Online
Education	HS graduate or less Some college/trade school College graduate	53% 71% 85%
Occupation	Professional Other	76% 61%
Household Income	Less than $40,000 $40,000 - $74,999 $75,000 or more	52% 79% 90%
Ethnic Background	White African-American Other	73% 43% 54%

(Parent respondents with children ages 2-17)
Source: Banner 1; Data Table 42a (combination of Tables 38, 39 and 42)
Grunwald Associates

When children's use is factored in, every demographic group's use rises between 4-16%. What is striking is how the picture changes for non-educated, low-income, and African-American households; when children are included, about half of these households include someone who uses the Internet.

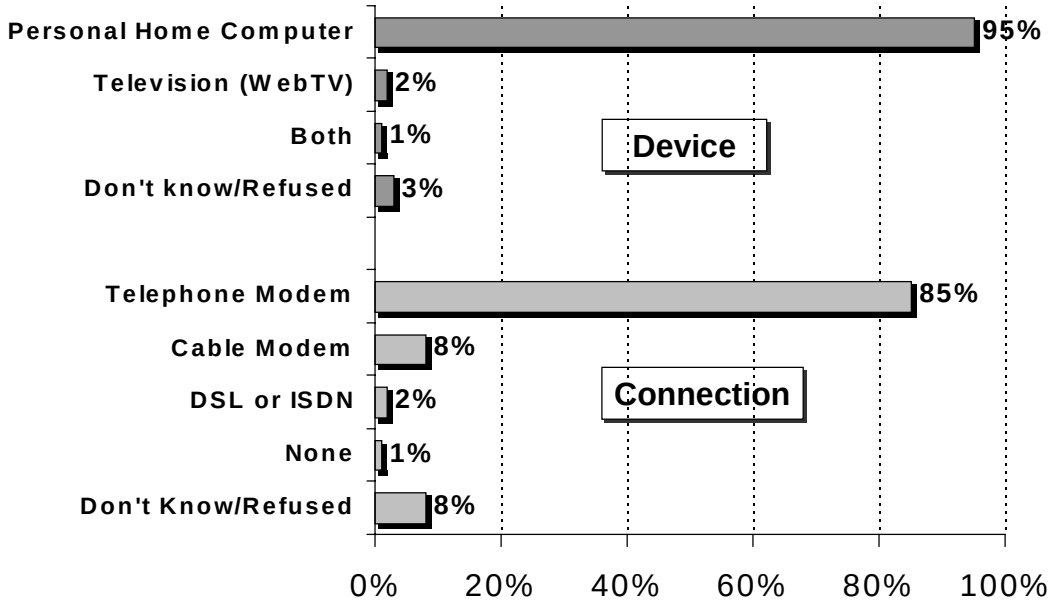
The reason for this increase is one word: school. As we will see in Chapter 7, school is a significant access point for children from low-income, non-educated, non-professional, and minority households.

As computer ownership rises among low-income families (it's at nearly 50% now) and as the price of PCs decreases steadily every year, the ownership rate of computers is destined to grow. Furthermore, as dial-up Internet access becomes increasingly less expensive or even free, and as Internet access through inexpensive hand-held devices grows, we believe the digital divide of access between high- and low-income families will shrink considerably.

2f. Types of Household Internet Access

Almost all households with an Internet connection (95%) access the Internet through a personal computer (Figure 2-5). Approximately four out of five (85%) of these home personal computers are linked to the Internet through standard dial-up service. [Source: Banner 1; Data Tables 56, 57; Questions 3.1, 3.2] Thirteen percent (13%) of all households with children ages 2-17 indicated that they intend to obtain high-speed

Figure 2-5. Type of Internet Access



(Parent respondents with household member using the Internet from home, and connecting to the Internet using a home computer)
Source: Banner 1; Data Tables 56 and 5

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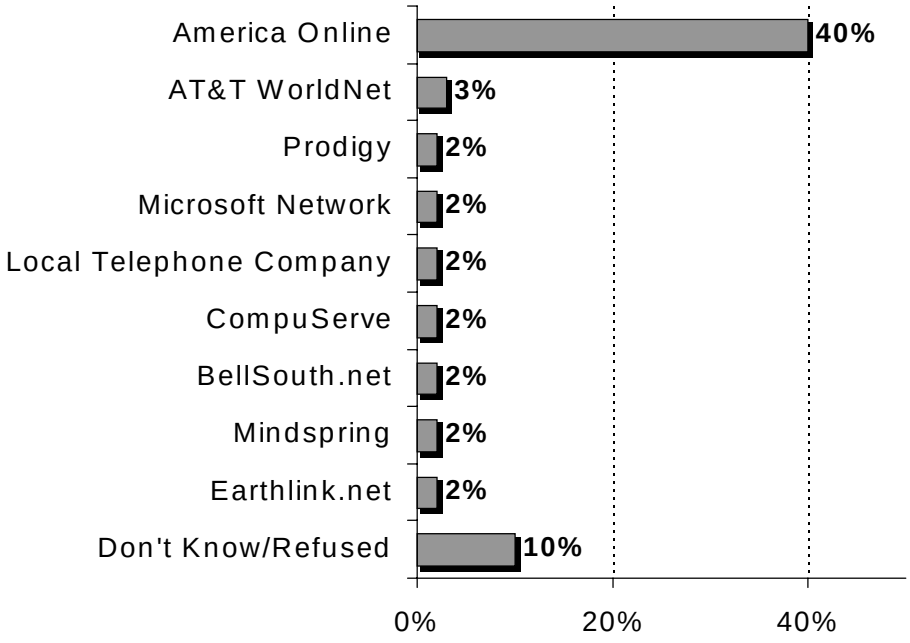
access within the following 12 months. Respondents from households earning over $75,000 annually were significantly more likely to plan to purchase high-speed access than households with annual incomes under $40,000.

Four in ten households with Internet access at home use America Online as their Internet Service Provider (Figure 2-6). Each of the other major ISPs is used by 3% or fewer of the respondents.

Figure 2-6. Internet Service Providers



Note: Only ISPs mentioned by eleven or more respondents (2%) are included in this figure.
(Parent respondents with household member using the Internet from home)
Source: Banner 1; Data Table 58

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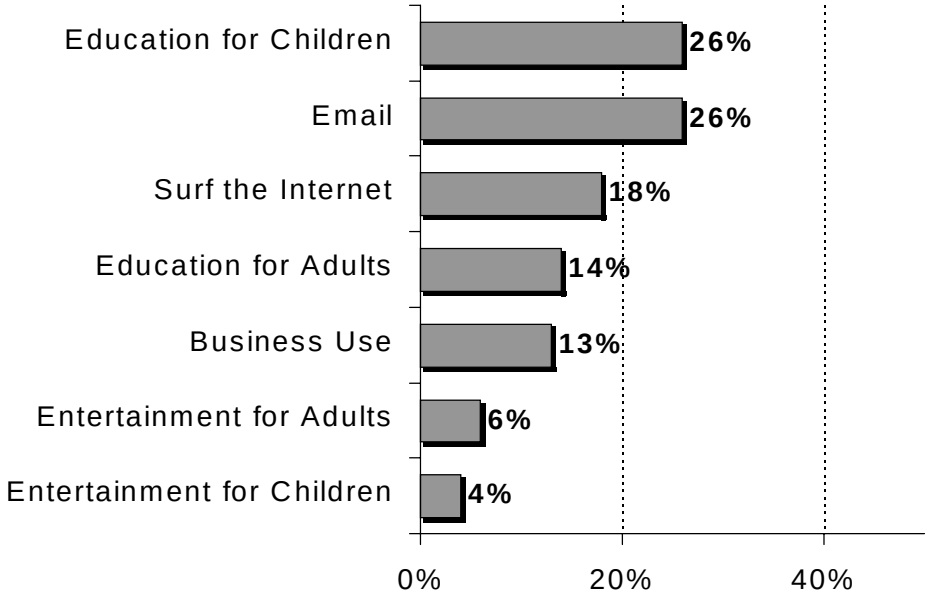
2g. Original Reasons for Household Obtaining Internet

Children's education and email were the top two reasons parents reported their household obtained Internet access (Figure 2-7). As we will see later in Chapter 5, once families make use of their Internet access, children's education surpasses even email as a primary use.

Figure 2- 7. Original Purpose for Households Obtaining Internet Access



Note: Only uses mentioned by 4% or more respondents are included individually in this figure.
(Parent respondents with household member using the Internet from home)
Source: Banner 1; Data Table 59

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2h. Parental Use of the Internet

Internet use among parents is widespread. All parents in the survey, regardless of whether they had computers in their homes, were asked whether they used the Internet from any location. In 55% of the households surveyed, at least one parent uses the Internet from some location.

Location of Internet Use
When we asked parents where they used the Internet, 82% said they use it from home, and nearly half (46%) use it from work. If we look at where parents access the Internet by demographics, we notice an interesting pattern, as seen in Table 2-5.

Home outpaces work as an access point for every single demographic subgroup except African-American parents (for whom home and work provide equal, albeit minimal, access). We would expect this to be the case with higher income, professional, educated households who can afford Internet access at home, but work is clearly not a place for low-income, non-professional, less-educated parents to use the Internet.

Table 2-5. Parent/Guardian Internet Use At Home and Work by Education, Occupation, Income and Ethnic Background

Variable	Category	Percent Online From Home	Percent Online From Work
Education	HS graduate or less	27%	12%
	Some college/trade school	45%	31%
	College graduate	69%	54%
Occupation	Professional	55%	40%
	Other	38%	22%
Household Income	Less than $40,000	23%	14%
	$40,000 - $74,999	58%	33%
	$75,000 or more	76%	64%
Ethnic Background	White	50%	31%
	African-American	14%	17%
	Other	31%	21%

(Parent respondents with children ages 2-17)
Source: Banner 1; Data Tables 42c, 42d (combination of Tables 8 and 9)
Grunwald Associates

Therefore, if people from these groups are using the Internet at all, they are more likely to be using it from home, unlike their children, who are likely to be using it from school. This suggests that schools may be doing a better job than workplaces of providing Internet access to those people with fewer advantages.

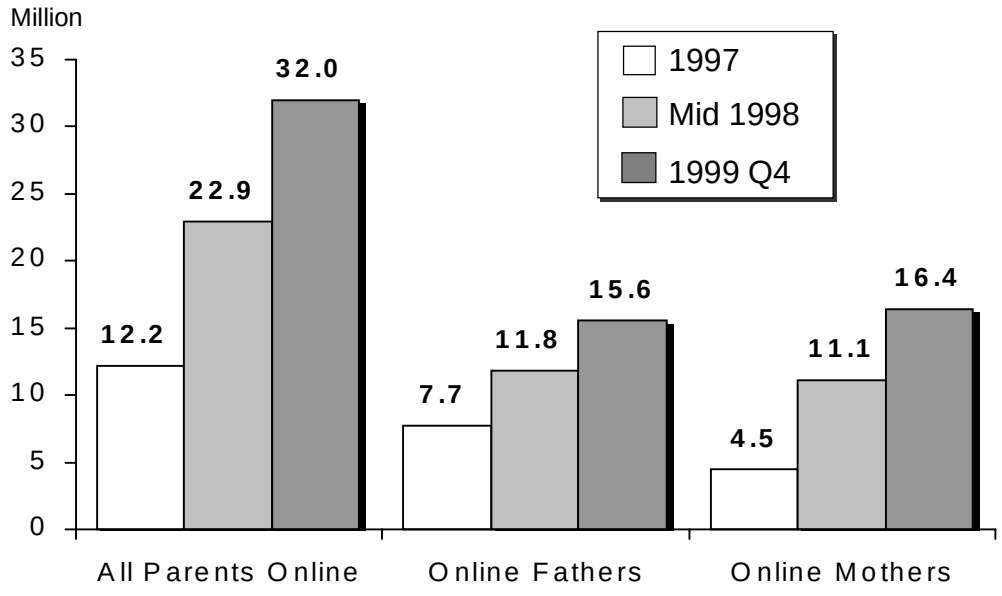
Parents' Role in Children's Use
Among the survey's most significant findings is that the number of mothers online is overtaking the number of fathers, as seen in Figure 2-8.

Not only does it appear that more mothers are online than fathers; they are going online at a faster rate as well. Since 1997, the number of mothers online has more than tripled, while the number of fathers has merely doubled.

In addition, mothers appear to just edge out fathers in providing children their first Internet experience at home. Thirty-six percent (36%) of respondents reported that their child first used the Internet at home with the mother, compared with 34% who named fathers. This is especially true, not surprisingly, in single parent households (40% mothers vs. 21% fathers) and among parents of children ages 2-5 (55% of whom go online with mom first). Where this is *not* true is in upper income and educated households. In households where at least one of the parents is a college graduate or the annual household income is above $75,000, about 40% of fathers provided their children their first Internet experience, compared to approximately 31% of mothers. A majority of 9-12 year olds (45%) also went online with dad first.

Nevertheless, the overall numbers should signal an important change to Internet marketers, especially as we will see in Chapter 4 that girls use the Internet as much as boys do. The Internet is no longer a bastion of male "net heads," but moving toward a

Figure 2-8. Online Parents From Any Location



Source: Banner 1; Table 6 Projected to Millions of Parents

Grunwald Associates

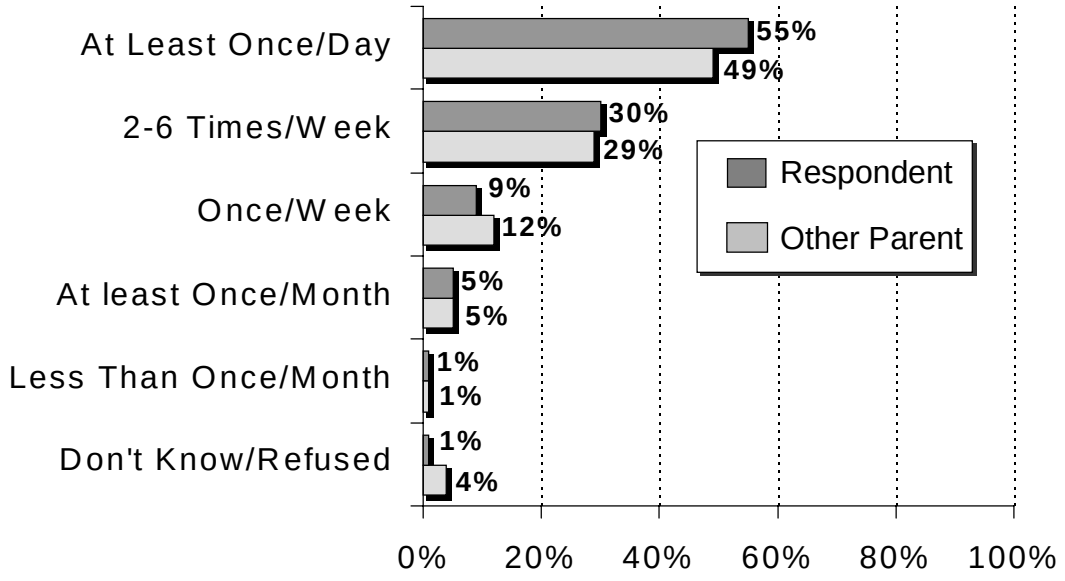
mainstream platform that mothers and girls are using in increasingly large and enthusiastic numbers. The implications for this "feminization" of the Internet are enormous. Among other things, it may mean that the way to reach mothers is through online services for their children, and vice-versa. It should also be noted that 38% of teens first went online either with a sibling, a friend, or on their own (though a majority went online with one or the other parent), and that relatively high percentages of low-income children (15%, versus 10% of middle income and 5% of high income children) are going online on their own as well.

Frequency of Parental Internet Use

As shown in Figure 2-9, approximately half of the adult respondents who use the Internet (55%) and other parents (49%) in the household use the Internet from some location at least once a day. Approximately another 30% of respondents and other parents log on two to six times per week.

Table 2-6 shows the average number of hours of use per week by sub-group. While college graduates, professionals, and those with higher household incomes tend to use the Internet more hours per week, none of these differences is statistically significant.

Figure 2-9. How Often Parents Use Internet From Any Location



(Parent respondents who use the Internet
Source: Banner 1; Data Tables 10 and 11

Grunwald Associates

There are, however, statistically significant differences in frequency of use, between fathers, more educated parents, older parents, professional parents, and high-income parents accessing the Net at least once a day with greater frequency than their counterparts. For example, 62% of parents aged 45 or older access the Net at least once a day, versus 55% of 30-44 year olds, and only 43% of 18-29 year old parents. The fact that older parents are making the Net a part of their daily lives with greater frequency than younger parents (although they do not spend more hours online) is particularly interesting, not only because people of this age are usually perceived as less in touch with the Internet revolution than their younger peers, but also in light of the extent to which their online behavior may be influenced by their children (see below).

Help from Children

Parents were also asked if any of their children had helped them in setting up or using the Internet. Overall, 20% of the parents said one or more of their children had helped them set up the computer and modem for Internet use, and 26% said their children had helped teach them how to use the Internet. Table 2-7 shows that the most important demographic variable in influencing who received help from their children was age — older respondents were more likely to get both types of help. Mothers, less-educated parents, non-professional parents, and white parents were also especially likely to ask their children for assistance. Thirteen years is the average age of the child who helps parents set up and/or learn to use the Internet.

Table 2-6. Average Hours per Week Parent Uses Internet From Any Location

Variable	Category	Average Hours/Week
All Parents		8.0
Respondent Education	HS graduate or less	6.6
	Some college/trade school	8.9
	College graduate	8.4
Respondent Occupation	Professional	9.0
	Other	7.6
Household Income	Less than $40,000	7.6
	$40,000 - $74,999	8.5
	$75,000 or more	8.3

(Parent respondents who use the Internet)
Source: Banner 1; Data Table 62
Grunwald Associates

The role that children play in helping their parents with the Internet suggests that in some families children may be strong influencers of parents' Internet behaviors. (For more discussion on this topic, see Chapter 9.)

Table 2-7. Child Helped Parents Set Up Computer and Learn to Use Internet

Parent/Guardian Age	Received Help Setting Up	Received Help Using Internet
	20%	26%
18 – 29	2%	4%
30 – 44	18%	26%
45 or older	34%	37%

(Parent respondents who use the Internet)
Source: Banner 1; Data Tables 76 – 77
Grunwald Associates

2i. Personal Web Sites in Household

Eight percent of family households include someone who maintains a personal web site (Table 2-8), and households with more education and higher income are more likely to include such a member.

Table 2-8. Personal Web Sites in Household

		Household Member Maintains a Personal Web Site
Parents		8%
Respondent's Education	HS graduate or less	5%
	Some college/trade school	9%
	College graduate	12%
Respondent's Occupation	Professional	10%
	Other	9%
Household Income	Less than $40,000	6%
	$40,000 - $74,999	12%
	$75,000 or more	12%

(Parent respondents)
Source: Banner 1; Data Table 201
Grunwald Associates

Of the households with personal web sites, more parents have a web site than children:

- In 66% of the households, the parent or guardian has a web site.
- In 40% of the households, the child has a web site.

But the number of personal websites maintained by children is of significant interest, particularly when different ages of children are considered and one translates these seemingly small percentages into raw numbers. For example, according to parents, 4% of teens maintain their own web sites, translating into 823,446 teen-developed sites. Slightly less than 1% of 9-12 year olds and slightly less than 1% of 6-8 year olds also have their own sites, translating into an additional 83,014 6-8 year old child-developed sites, 140,471 9-12 year old child-developed sites, or 223,484 sites in total.

Conclusion

The statistics on home computer and Internet use suggest that there is no turning back — we are on an inevitable trajectory toward becoming a fully connected culture. The gap between high- and low-income users and non-users is narrowing. For families, mothers are fast becoming the key Internet-using adults in the household, which will completely change the face of Internet marketing. Mothers are often responsible for parenting and education, an important consideration for marketers trying to reach this audience.

C H A P T E R T H R E E

Children's Overall Internet Use

Chapter Outline

3a. Use by Age
3b. Use by Gender
3c. Where Children Use the Internet
3d. Children's Frequency on the Internet
3e. Children's Time Spent Online
3f. Increases in Children's Online Use

Introduction

At the beginning of the new millennium, almost half (49%) of the family households in the U.S. reported that at least one child between the ages of 2 and 17 currently use the Internet from some location. Translated into numbers of children, 40% — or 25.4 million — of all children currently use the Internet from some location. Looking at these numbers at a closer range reveals:

- A little over half of the children who use the Internet are teenagers, but teenagers represent a decreasing proportion of all children online.
- Girls and boys use the Internet equally; however, boys spend more time online at home than girls do.
- Home is the primary access point for most children, although teenagers told us that school is more likely to be their Internet access point.

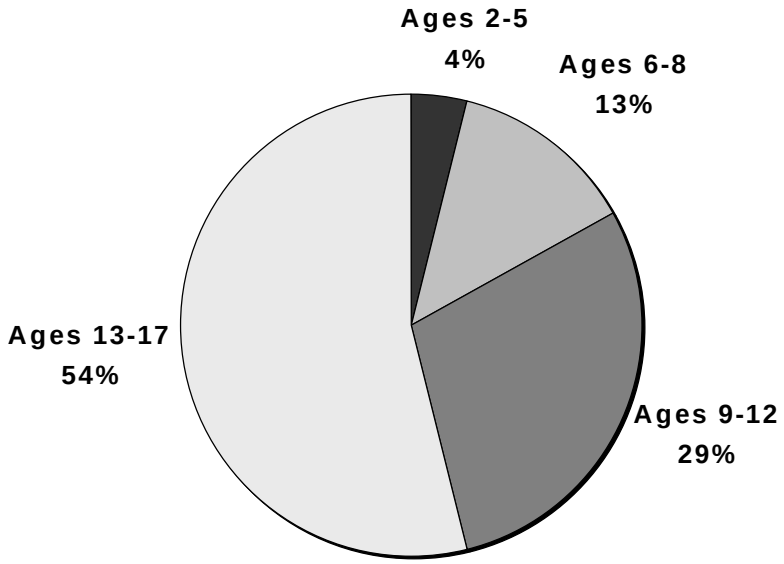
3a. Use by Age

According to parents, the average age that children first start using the Internet is 10. But when one compares first use against age of parent, it appears that to some extent the current average is an artifact of the newness of the medium, and that the average child growing up today is likely to be coming online significantly earlier in life.

Specifically, parents ages 45 and older report 12 as the age of first Internet use by their child, parents ages 30-44 report 10 as the age of first use, while parents ages 18-29 report 8 years of age as their child's first use.

Looking at the age distribution of Internet use among children in Figure 3-1, we see, not surprisingly, that the greatest concentration of Internet users is among 13-17 year olds — 54% of online users are teenagers. Almost a third (29%) are 9-12 years old, 13% are ages 6-8, and only 4% are the youngest children, ages 2-5. Note that these percentages represent proportions of all online children, not proportions of the children in that age group who are online.

Figure 3-1. Proportion of All Online Children, By Age Segment
(Parents' Responses)

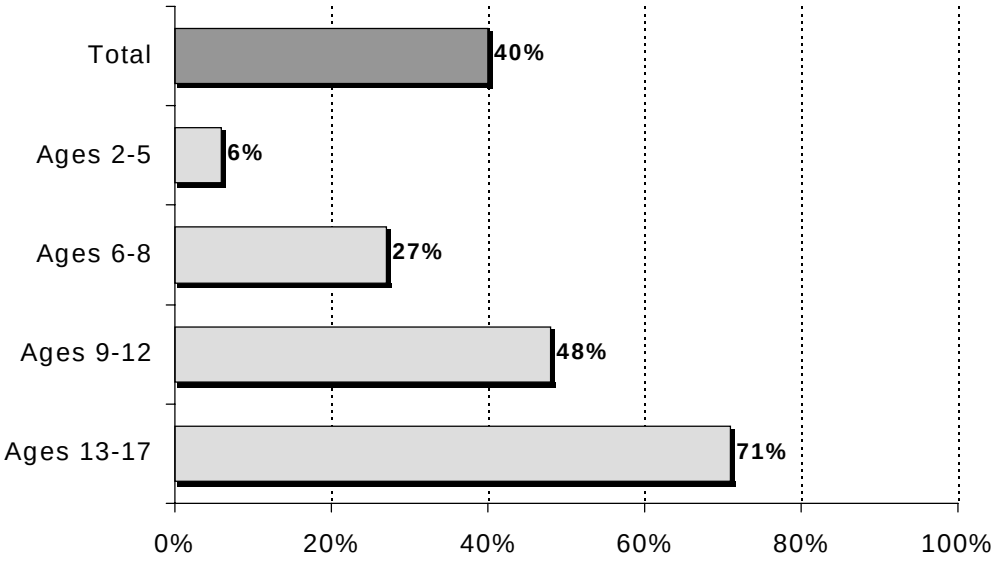


(Parent respondents with children ages 2-17 who use the Internet
Source: Banner 2; Data Table 43
Grunwald Associates

Our 1997 findings indicated that about 60% of children online were aged 13-17. While the majority of children online today are still teenagers, the number of younger children online has grown steadily since 1997.

Figure 3-2 shows the percentage of each online age group. As a percentage of their respective age populations, 71% of all teenagers use the Internet from some location, almost half (48%) of all 9-12 year olds are online, over a quarter (27%) of 6-8

Figure 3-2. Use of Internet by Age
(Any Location; According to Parents)



Source: Banner 2; Data Table 43

Grunwald Associates

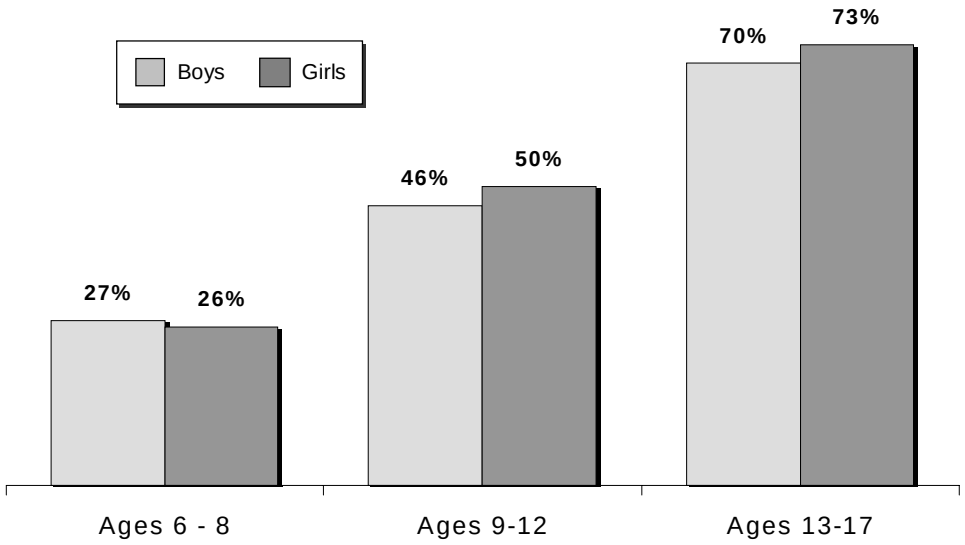
year olds and 6% of all 2-5 year olds use the Internet from any location.

3b. Use by Gender

One of the more provocative findings of this survey is that there is no significant difference between boys' and girls' use of the Internet from any location. Male and female children use the Internet in equal numbers, regardless of age group. In fact, as Figure 3-3 suggests, older girls seem to be online in slightly higher proportions than boys of similar age. This difference is not statistically significant, but it does shatter the stereotype of girls as sideline observers of the Internet culture.

That said, we will see later in this chapter that there are differences in how much time boys and girls spend on the Internet. In Chapter 5, we will look at how boys' and girls' use of the Internet differs (less than one might expect) and in Chapter 11, we'll explore gender-based differences among non-users, which suggest that the proportion of girls online is likely to increase.

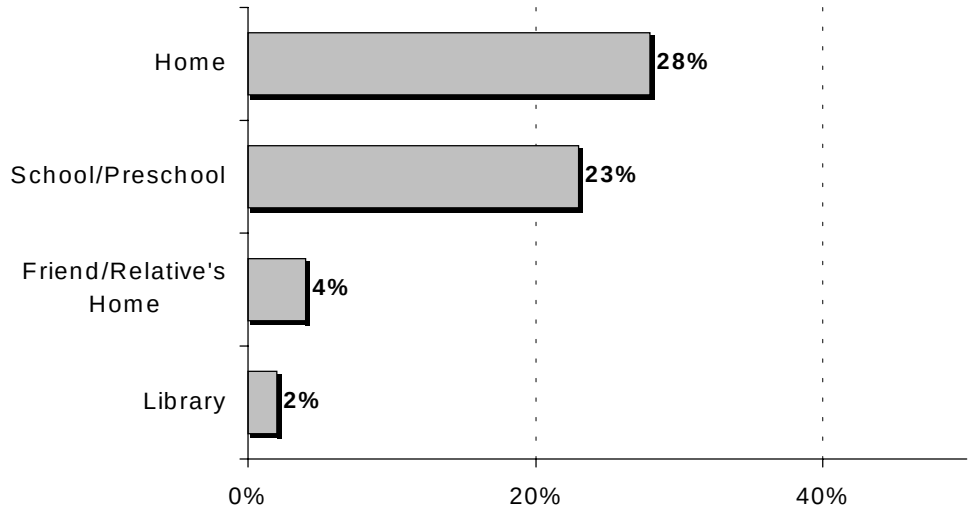
Figure 3-3. Gender of Children Online



Source: Banner 2; Data Table 43

Grunwald Associates

Figure 3-4. Where Children Use the Internet



(All children of parent respondents)
Source: Banner 1; Data Table 26a

Grunwald Associates

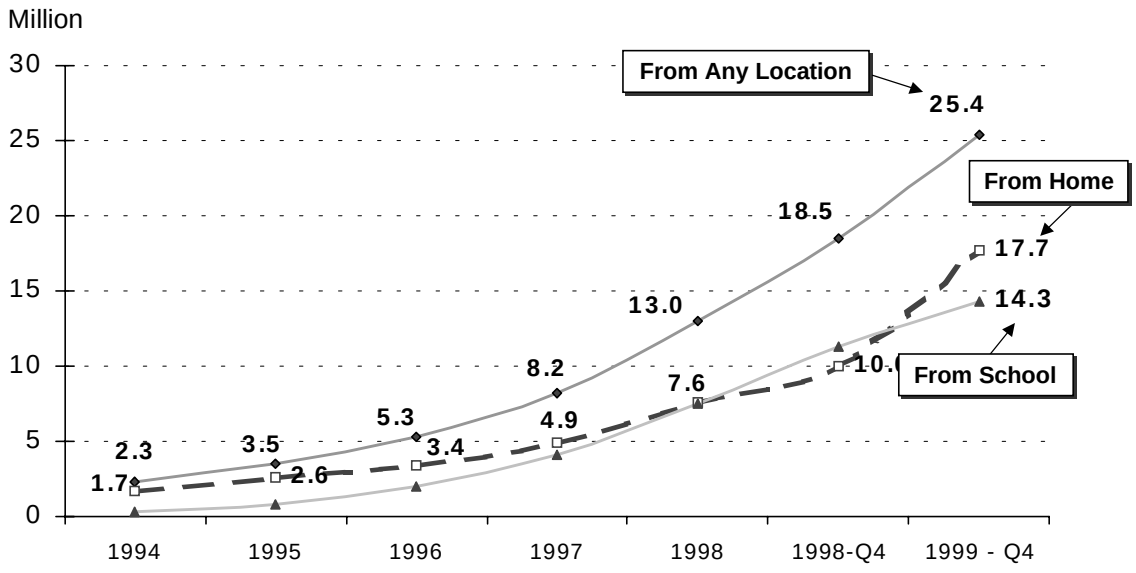
3c. Where Children Use the Internet

When parents were asked where their child uses the Internet now (they could name as many locations as were applicable) they reported that home outpaces other locations as their children's point of Internet use. As seen in Figure 3-4, 28% of all children use the Internet from home, compared to 23% who use the Internet from school.

In terms of hard numbers, 17.7 million children use the Internet from home and 14.3 million use it from school regularly. The evidence from parents positions home as the main point of children's Internet use, which seems to reverse an earlier trend showing school Internet use equaling and then outpacing home use in 1998, as seen in Figure 3-5.

When we look at the universe of online children, as shown in Table 3-1, we find that 69% of all online children use the Internet at home and 55% use it at school, according to parents. About 10% of online children use the Internet from the home of a friend or relative. The library plays a small role in younger children's Internet access, but about 7% of older online children (ages 9 – 17) use the Internet at the library**.**

Figure 3-5. Children Online By Location
(Children Online Regularly According to Parents)



Source: Banner 1; Data Table 26a

Grunwald Associates

Table 3-1. Where Children Use the Internet
(Of Children Who Use the Internet, According to Their Parents)

Location	Parents' Responses Age of Child				
	Total Children (2 – 17)	2 – 5	6 – 8	9 – 12	13 – 17
Home	69%	86%	69%	68%	69%
School/Preschool	55%	15%	44%	55%	61%
Friend/Relative's Home	10%	4%	7%	10%	11%
Library	6%	--	--	7%	6%

(Parent respondents with a target child (ages 2-17) who uses the Internet)
Source: Banner 2; Data Table 44
Grunwald Associates

However, as evidenced in Table 3-2, the dominance of home as a point of use may represent a trend only for younger children, since parents may not be fully aware of their older children's school access. According to the teenagers with whom we spoke, school is, in fact, more likely to be their Internet access point — 69% of 13-17 year olds who use the Internet said they use the Internet at school (compared to 61% of their parents) and only 59% named the home as a place where they use the Internet (compared to 69% of their parents).

Table 3-2. Where Target Children Use the Internet
(Percentage of Children Who Use the Internet)

Location	Age of Child			
	Ages 9 – 12		Ages 13 – 17	
	Parents' Responses	Children's Responses	Parents' Responses	Children's Responses
Home	68%	51%	69%	59%
School/Preschool	55%	54%	61%	69%
Friend/Relative's Home	10%	6%	11%	15%
Library	7%	8%	6%	13%

(Parent respondents with a target child ages 9-17 who uses the Internet, all target children ages 9-17 who use the Internet)
Source: Banners 1, 2; Data Tables 44, 279
Grunwald Associates

Moreover, not only did parents underestimate their teenagers' school use, but they overestimated their 9-17 year olds' home use. It's notable that 68% of parents reported that 9-12 year olds access the Internet from home, but only 51% of children of that age

group said they did. With teenagers, parents reported 69% used the Internet from home, whereas only 59% of the teenagers themselves reported online use at home.

These two factors combined — parents' underestimation of their teenager's school use and overestimation of their 9-17 year olds' home use — suggest that, even with the fast-paced growth of the home Internet market, school continues to play a critical role in providing Internet access for U.S. children. We will discuss the implications of school Internet use in Chapter 7, including its importance for specific demographics.

3d. Children's Frequency on the Internet

It is clear that home and school are the significant access points for children's Internet use. However, home provides an opportunity to go online more often than schools do, according to both parents and children.

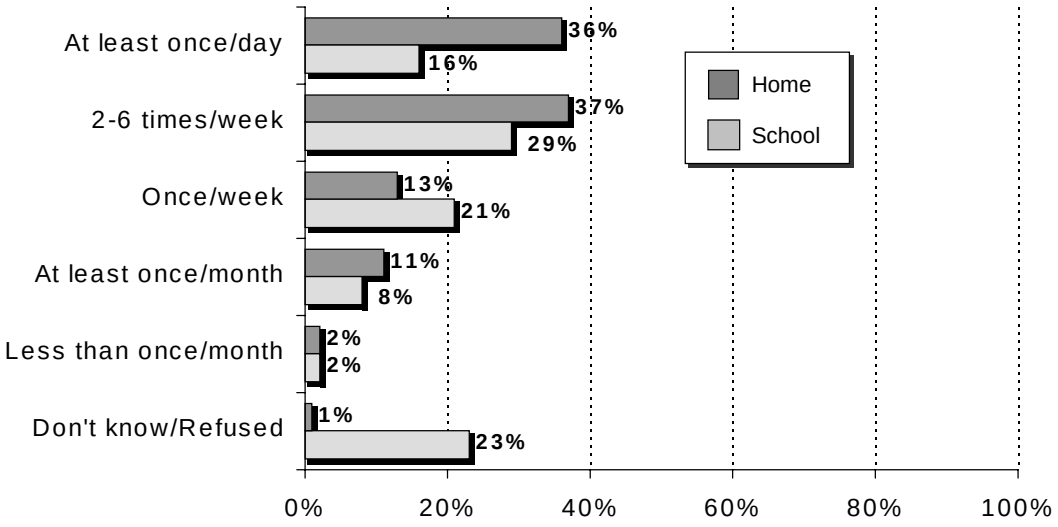
In Figure 3-6, parents report that over one-third (36%) of the children who use the Internet at home use it at least once a day, compared to 16% who use it with the same frequency from school. In Table 3-3 we see children ages 9-17 agree that their home use is more frequent than their school use, but 42% report they use the Internet once a day at home, and 21% said that they get online once a day at school, figures higher than their parents' estimates. Notably, substantial numbers of parents said they don't know the frequency with which their children go online at school; parents were significantly less likely to know about their teenagers' school use than the use of their children ages 9-12.

Table 3-3. How Often Children Ages 9-17 Use the Internet at Home and School (Parents' and Children's Responses)

Frequency	Home		School
	Parents' Responses	Children's Responses	Children's Responses
At least once/day	39%	42%	21%
Two to six times/week	38%	27%	21%
Once/week	11%	13%	24%
At least once/month	9%	14%	21%
Less than once/month	2%	5%	8%
Don't know/refused	1%	*	5%

(Parent respondents with children ages 9-17 who use the Internet at home (school), all target children (ages 9-17) who use the Internet at home (school)
Source: Banner2; Data Tables 27a, 28a, 272, 273
Grunwald Associates

Figure 3-6. Frequency of Internet Use From Home and School
(According to Parents)



Source: Banner 1; Data Tables 27, 28

Grunwald Associates

It is worth noting that there is a substantial jump in home Internet use frequency between 9-12 year olds and 13-17 year olds — 51% of teens say they use the Internet at least once a day from home vs. only 23% of 9-12 year olds.

3e. Children's Time Spent Online

About 41% of children ages 9-17 report spending 30 minutes or less on their Internet sessions at school. Almost a quarter (22%) spend between half an hour and an hour, and another third report sessions that last an hour or more.

Contrast this with home use, where 40% of children who use the Internet at home report spending 30 minutes to an hour on an average Internet session. The average Internet session at home is 54 minutes, with teenagers reporting over an hour online as an average length (Table 3-4).

Table 3-4. Length of Children's Internet Sessions From Home

	Parents' Responses					Children's Responses	
	All Children (2-17)	Age 2 – 5	Age 6 – 8	Age 9 – 12	Age 13 –17	Age 9 – 12	Age 13 – 17
1 – 29 minutes	19%	13%	31%	20%	15%	19%	8%
30 – 59 minutes	40%	42%	52%	53%	30%	38%	35%
1 hour	25%	30%	9%	22%	30%	33%	37%
2 hours	10%	14%	6%	4%	13%	3%	13%
3 – 5 hours	4%	--	--	1%	7%	4%	4%
Average Session Length	54 min	55 min	35 min	41 min	65 min	49 min	63 min

(Parent respondents with a target child who uses the Internet from home, all target children respondents (ages 9-17) using the Internet from home)
Source: Banner 2; Data Tables 141, 141a, 314and 314a
Grunwald Associates

In terms of hours per week, the mean number of hours of children's use from home is 4.0 hours and 2.1 hours from school, according to parents. Children's answers are very close to parents': they report a mean of 4.2 hours at home and 1.9 hours at school. There are, as with frequency, significant differences by age. Parents of 6-8 year olds report their children spend 1.5 hours a week online from home and 0.9 hours a week from school. Parents of 9-12 year olds report 2.5 hours a week online from home and 1.8 hours a week from school. Children 9-12 report being online 3 hours a week from home and 1.3 hours a week from school. Teen use represents a large jump from these already significant numbers. According to parents, the average teen spends 5.4 hours a week online from home, and 2.5 hours a week online from school, while teens themselves report 4.8 hours a week of use from home and 2.1 hours a week online from school.

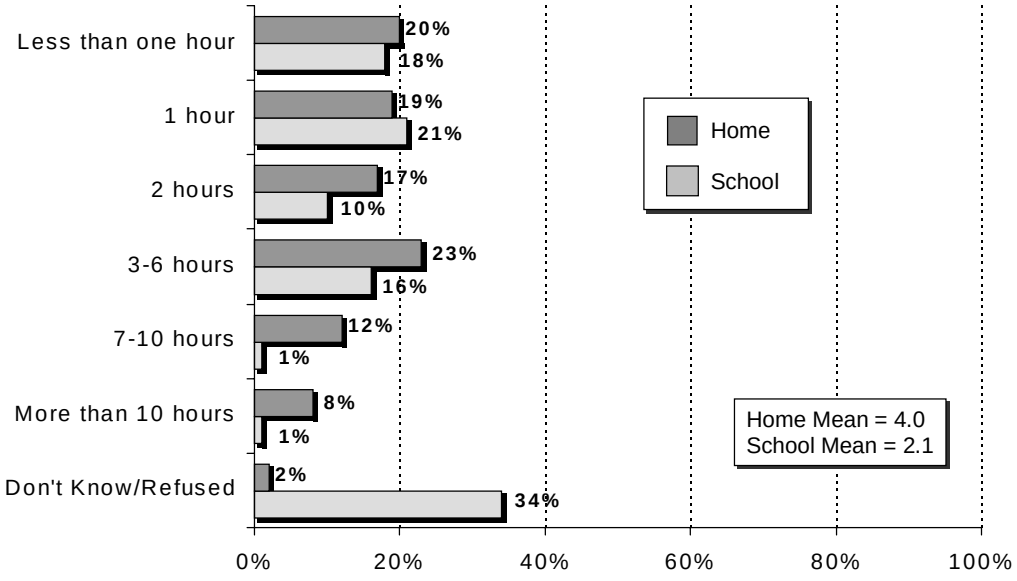
In Table 3-5, boys and girls ages 9-17 report equal time on the Internet in school (each is just 6 minutes off the mean). But at home, boys say they spend more time online than girls do — boys are 30 minutes above the mean, and girls are 24 minutes below the mean. That translates to about an hour's difference between the amount of time boys and girls are spending online weekly at home.

Table 3-5. Comparison of Hours Online at Home and School (Children Ages 9-17 Responses)

Location	Mean Hours per Week	Boys	Girls
Home	4.2	4.7	3.8
School	1.9	2.0	1.8

Source: Banner 3; Data Tables 299, 300

Figure 3-7. Hours Per Week of Internet Use
(Home and School, According to Parents)



Source: Banner 1; Data Tables 119, 120

Grunwald Associates

If we examine these numbers by further age and by location of the computer at home, as in Table 3-6, we see the gap widen between teenage boys and girls.

Girls ages 9-12 actually use the Internet at home about a half-hour more per week than do boys of the same age. This age group of girls also appears more likely than boys to have a computer dedicated to their own use (15.3% vs. 9.3%); however, these boys and girls are equally likely (or unlikely) to have a computer in their bedroom.

Teenage boys, however, are no more likely than teenage girls to have a computer dedicated to their own use, but appear much more likely than girls to have a computer in their bedroom. And perhaps not surprisingly, they spend almost two more hours per week online than girls.

Table 3-6. Comparison of Boys' and Girls' Time Online at Home With Location of Computer (Parents' Responses and Children's Responses)

	Ages 9 – 12		Ages 13 – 17	
	Boys	Girls	Boys	Girls
Mean hours online per week (Children's Responses)	2.7	3.3	5.7	4.0
Has a computer dedicated to own use (Parents' Responses)	9%	15%	25%	22%
Uses computer in his/her bedroom (Parents' Responses for 9-12, Children's Responses for 13-17)	7%	6%	17%	8%

Source: Banners 2-3, Data Tables 109, 110, 294, 299; Grunwald Associates

The fact that most girls do not have computers in their bedrooms could help explain the inequities in use among teens, although it's likely that computer location is a choice made by many teens and, therefore, a reflection of their relative interest. The widening gap in the teen years could also be a last reflection of old attitudes (since these inequities are not found among younger children) or a reflection of ongoing societal pressures to push girls away from computers as they grow up.

Other than gender differences, there were virtually no other statistically significant demographic differences in time spent online reported among those children in each demographic who had access, with the exception that children of single parents reported substantially higher home use than children of couples (6.5 hours per week vs. 3.8 hours per week for couples), and non-white, non-African-American children reported significantly higher school use than white children (3 hours/week, vs. 1.7 hours per week for whites). Single parents also reported significantly higher home use for their children (5.1 hours vs. 3.8 hours for two parent homes), and one-child families reported significantly higher use for their child (5.2 hours vs. 3.5 hours for 2-3 child families and 3.8 for homes with 4 or more children), which could be an artifact of computer time-sharing.

3f. Increases in Children's Internet Use at Home

Parents and children both report the child's home Internet use has either increased or stayed the same in the last year. Very few respondents reported a decrease in Internet use, as can be seen in Table 3-7.

Table 3-7. Change in Children's Home Internet Use During Prior 12 Months Parents' and Teens' Responses

	Parents' Responses				Teens' Responses
	All Children (2 – 17)	Age 2 – 8	Age 9 -- 12	Age 13 – 17	Age 13 – 17
Increase	39%	37%	45%	37%	44%
Decrease	10%	9%	7%	12%	15%
Stayed the Same	50%	52%	47%	50%	42%

(Parent respondents with children who use the Internet at home, teen children who use the Internet at home)
Source: Banners 2, 3; Data Tables 143, 315
Grunwald Associates

Internet use among girls seems to be more in flux than that of boys. More parents of girls than boys report increases in Internet use (42%-36%), but more parents of girls also report decreases (12%- 8%), and significantly fewer parents of girls than boys report that usage has remained the same in the last year (55% of parents of boys report no change, vs. 44% of parents of girls). In addition, 42% of high-income parents report an increase in usage over the last year and only 6% report a decrease, while nearly as many poor parents report a decrease (22%) as report an increase (28%). Professional parents (44%) are also especially likely to report an increase in their child's Internet use.

When probed for explanations of the increase in Internet use, both parents and children named educational uses as the primary reason for the increase, as can be seen in Table 3-8. In fact, according to parents of boys ages 9-12, education is the dominant reason for increased use. Parents of 9-12 year old girls report a more even distribution of reasons, with email and education in a virtual tie for the main impetus for increased Internet use. Education is also the dominant reason for increased teen use, as seen in Figure 3-8.

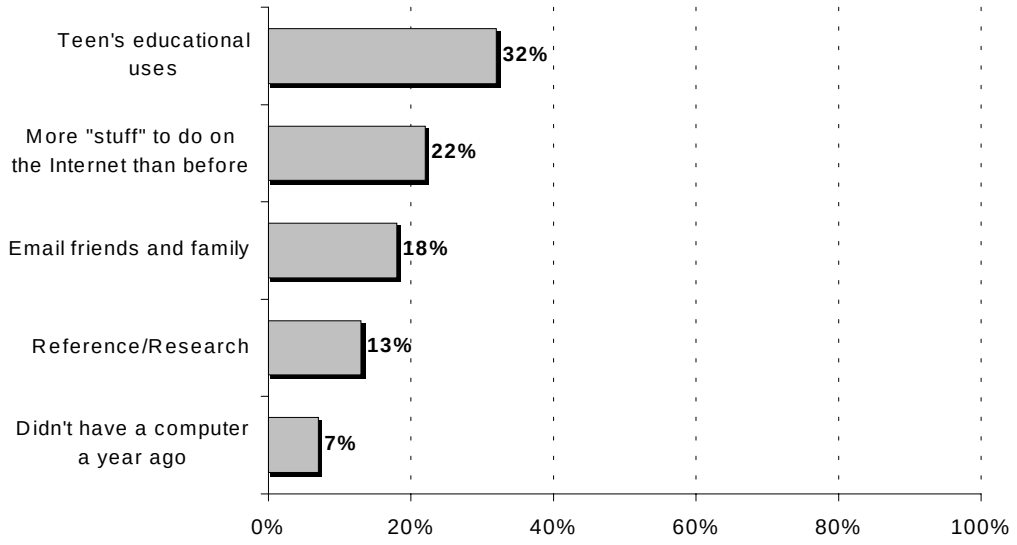
Table 3-8. Reasons for Increased Internet Use at Home for Children Ages 9-12

	Parents' Responses		
Reason	All Children Ages 9 – 12	Male Children Ages 9 – 12	Female Children Ages 9 – 12
Children's educational uses	32%	44%	22%
Email friends and family	16%	9%	21%
More "stuff" to do on the Internet than before	13%	8%	17%
Child is older now	10%	9%	10%
Allows child to be more creative	10%	6%	13%

Note: Only the top five responses are shown here.
(Parent respondents of children ages 9-12 whose use of the Internet at home has increased)
Source: Banner 2; Data Table 144a (with similar children's education and email codes combined
Grunwald Associates

Figure 3-8. Reasons for Increased Internet Use At Home for Teens

(Teens' Answers)



Note: Only the top five responses are shown here.
(All teen target respondents whose Internet usage has increased)
Source: Banner 3; Data Table 316a

Grunwald Associates

Conclusion

With 40% of all children in this country currently online, the Internet is ripe with possibilities for products and services geared toward children's interests and motivations. Internet marketers should keep in mind that the "traditional" Internet user (e.g., teenage boy) is no longer an accurate user profile in today's children's Internet market, which is increasingly female and younger. Additionally, although home is the primary point of Internet use for children, substantial numbers of children use the Internet at school, particularly teenagers, which has implications for companies interested in the teen online market.

C H A P T E R F O U R

Children's Internet Activities at Home

Chapter Outline

4a. Number of Children Online From Home
4b. Children's Motivation for Using the Internet at Home
4c. Children's Primary Uses of the Internet at Home
4d. Children's Weekly Activities Online at Home
4e. Children's Internet Habits as Influenced by Other Factors
4f. School Subjects for Which Children Use the Internet at Home

Introduction

Families tell us that education and learning dominate children's Internet use at home. Though it is also clear from the survey that children use the Internet for much more than schoolwork and learning, respondents told us that education is:

- The single biggest motivator for children of all ages to use the Internet at home
- The main use of the Internet at home for children of all ages
- The most frequent weekly Internet activity for all children

Entertainment and games are popular among younger children, whereas email and surfing join with education as the main Internet activities for older children.

4a. Number of Children Online From Home

In the last two years, the number of children who use the Internet from home grew at an astonishing pace. As shown in Figure 4-1, at the end of 1999, there were over 17 million children online from home. That's over twice as many as there were online a year earlier, and over three times as many as in 1997. (Note that many of these same children also use the Internet from school.)

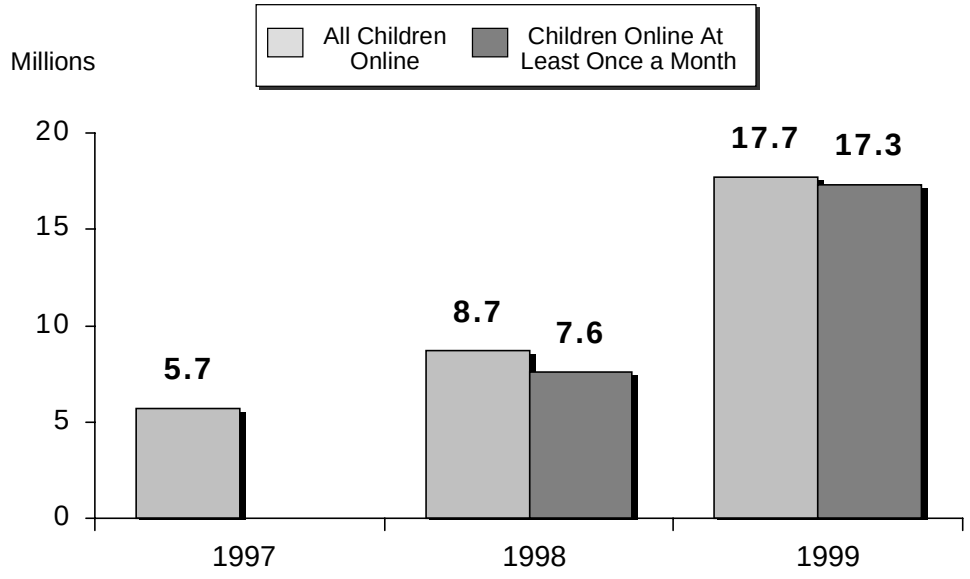
These 17 million children online from home represent 70% of all online children and 28% of all children ages 2-17. To put it another way, almost three-quarters of the children

who use the Internet use it at home, and they represent over one-quarter of all U.S. children ages 2-17.

4b. Children's Motivation for Using the Internet at Home

Education is the single largest motivating factor for children using the Internet at home, both parents and children report, as indicated in Table 4-1. When we asked parents and children to identify original motivations for children to use the Internet, the category of education — which includes homework, learning programs, creating papers and reports for school, helping children prepare for and function in school, communicating with teachers and tracking school assignments — garnered the largest percentage of responses. Education was extremely broad-based as a motivation—we found no significant demographic differences by income, race, household type, parental education, vocation or age.

Figure 4-1.Children Online From Home
(According to Parents of Children 2 -- 17)



Source 1999: Banner 1; Data Tables 26a, 26a-1

Grunwald Associates

Table 4-1. Original Motivation for Children to Use the Internet at Home

Motivation	Parents' Responses All Children	Children's Responses Ages 9-17
Children's Education	45%	29%
Email with Relatives/Friends (nearby and distant)	11%	17%
Surf/Search the Internet	10%	16%
Entertainment for Children	9%	8%
Games	7%	7%
Chats, Chat Rooms or Instant Messaging	4%	7%

Source: Tables 132a, and 307a, banner book 1
Grunwald Associates

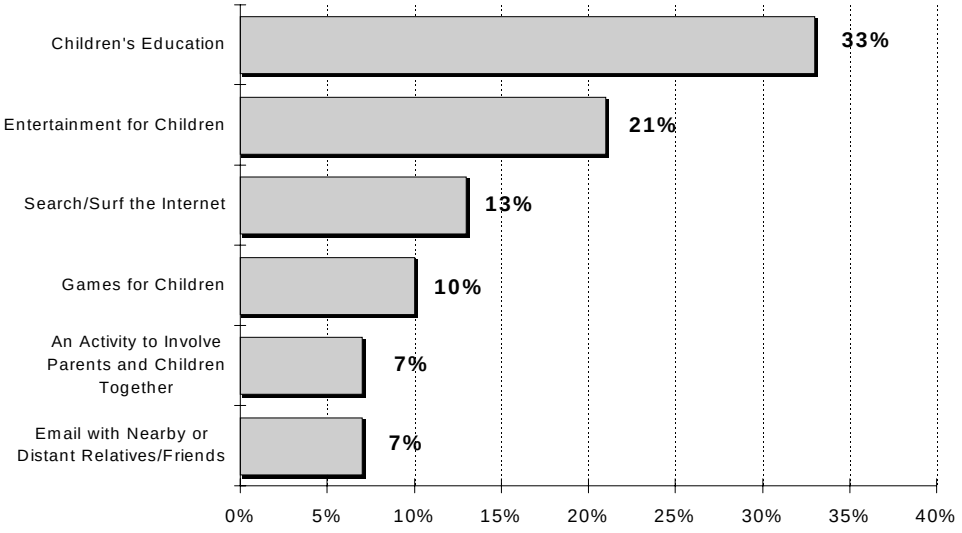
When motivations are broken out by age group and gender we start to see differences among children.

Children Ages 2-8
We asked parents of children ages 2-8 for the original reason their children used the Internet at home. Even though the question was about the *children's* motivation, parents' motivations *for* their children in this age group are the determining factor. As we see in Figure 4-2, the largest number of parents (33%) reported children's education, which would be consistent with how parents in general view the Internet as a learning tool. However, other motivations — children's entertainment (21%), surfing (13%), and games (10%) — suggest that parents of children ages 2-8 see the Internet as much or more for diversionary purposes as they do for their children's learning.

In fact, parents of online boys ages 2-5 said in significantly higher proportion than other parents that they see the Internet as more of a source of entertainment than education. But as children get older there appears to be a shift from entertainment to education. For instance, entertainment outdistanced education as motivation for 2-5 year olds by a 3:2 margin, and education led entertainment as a motivation by 2:1 among 6-8 year olds. Though the differences between the two groups do not yet rise to the level of statistical significance, they may be worth some consideration.

Figure 4-2. Original Motivation for Children to Use Internet from Home

(Children Ages 2 -- 8, According to Parents)



Source: Banner 2; Data Table 132a

Grunwald Associates

Gender Difference Ages 2-8

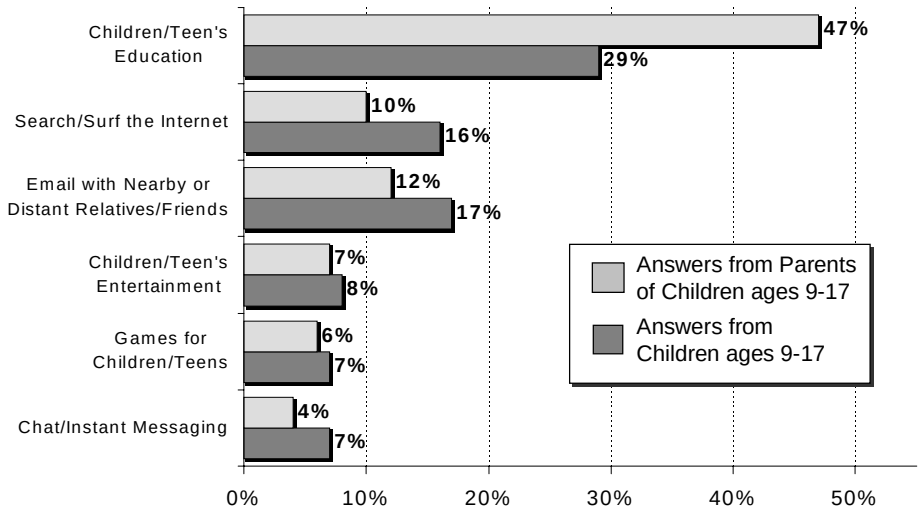
In this age group, we can detect few differences between the ways in which parents of 2-8 year old boys and girls categorize their motivations for going online. Parents of boys and girls are equally likely to name education, entertainment, and surfing. Parents of boys ages 6-8 are more likely than parents of girls ages 6-8 to mention games as a motivation for going online from home.

Children Ages 9-17

By the time children reach this age, education is clearly the leading motivation for first Internet use. Older children, as we see in Figure 4-3, are less likely than their parents to name education as the reason they started using the Internet at home — 29% of 9-17 year olds cited education, versus 47% of their parents. Nonetheless, education still tops the teens' list of motivations. Children ages 9-17 were also more likely than their parents to list surfing (16% vs. 10%) and email (17% vs. 12%) as motivators for initial use.

Figure 4-3. Original Motivation for Children to Use Internet from Home

(According to Parents and Children Ages 9 -- 17)



Source: Banner 2; Data Tables 132a, 307a

Grunwald Associates

Gender Differences Ages 9-17

Differences between boys and girls are slightly more evident in this age group, particularly for teenagers. While 9-12 year old boys in our sample report a slightly higher interest in initially using the Internet for education than girls the same age (26% vs. 22%), teenage girls (ages 13-17) said in higher numbers than teenage boys (39% vs. 24%) that they were motivated to use the Internet for educational reasons. More boys than girls, ages 9-17, also reported motivation to use the Internet for games (10% vs. 4%), while girls were more likely than boys to name email (21% vs. 12%) as their original impetus for using the Internet at home.

4c. Children's Main Uses of the Internet at Home

When we asked parents and teenagers about children's main uses of the Internet at home, we captured all their responses, including the use that they first mentioned. We learned, as we see in Table 4-2, that once children become regular users of the Net, their actual use tracks original motivations for getting online. In fact, for both parents and children, education is an even more dominant actual use of the Internet than it was an original motivation, with a particularly strong increase reported by the children.

Even when we break down responses further by age and gender, education retains its primary position, but there are some usage differences worth noting.

Table 4-2 Children's Main Uses of the Internet at Home (Parents' and Children's Responses)

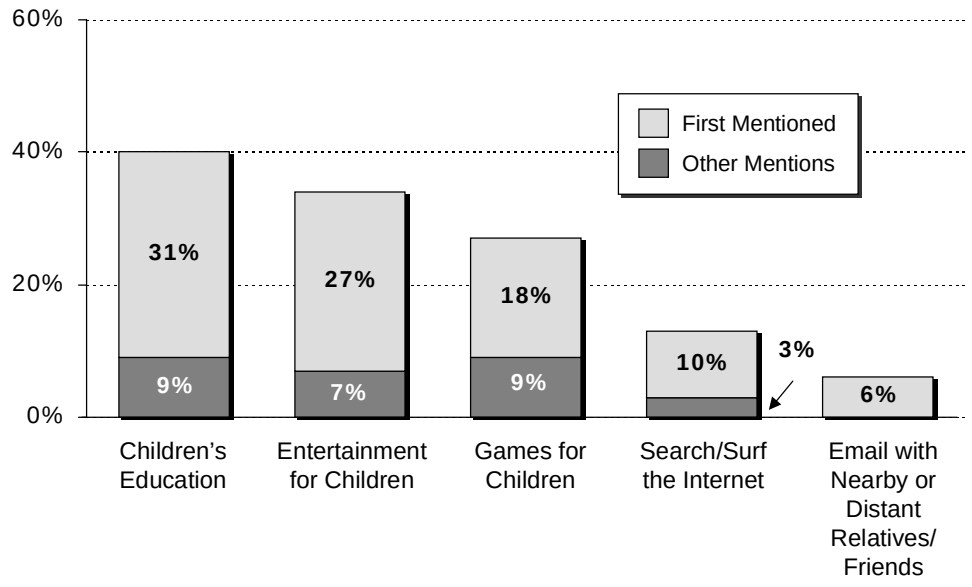
Main Use	Parents' Responses Children Ages 2-12	Teens' Responses Ages 13-17
Children's Education	53%	50%
Email with Relatives/Friends (nearby and distant)	16%	36%
Search/Surf the Internet	13%	28%
Entertainment	21%	6%
Games	18%	9%
Chat/Instant messaging	2%	11%

Source: Banner Book 2; Data Tables 151a, 321a
Grunwald Associates

Children Ages 2-8

In Figure 4-4, according to parents of children ages 2-8 who use the Internet from home, education is their child's main use of the Internet (40%), followed by entertainment (34%). Furthermore, 31% of parents of children ages 2-8 first mentioned education when asked about their children's main online activities.

Figure 4-4. What Children Do Online From Home
(Children Ages 2 to 8, According to Parents)



Banner Book 2; Data Tables 151a, 151a-1

Grunwald Associates

Playing games is a sizable category for this age child — 27% of parents listed games as an online activity for their 2-8 year old, with 18% of parents mentioning games before any other activity.

Not surprisingly, email plays a much smaller role with online 2-8 year olds than for older children. Only 6% of the younger children use the Internet for email, according to their parents, while 32% of 9-17 year olds report using email, 23% listing it as a first mention. As with original motivation, there appears to be a shift from entertainment to education between the 2- 5 age group and the 6-8 age group, with 40% of parents of 2-5 year olds reporting entertainment as the main use (and an additional 19% reporting games), versus only 24% reporting education as a primary use. Though the base of online younger children is limited, this shift to education seems to begin in the 6-8 age group.

Gender Differences Ages 2-8
In our survey, parents of boys ages 2-8 were more likely than parents of girls the same age to name education as a main use (45% vs. 32%). However, a larger percentage of parents of boys than girls (37% vs. 14%) listed games as a main use, and 46% of parents of girls cited entertainment vs. only 24% of parents of boys.

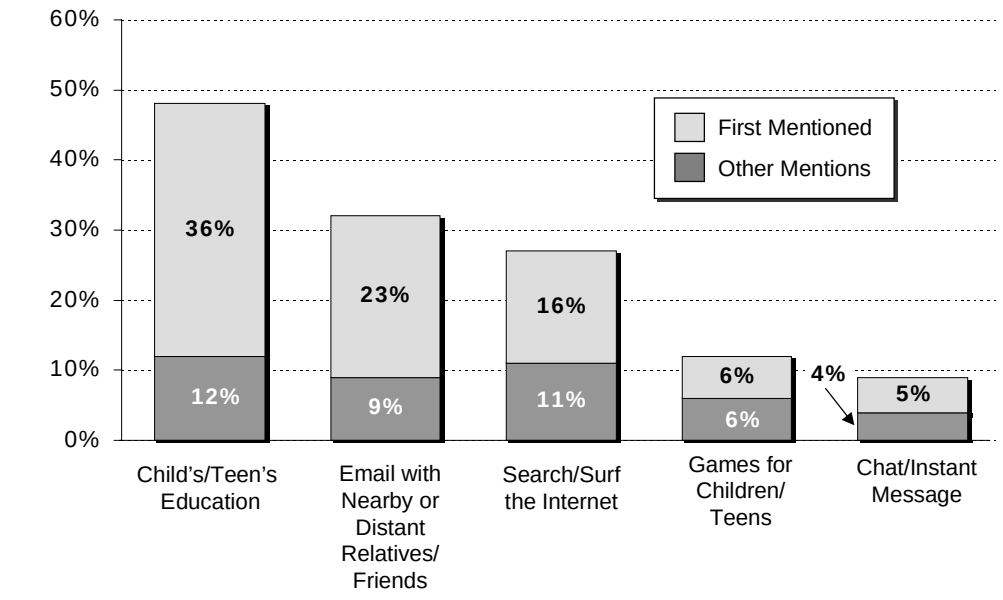
Children Ages 9-17
When we look at 9-17 year old children's answers in Figure 4-5, we see that education overshadows all other activities, including surfing and email. Entertainment as a category shrinks with this age group.

It is noteworthy that not only did education rank first among older children, but also 36% of 9-17 year olds mentioned education first, ahead of any other Internet activity. If we break out the children's responses and look at the top five main uses of 9-12 and 13-17 year olds, education runs as a banner across the top of the charts, as seen in Table 4-3, with email and surfing in the numbers two and three slots, as reported by the children themselves. Not surprisingly, parents provide higher estimates for their 9- to 12-year old's educational uses (61% vs. 44%) than the children themselves and underestimate their penchant to surf — ranked fifth by parents but second by children.

It's also noteworthy that many commonly developed services and features for children's sites are rarely, if ever, considered main uses by the children in this age group whom we queried. Specifically, we found that few, if any, children ages 9-17 consider any of the following as among their main uses of the medium: the pursuit of hobbies or interests, looking at news or weather, downloading music or software, listening to Internet radio, or creating art, stories, or music. This does not mean that children don't use these types of services or features — independent studies of top sites children visit (which include a number of news sites) and the development of leading brands like AOL Kids Only (where news, clubs, and art have become key components) suggest otherwise. Rather, we believe it indicates either that no one in the marketplace has yet developed sufficiently compelling offerings in these areas and/or that these services represent niche appeals.

Figure 4-5. What Children Do Online From Home

(According to Children/Teens Ages 9 - 17)



Banner Book 2; Data Tables 321a, 321a-1

Grunwald Associates

Table 4-3. Children's/Teens' Top Five Main Uses for the Internet at Home

Rank 1 – 5	Parents' Responses for Children (Ages 9-12)	Children's Responses (Ages 9-12)	Teens' Responses (Ages 13-17)
1	Children's Education (61%)	Children's Education (44%)	Teens' Education (50%)
2	Email with Relatives/Friends (nearby and distant) (22%)	Search/Surf the Internet (26%)	Email with Relatives/Friends (nearby and distant) (36%)
3	Games for Children (13%)	Email with Relatives/Friends (nearby and distant) (25%)	Search/Surf the Internet (28%)
4	Entertainment for Children (13%)	Games for Children (17%)	Chat/Instant Messaging (11%)
5	Search/Surf the Internet (12%)	Entertainment for Children (10%)	Games for Teens (9%)

(Parent respondents of target children ages 9-12 who use the Internet at home, all target children ages 9-12 who use the Internet at home, all target children ages 13-17 who use the Internet at home)
Source: Banners 2, 3; Data Tables 151a, 321a (with combined education and email codes)
Grunwald Associates

Finally, while we found few significant demographic trends in "main uses," there were some significant gender differences in these uses among 9-17 year olds. Girls, and particularly teenage girls, were significantly more likely than boys to report both education and e-mail as main uses, while boys (18% vs. 5% of girls), particularly boys ages 9-12 (26%), were significantly more likely than girls to report games as a main use.

4d. Children's Weekly Activities Online at Home

After we learned what children did on the Internet at home in a general way, we drilled deeper and asked parents and children whether children engaged in specific activities on the Internet from home *at least once a week*. Once again, as seen in Table 4-4, the theme of education dominates, with email running a close second. Sixty-two percent (62%) of parents with children ages 2-17 who use the Internet at home named schoolwork, and 59% listed email as a regular weekly Internet activity.

In addition to schoolwork, a surprising 4 in 10 parents also list learning activities not connected with school or informal education as a weekly activity of children. Children ages 9-17 cite schoolwork and informal education less frequently than parents, particularly children ages 9-12, where there's a steep drop in informal educational use reported by both parents and children (which rebounds with teens).

We see further in Table 4-4 that the older a child gets, the more likely he or she is to use the Internet on a regular basis for schoolwork, email, and entertainment. About a third of 9-12 year olds who use the Internet from home report that they use it for schoolwork, email, and entertainment at least once a week. Those percentages increase almost twofold for 13-17 year olds. In fact, the only activity that 9-12 year olds report in greater numbers than teens is games: 45% of this age group plays games on the Internet at least once a week, compared to 37% of teenagers.

We also see from Table 4-4 that of the teens who use the Internet at home, almost half (47%) report using chat, chat rooms, or instant messaging at least once a week, compared to only 29% of 9-12 year olds. It's interesting to note that for chat — which is arguably one of the most sensitive categories of Internet use for children — parents seem remarkably aware of their children's chat use. There is virtually no difference between the numbers reported by parents and those reported by 9-17 year olds for chat use, which supports parents' statements in this survey that they are aware of and feel positively about their children's Internet use. We will look more closely at this issue in Chapter 9.

Table 4-4. Activities For Which Children Use the Internet at Home at Least Once a Week

	Parents' Responses				Children's Responses	
	All Children (2 – 17)	Age 6 – 8	Age 9 – 12	Age 13 – 17	Age 9 – 12	Age 13 – 17
Schoolwork	62%	33%	57%	76%	33%	63%
Email with Friends or Relatives	59%	34%	55%	71%	39%	77%
Entertainment	48%	45%	39%	51%	39%	60%
General learning activities not connected with school	40%	43%	32%	42%	29%	35%
Games	39%	38%	38%	37%	45%	37%
Chats, Chat rooms or Instant messaging	31%	1%	24%	45%	29%	47%
Downloading music from the Internet	10%	1%	1%	18%	7%	21%
Internet Radio	9%	4%	8%	11%	3%	13%

(Parent respondents with children in noted age categories who use the Internet at home, all target children in noted age categories who use the Internet at home)
Source: Banners 2, 3; Data Tables 152-159, 322-329
Grunwald Associates

At the same time, relatively high numbers of both parents and children report no use of the medium for some of the entertainment-oriented purposes we questioned them about. Fifty percent (50%) of parents of 9-17 year olds say their online child never chats, and 41% of children ages 9-17 (and 58% of 9-12 year olds vs. 68% of parents of 9-12 year olds) agree. Seventy-eight percent (78%) of all parents say their online child never uses the Internet to download music, and 83% never use Internet. By contrast, only 16% of parents of 2-17 year olds say their online child never uses the Internet for schoolwork.

Gender Differences and Weekly Internet Activities
Looking at weekly home Internet activities by age and gender, families reported the following differences between boys and girls:

- Online girls ages 2-8 seem more likely than boys to use the Internet for schoolwork at least once a week (32% vs. 18%), according to parents in our sample.

- Boys ages 2-8, on the other hand, seem more likely than girls to use the Internet for informal learning on a weekly basis (53% vs. 43%), according to parents in our sample.

- Boys ages 2-8 also seem more likely than girls to use the Internet weekly for entertainment (58% vs. 43%) and for games (58% vs. 36%), according to parents in our sample.

- Forty percent (40%) of 9-12 year old boys report using the Internet once a week at home for schoolwork, compared to 24% of 9-12 year old girls.

- Boys ages 9-17 use the Internet for entertainment significantly more than girls of the same age group (61% vs. 45%).

- Girls ages 9-17 are more likely than their male counterparts to use email weekly (71% vs. 57%).

- Boys ages 9-12 are the least likely to use chat on a weekly basis (25%), compared to 9-12 year old girls (34%), 13-17 year old boys (44%) and 13-17 year old girls (50%), which suggests that teenage boys and girls ages 9-17 may be more interested in the social and communication aspects of the Internet than are 9-12 year old boys.

4e. Children's Internet Habits as Influenced by Other Factors

On- and Offline Music

Table 4-4 also reveals that one-fifth of teenagers who use the Internet at home report downloading music at least once a week, and another 13% listen to Internet radio that often. This represents a substantial proportion of teenagers who already depend on the Internet as a music-access and listening device.

Furthermore, there appears to be a relationship between children's on- and offline music activities. Watching music videos seems to influence older children's music Internet habits, as we can see in Table 4-5. Children who watch videos are more likely than non-video watchers to listen to Internet radio and to download music at least once a month.

In addition, boys in our sample seem slightly more likely than girls to use Internet radio (12% vs. 7%), but equally likely (17% and 15%) to download music off the Internet. This link between music videos and music activity on the Internet suggests opportunities for cross-marketing music services on both "old" and "new" media platforms.

Household Phone Lines

Children in households with more than one phone line appear to use the Internet more often than children in one-phone line homes (Table 4-6). There does not seem to be any difference in the activities children use the Internet for, other than the fact that children in households with one telephone line may play more games on the Internet.

Table 4-5. Use of Music on the Internet by Whether Target Child (ages 9-17) Watches Music Videos on TV

	Children's/Teens' Responses (Ages 9-17)	
	Watch Music Videos	Do Not Watch Music Videos
How often do you use the Internet for Internet radio?		
At least once per week	12%	9%
At least once per month	17%	5%
Less than once per month	6%	6%
Never	64%	80%
How often do you use the Internet to download music from the Internet?		
At least once per week	25%	14%
At least once per month	21%	13%
Less than once per month	2%	7%
Never	52%	65%

(All target children age 9-17 who use the Internet at home)
Source: Banner 4; Data Tables 328, 329
Grunwald Associates

Table 4-6. Children's Internet Usage From Home by Number of Household Phone Lines

	Children's/Teens' Responses (Ages 9-17)	
	One Phone Line	More Than One Phone Line
Use Internet from home at least once per day	38%	46%
Internet Activities		
Child's/Teen's Education	52%	50%
Email with Relatives/Friends (nearby and distant)	38%	34%
Search/Surf the Internet	27%	28%
Games	14%	7%
Chat/Instant Messaging	10%	9%

Note: Number of phones in household was asked of parents of children ages 9-17; however, the Internet usage responses shown above are children's/teens' answers.
(All target children ages 9-17 who use the Internet from home)
Source: Banner 4; Data Tables 272, 321a
Grunwald Associates

Job and Allowance

Children's disposable income does not seem to have a notable effect on their Internet use, as we can see in Tables 4-7 and 4-8. Children ages 9-17 who receive an allowance seem to use the Internet slightly more than children who do not, whereas teenagers with jobs appear to use the Internet less often than non-working teens. There are some differences in the use of email and chat among the different groups, but none of the differences are statistically significant.

Table 4-7. Internet Usage From Home by Whether Target Child Receives an Allowance

	Children's/Teens' Responses (Ages 9 – 17)	
	Receive Allowance	Do Not Receive Allowance
Use Internet from home at least once per day	46%	38%
Internet Activities		
Children's/Teens' Education	49%	53%
Email with Relatives/Friends (nearby and distant)	32%	36%
Search/Surf the Internet	27%	28%
Games	11%	9%
Chat/Instant Messaging	14%	5%

Note: Whether children/teens receive an allowance was asked of parents of children ages 9-17; however, the Internet usage responses shown above are children's/teens' answers.
(All target children ages 9-17 who use the Internet from home).
Source: Banner 4; Data Tables 272, 321a (with similar children's education and email codes combined)
Grunwald Associates

Table 4-8. Internet Usage From Home by Whether Target Child Has a Job

Use Internet from home	Teens' Responses (Ages 13 – 17)	
	Have a Job	Do Not Have a Job
Use Internet from home at least once per day	42%	56%
Internet Activities		
Teens' Education	53%	50%
Email with Relatives/Friends (nearby and distant)	27%	40%
Search/Surf the Internet	30%	27%
Games	6%	10%
Chat/Instant Messaging	14%	9%

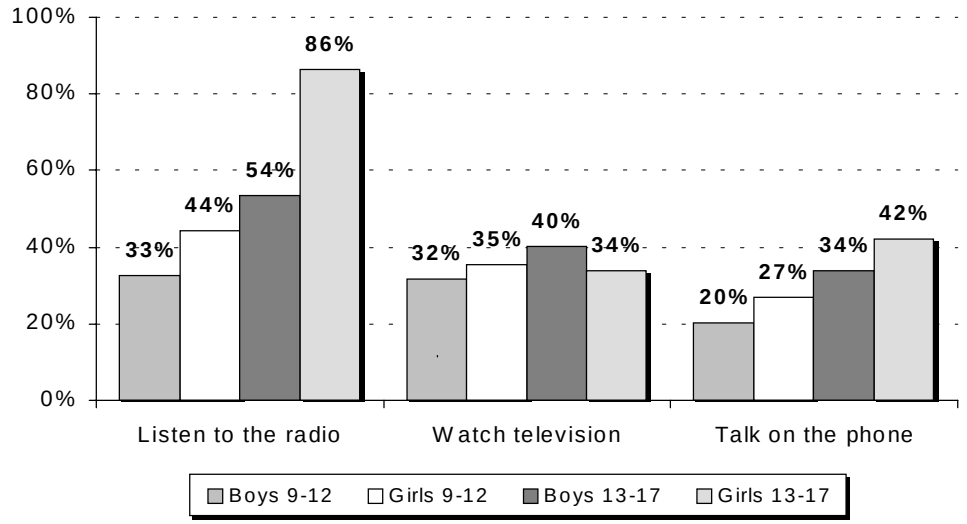
(All target children ages 13-17 who use the Internet from home)
Source: Banner 4; Data Tables 272, 321a
Grunwald Associates

Multitasking Online

Bearing in mind that these are figures for all parents whose children ages 2-8 have online access, children ages 9-17 tell a somewhat different story. In figure 4-6 a full 59% say they listen to the radio while online, 36% say they watch television while online, 33% say they talk on the phone while online, and only 25% say they do nothing else while online. The combination of parents' and children's results (plus site marketing findings we'll discuss in Chapter 5, still suggest to us that television may be a relatively inefficient way to market Internet sites to children. But they also suggest that radio

advertising, which is far less expensive, may be a more potentially powerful way to reach the 9-17 demographic while they are online.

Figure 4-6. Other Activities Performed by Children While Online By Age and Gender
(Children's Responses)



(All target children ages 9-17 who use the Internet at home)
Source: Banner 3; Data Table 351

Grunwald Associates

4f. School Subjects for Which Children Use the Internet at Home

Since we were told that a large percentage of children are going online at home for their schoolwork, we asked them for which subjects they use the Internet. As Table 4-9 shows, science is a consistently strong subject across all grade levels, with English/Language Arts dominating teenagers' use. (English/Language Arts is also popular among the 6-8 year olds, according to their parents. Strictly speaking, language arts content for this age group is still limited on the Internet, but perhaps general reading activities on the Internet may qualify in these parents' minds as English/Language Arts.)

In middle school, social studies is a popular subject area for Internet use, whereas history plays a greater role for high-school age children. Math use is solid in the 6-12 age range (almost a quarter of 9-12 year olds who use the Internet at home report using it for math) and then suddenly drops off with teenagers. Even with fewer teens taking math in their later high school years (some schools require math classes

Table 4-9. School Subjects for Which Children Are Using the Internet at Home

	Parents' Responses		Children's Responses	
	Age of Target Child		Age of Target Child	
	6 – 8	9 – 12	9 – 12	13 – 17
Social Studies	28%	45%	46%	17%
Science	33%	42%	48%	41%
English/Language Arts	44%	27%	25%	53%
History	22%	34%	20%	39%
Math	14%	17%	23%	9%
Foreign Language	--	2%	4%	4%
All Others	5%	2%	2%	11%
Don't Know/Refused	8%	5%	3%	7%

Source: Banner 2, Tables 160 and 330
Grunwald Associates

only through the 10th grade), this sharp drop-off may suggest that there is a dearth of activities on the Internet that support and complement high school math. In Chapter 6, when we look at the subjects for which children use the Internet at school, we will see virtually the same pattern.

Conclusion

Education, both formal and informal, is clearly a force to be reckoned with on the Internet — it is part of parents' and children's expectations for what they can and will do on the Internet, and it occupies a good deal of the children's reported Internet activity. This interest creates tremendous opportunities for increase in traffic and use for educational sites that can create products and services of value to children and their parents. However, there are other important uses of the Internet: entertainment and games are strong among younger children, and surfing and email are popular with older children.

C H A P T E R F I V E

Children's Web Site Use at Home

Chapter Outline

5a. Web Sites Identified by Children and Parents
5b. Web Sites Children Visit More Than Once
5c. How Children Learn About Web Sites
5d. Rethinking Traditional Marketing Approaches to Children on the Web

Introduction

According to our survey, children's web usage is fragmented. Among the trends that emerge from the data:

- Younger children discover web sites through their parents and TV. Word-of-mouth marketing is the predominant means by which older children learn about web sites.

- Television strongly influences younger children's web usage, though not, it seems, through direct suggestion or advertising, but through the association between favorite children's TV shows and their web sites.

- Among older children, there seems to be little brand loyalty to any particular web sites. Surfing characterizes older children's web activity.

- Although on a macro level families told us that children's education is a major motivator and use of the Internet, no education sites emerge as dominant.

- All of these trends have important implications for the way Internet companies think about marketing their web sites to children and teens.

5a. Web Sites Identified by Children and Parents

To gain an understanding of children's web usage patterns, we asked which web sites children and their parents could identify by name as places children are "most likely to visit" on the Internet. We found through this unaided question that there are few dominant brands among web sites for children and teenagers. In several critical age segments, when asked which web sites children are likely to visit, "Don't Know" or "Other" was as much or more likely to be named by parents and children as any particular web site.

Children Ages 2-8
Brand loyalty is most evident in this age group's limited base of users. When parents of 2-8 year olds named the sites their children are likely to visit, they almost unanimously chose sites associated with television properties, as seen in Table 5-1.

Table 5-1. Five Most Mentioned Web Sites for Children 2-8 (Parents' Responses*)

Web Site	Children Ages 2-5	Web site	Children Ages 6-8
Nickelodeon Online (& Nick Jr.)	71%	Disney Online, Go Network	37%
Disney Online, Go Network	14%	Nickelodeon Online (& Nick Jr.)	32%
PBS, PBS Kids (and affiliated brands – Arthur, Teletubbies, etc.)	11%	Discovery.com	7%
Children's Television Workshop (Sesame Street, etc.)	7%	Children's Television Workshop (Sesame Street, etc.)	6%
Fox Kids (2-5)	3%	PBS, PBS Kids (and affiliated brands – Arthur, Teletubbies, etc.)	5%

Note: Only the top five responses are shown here.
(Parent respondents with children ages 2-8 who use the internet from home)
*Parents who indicated in a previous question they were not at all knowledgeable about the Web sites their target child visits from home were not asked this question.
Source: Banner 2; Data Table 163; Question 9.13 in parent survey
Grunwald Associates

This association of web sites with television shows suggests the powerful role that TV (particularly Nickelodeon and to a lesser extent, Disney) plays in establishing brands among families with young children.

However, brand identity doesn't seem to extend to non-TV children's brands on the web. A few sites sponsored by popular children's brands were mentioned by respondents — for example, Lego, Mattel, and McDonald's — but none earned enough mentions to make the top five list. AOL Kids Only, which is not a TV property nor a child brand property outside of the online world, was also mentioned by only 2% of the parents of this age group. This percentage is surprisingly low when one considers that 37% of

parents of this age group use AOL as their Internet portal, and Kids Only's prominence in the industry. It's important to remember that the question we asked is not only a test of brand knowledge or past performance, but a projection into the near future — sites children may have visited many times in the past may not make the cut as sites they are "most likely to visit" from home.

If we were to recast Table 5-1, and consider "All Others" and "Don't Know" as part of the top five responses, the table would change to the following:

Table 5-1a. Five Most Mentioned Web Sites for Children Ages 2-8, Including "Don't Know" and "All Others" (Parents' Responses*)

Web Site	Children Ages 2-5	Web site	Children Ages 6-8
Nickelodeon Online (& Nick Jr.)	71%	Disney Online, Go Network	37%
All Others	24%	Nickelodeon Online (& Nick Jr.)	32%
Disney Online, Go Network	14%	Don't Know/Refused	21%
PBS, PBS Kids (and affiliated brands – Arthur, Teletubbies, etc.)	11%	All Others	16%
Don't Know/Refused	8%	Discovery.com	7%

Note: Only the top five responses are shown here.
(Parent respondents with children ages 2-8 who use the internet from home)
*Parents who indicated in a previous question that they were not at all knowledgeable about the web sites their target child visits from home were not asked this question.
Source: Banner 2; Data Table 163
Grunwald Associates

In the case of online 2-5 year olds, Nickelodeon seems to be the one web site most parents know about. (Few of these parents responded "Don't Know," probably because parents go on the web with their online 2-5 year olds.) After that, almost one-quarter (24%) of the parents say that their children visit a myriad of sites. With 6-8 year olds, "Don't Know" and "All Others" earn a third and fourth place on the top five billboard.

Children Ages 9-17

Older children are even more all over the map and less likely to volunteer a web site by name than parents. The listing of answers in Table 5-2 omits "All Others" and "Don't Know" responses.

We see that television is still a strong influence on 9-12 year old brand recognition and web activity. With the exception of Yahooligans, the other sites — Nickelodeon, Disney Online, Pokemon, and WWF (Worldwide Wrestling Federation) — are all TV properties.

Table 5-2. Five Most Mentioned Web Sites for Children Ages 9-17 (Children's Responses)

Web Site	Children Ages 9-12	Web Site	Children Ages 13-17
Nickelodeon Online (& Nick Jr.)	22%	Yahoo Teen Clubs & Boards	14%
Disney Online, Go Network	11%	MTV Online	6%
Yahooligans	8%	Music sites-general	5%
Pokemon	6%	Gamespot.com	4%
wwf.com	6%	Hotmail	4%

Note: Only the top five responses are shown here.
(All children respondents ages 9-17 who use the internet from home)
Source: Banner 3; Data Table 334, 336
Grunwald Associates

But when it comes to teenagers, television seems to have little influence over Internet brand awareness. With the exception of MTV, not one site is associated with television. The data will further show in Table 5-3 that as children grow older, television plays a decreasingly important role in the sites they visit.

When we factor in "don't know" and "all others" responses (Table 5-2a), "don't know" becomes the most popular web site on the Internet for 9-17 year olds. The high percentage that "All Others" also earned illustrates that "surfing the web" is indeed a major Internet activity among this age group — teens cast a very wide net over the Web, and they don't seem especially likely to remember the sites they visit.

Table 5-2a. Five Most Mentioned Web Sites for Children Ages 9-17 Including "Don't Know" and "All Others" (Children's Responses)

Web Site	Children Ages 9 – 12	Web Site	Children Ages 13 – 17
Don't Know/Refused	23%	Don't Know/Refused	35%
Nickelodeon Online (& Nick Jr.)	22%	All Others	26%
All Others	15%	Yahoo Teen Clubs & Boards	14%
Disney Online/Go Network	11%	MTV Online	6%
Yahooligans	8%	Music sites – general	5%

Note: Only the top five responses are shown here.
(All children respondents ages 9-17 who use the Internet from home)
Source: Banner 3; Data Table 334, 336
Grunwald Associates

Another interesting finding of the data is that there are no education sites on the top five lists for 9-12 year olds or teenagers. ("Educational Sites – General" earned about 3% of teen mentions; 9-12 year olds mentioned no education site, by name or in general.) Yet these same older children told us in large numbers that their primary use

of the web is for education. This suggests that children's online educational activities are not *site*-, but *task*-oriented. That is, children use the Internet to pursue educational tasks, and the sites they go to will, therefore, be relevant to the task.

Given both the fragmented nature of the education market (where no one company dominates), and the inherent fragmentation of the web, it would seem that content (or service) needs rather than brand loyalty may be the operating principle in children's educational use of the web.

5b. Web Sites Children Visit More Than Once

To drill down on web usage patterns, the survey posed a prompted question, listing a number of popular children's web sites and asking parents and children which of these sites the children have visited more than once. If they mentioned a site in the preceding unaided questions, that site was omitted from the list read to them. We further broke out the data by gender, to see if there were any detectable patterns of boy and girl usage. Below we report the results for children ages 9-12 and 13-17. (The sample sizes were too small to report for boys and girls ages 2-5 and 6-8.)

In general, we found that virtually all of the well-known and established sites fared far better on the aided multiple-visits (past behavior) test than they did on the "most likely to visit" (future behavior) test. It is true, of course, that the "multiple visits" test is a much lower bar for sites to hurdle than "most likely to visit," but in our view, the relatively low numbers for the top "most likely to visit" sites and the stiff competition they face from "don't know" and "other" could represent a warning sign to established players.

Children Ages 9-12
The list of web sites read to this age group included: AOL Kids Only; Nickelodeon Online (which includes Nick Jr.); Disney Online/Go Network; Nintendo; Yahooligans; Warner Bros. (includes Kids WB, DC Comics, Cartoon Network); Discovery.com; PBS/PBS Kids (includes affiliated brands – Arthur, Teletubbies, etc.); Mattel (includes Purple Moon, Barbie, Hotwheels); Children's Television Workshop (includes Sesame Street); Bonus.com; Headbone. In Figure 5-1 we see that:

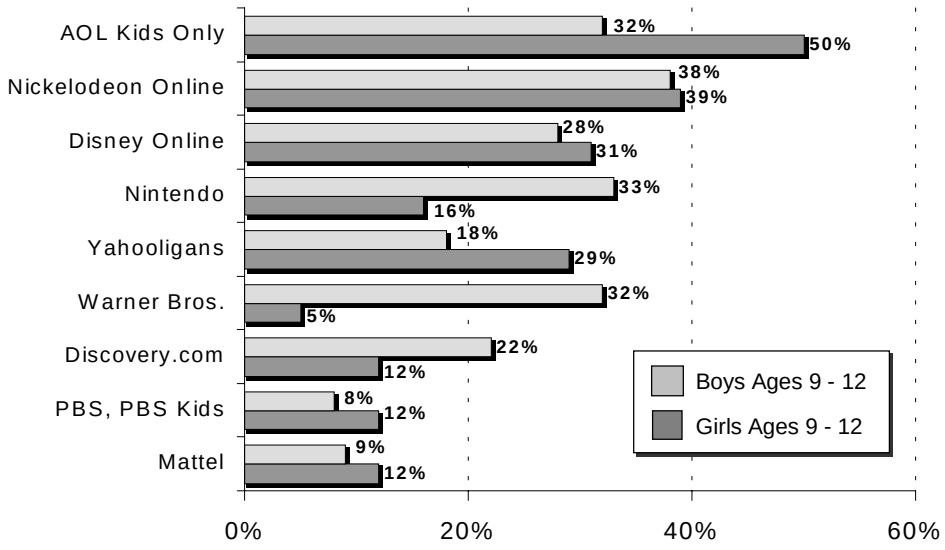
- Nine out of these 12 sites earned at least a 10% total response from children ages 9-12.

- AOL Kids Only, which was mentioned by 6% of 9-12 year old girls in the unaided, open-ended question, drew a very strong response from the same age girls in the aided question as a repeat-visit web site (50%).

- When aided, girls also reported in larger proportions than boys (29% vs. 18%) that they had visited Yahooligans more than once from home.

- Warner Bros., which was mentioned by only 2% of 9-12 year old boys in the open-ended question, was mentioned by a significant 32% of the same age boys as a site they have been to more than once**.**

Figure 5-1. Web Sites Children Ages 9-12 Have Visited More Than Once
(Children's Responses to List)



Note: Only responses given by 10% or more of the total respondents are shown here.
(All child respondents ages 9-12 who use the Internet at home)
Source: Banner 3; Data Table 335

Grunwald Associates

Children Ages 13-17
The list of web sites read to this age group included: AOL Teens Channel; Yahoo Teen Clubs & Boards; Seventeen Online; Alloy.com; Teen People Online; Teens Online; Teen.com; gURL.com; Cyberteens.com; The Princeton Review Online; Virtual Kid. Figure 5-2 indicates the diffuse nature of teens' web preferences:

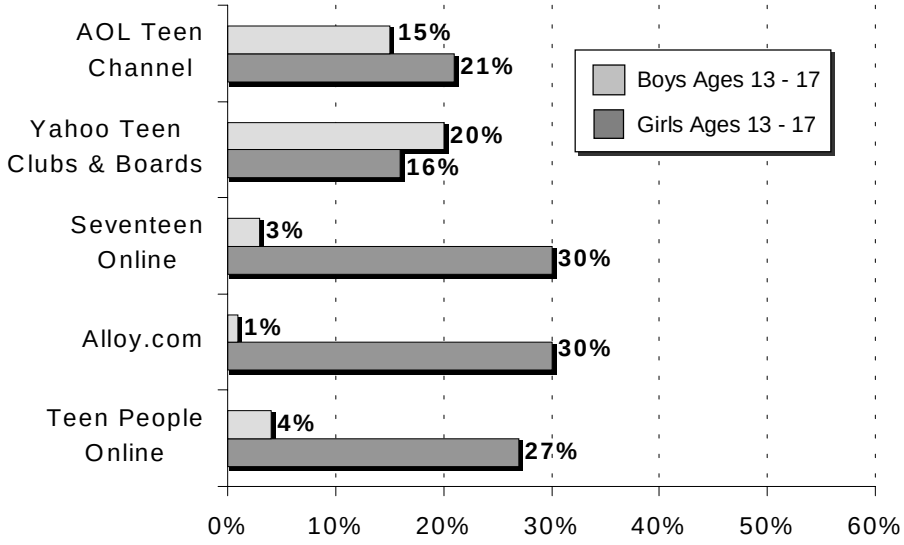
5c. How Children Learn About Web Sites

The survey also asked parents and children how children learn about the web sites they visit. The data broken out by age in Table 5-3 indicates that younger children are most likely to learn about web sites from their parents, and teenagers are very unlikely to learn about web sites from their parents. But there are other interesting findings as well.

According to their parents, online 2-5 year olds are likely to learn about web sites from only two main sources: their parents and television. Considering that the top five named web sites for this age group are TV-related sites, it seems that to a large extent parents *choose* web sites based on their young children's TV viewing, rather than learn *about* web sites from TV (i.e., from mentions or advertising). At the same time, the much higher tally for parents than for television as information source indicates that parents and indirectly, their children, have other important sources of information as well. One way or another, parents are the best way onto the web-browsers of this age group.

Figure 5-2. Web Sites Teens Ages 13-17 Have Visited More Than Once

(Teens' Responses to List)



Note: Only responses given by 15% or more of the total respondents are shown here.
(All teen respondents ages 13-17 who use the Internet at home)
Source: Banner 3; Data Table 337

Grunwald Associates

Table 5-3. How Children Learn About Web Sites (by Age)

Source	Parents' Responses for Children/Teens Ages:					Children's/Teens' Responses for Ages:	
	All Children (2 – 17)	2 – 5	6 – 8	9 – 12	13 – 17	9 – 12	13 – 17
Parents/Guardians	31%	74%	46%	38%	21%	32%	6%
Friends	29%	8%	5%	22%	40%	42%	48%
Explores by Self	23%	--	7%	17%	31%	15%	30%
School/Teachers	19%	--	9%	18%	23%	10%	12%
Television	10%	29%	22%	11%	4%	20%	14%
Links on other Sites	9%	--	7%	9%	10%	5%	9%
Newspapers/ Magazines	6%	5%	11%	6%	6%	3%	16%
Online Ads	3%	--	5%	3%	4%	2%	2%

Note: Only the top 8 responses are shown here.
(All parent respondents with children in noted age categories who use the Internet at home, all target children in noted age categories who use the Internet at home)
Source: Banners 2, 3; Data Tables 165, 338
Grunwald Associates

In the 6-8 year old group, parents and television are still the dominant information sources, with parents self-reporting themselves as sources of information more than twice as often as television. Friends remain a small referral source for this age group. A few other sources begin to pop up on the radar screen, the most interesting of which is magazines. There are a number of magazines on the market designed for this age group — *Ranger Rick, Zillions, Weekly Reader, Scholastic News, American Girl* — and this is an age at which children begin to do independent reading.

Parents view themselves as their 9-12 year old children's main source of web information (38%) and place their children's friends as less influential (22%). However, according to 9-12 year old children themselves, friends are their most important source of web information — 42% of 9-12 year old children who use the Internet at home report that they learn about web sites from their friends, compared to the 32% who named parents.

Interestingly, parents also downplay the role of TV for this age group (only 11% named TV as a source of information), but one-fifth (20%) of 9-12 year olds said they learn about web sites from TV. Again, this may be because many of the sites 9-12 year old children visit (e.g., Nickelodeon, wwf.com) are based on TV shows. That said, it's important to emphasize that in this age group, friends are already far more important than television — by a margin of more than 2:1 — in how children report they find new sites. (Parents also view themselves as the primary source of web information for their daughters, whereas they see their sons being more influenced by their friends. See Figure 5-3.)

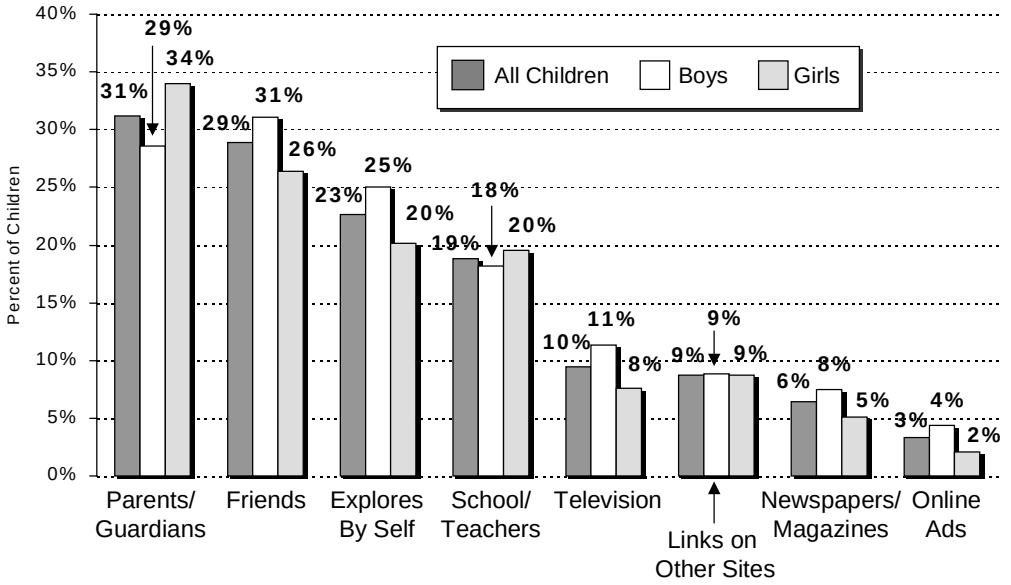
By the time a child is a teenager, parents and television play much smaller roles in influencing children to visit web sites: according to teens in Figure 5-3, only 6% learn about web sites from their parents (compared with 21% of parents who think that's true) and 14% reported that they hear about web sites from television. Friends are the dominant source of web information for teens, with nearly half (48%) of the 13-17 year olds naming them as a primary source. At this age, exploring by oneself is an important way teens learn about web sites (30%), and magazines and newspapers for this age group grow as a source of information (16%), though like other traditional media, they are far less important than simple word-of-mouth for teens. Given teens' reading habits, we suspect that teen-oriented, fashion, and music magazines (as opposed to newspapers) may be the source for tips about web sites to visit.

In none of the age groups, according to both parents and children, did online ads serve as an important source of web referral. Links on sites did not rate a big mention either. (Remember, this is how children *learn* about web sites, not how they use them.) However, it's somewhat difficult to distinguish "links on sites" from "explores by self," given the nature of the Web. And school/teachers play a modest role — 10-11% of 9-17 year olds who use the web at home say they learn about web sites from their school or teachers; only 9% of parents say their 6-8 year old learns about web sites via school.

Although we didn't specifically ask about its role in how children find out about web sites, radio can probably play a role in promoting web sites to teenagers. As discussed in Chapter 4, radio may be a cost-effective way of reaching the substantial portion of teenagers who multi-task while they are online.

Figure 5-3.How Children Learn About Web Sites by Gender

(Parents' Responses)



Note: Only the top eight responses are shown here.
(Parent respondents with children who use the Internet at home)
Source: Banners 2; Data Table 165

Grunwald Associates

Parents are clearly the inroad to younger children on the web. They, along with television, direct and influence their younger children's web use. However, the older a child gets, the more important word of mouth becomes. This increasingly informal information-migration path, coupled with what we learned about brand loyalty on the Web, compels us to rethink traditional marketing strategies for children's web-based ventures.

5d. Non-traditional Marketing Strategies for the Web

There are two pillars of traditional marketing strategy: brand loyalty and share of market. The data from our survey strongly suggests, however, that these traditional approaches may not apply to the children's Internet market as readily as they apply to other more traditional market venues, such as retail.

This is potentially very good news for smaller companies seeking to create a children's business on the web. Brand loyalty and market share are concepts that inherently favor "the big guys." Dominate with your name and you can dominate the market.

On the Web, however, the non-dominance of name brands (except for television brands among young children), the tendency for children to surf as they get older and more independent in their use, the influence of peers, and self-exploration all suggest that the

field may be wide open for many companies to find success, provided they understand the nature of the Web as a medium and market.

Leveraging Content, Customers, and the Medium
If you were to ask children ages 9-17 to name their favorite TV network, other than perhaps Nickelodeon (for the younger children) and MTV (for teenagers), they would likely not name any networks, although they could and would name their favorite TV *shows.*

This is the same pattern that seems to be emerging on the Web: children ages 9-17 can't name the sites they visit, but they seem to know what they *do* on the Web. This suggests that leveraging particular content and/or services on the site might be a successful tactic. Clearly, most web sites need to be branded to get children to come to them, but to have children identify the site as one they use, the magic of the brand name in the non-virtual world doesn't seem to have sway.

The large number of children who surf and the diffuse nature of response to our site questions may be a reflection of a larger phenomenon. Children are less passive on the Internet than they are in other media; they are looking for their wants and needs to be met. Whoever meets them has a piece of their loyalty, for now; whoever doesn't, regardless of brand name, gets clicked past the next time around.

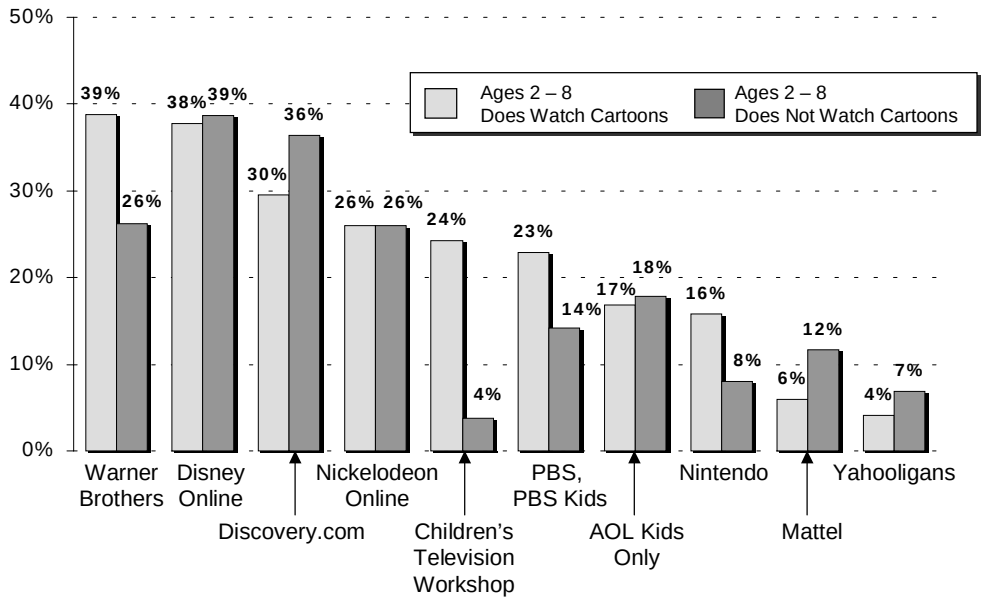
Children are looking all over the Internet for web sites to hold their interest and meet their needs; they're finding them in a variety of places or finding sites that only partially satisfy them, or not yet finding them at all. Through personalization and book-marking and task-orientation, they're creating their own personal brands out of collections of material and services drawn from all over the medium. They aren't simply Nickelodeon or Disney kids any more. We therefore believe that one of the clear messages from the study is that sites that recognize the need to deliver beyond brand, or to (re-)build their brands on great Internet-based experiences, will win on the Web.

We also think that the results suggest that companies will need to think less about market share and more about customer share, delivering in a focused way to win the shared loyalty of specific sub-sets of children. In Table 5-1, for instance, the Warner Brothers site (which includes Kids WB, DC Comics, Cartoon Network) doesn't show up among the top five mentions of parents of children ages 2-8 who use the Web.

Yet in looking at Figure 5-4, we see that from the perspective of their customers (e.g., cartoon-watching children) the site is exceedingly popular. Warner Brothers may be just one of a number of web sites visited and forgotten by many children.
One of the ways to rise above the inherently fragmented nature of the Internet, then, is for companies to leverage their content and the types of services their content implies in a deep and focused way to meet the needs of the customer. This means carefully defining — and limiting — the customer and what they want and need in the site. This strategy will enable companies to focus on "share of customer" — i.e., getting return visits, subscriptions, word-of-mouth recommendations — rather than simply focusing on "share of market," which is an elusive goal in the fragmented world of children online.

Figure 5-4. Top 10 Sites Children Ages 2-8 Visit More Than Once by Whether or Not They Watch Cartoons

(Parents' Responses to Site List)



(Parent respondents with children ages 2-8 who use the Internet at home)
Source: Banner 4; Data Table 164

Grunwald Associates

Finally, the strong word-of-mouth and exploratory aspects of site selection among children, especially children ages 9-17, suggest that a variety of non-traditional marketing practices will be more effective and efficient than the typically costly brand-building tactics of television and print advertising. Marketing programs that create incentive for children (or their parents), either directly or indirectly, to tell others about sites are likely to be more effective than traditional media with this audience, particularly if the incentive is well-integrated into the use of the site itself. Community-building programs, which naturally cause users to bring in friends as they seek to build the service, should be treated as site marketing as well as site-building approaches, and prioritized accordingly in site development.

Because Internet users find sites serendipitously through individual exploration of the Internet, and their site loyalties tend to be fluid, it is critically important that companies develop new approaches to draw children to their site. Beyond search engine tricks and the purchase of links and banner ads, companies will need to find ways to integrate sites with the content and promotions of many other sites. These trends call for companies to cease viewing their sites solely as destinations, and more as connected points of presence.

Conclusion

The Internet is a non-traditional medium and therefore requires non-traditional marketing strategies. But without the traditional pillars of marketing to rely on, how does a company make itself known in the sea of Internet products and services? Strategies that are customer- and content-focused will take advantage of the opportunities for success on the Web, including:

- Identifying who the *customer* is and what he or she would need and want in an Internet product or service.

- Leveraging content, particularly in pursuit of children ages 9-17. Older children don't identify with sites as much as they do with surfing for things to do. This is particularly true for educational Web use, where children seem to be task- rather than brand-focused.

- Creating tactics that capitalize on the inherent capability of the Internet to create grassroots, word-of-mouth, guerilla, and one-to-one marketing campaigns is far more likely to succeed in reaching older children than traditional marketing programs.

- Reaching younger children through their parents (it helps to have a Saturday morning television show, too). Parents of 2-8 year olds report they are interested in two things for their children's Internet use: education and engagement. A site's product and marketing messages should speak to these needs.

C H A P T E R S I X

Children's Internet Use From School

Chapter Outline

6a. School Internet Market Size and Growth
6b. School Usage by Grade
6c. Demographics of Students Online at School
6d. Internet Access Locations at School
6e. Children's Time on the Internet at School
6f. Subjects for Which Children Use Internet at School
6g. Children's Attitudes About Using the Internet in School

Introduction

The number of children online at school has risen more than 240% over the last two years. Important findings about the school Internet market include:

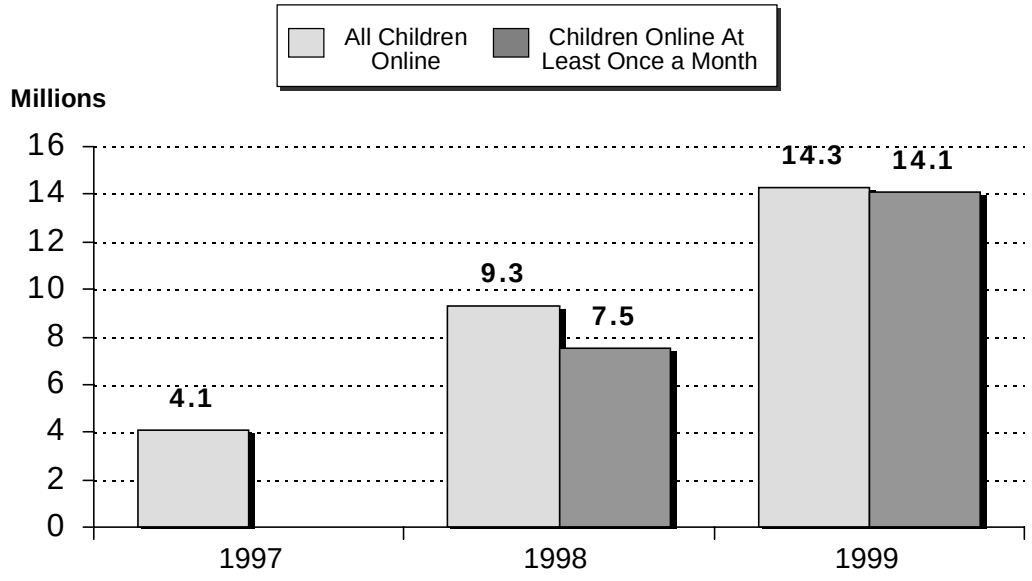
- Despite the increase in connectivity in instructional rooms, students still predominantly use the Internet in schools, labs or libraries.
- High school students spend more time online than middle or elementary school students.
- Despite the inroads in Internet access in schools, sizable numbers of students are still not using the Internet at school.
- Children are more positive than their parents regarding the job their teachers and schools are doing with the Internet.
- School presents a critical opportunity for low-income children to use the Internet.

6a. School Internet Market Size and Growth

At the end of 1999, there were 14.3 million children online from school regularly, according to parents (Figure 6-1). Our earlier surveys found there were 800,000 children online at school in 1995 and 4.1 million in 1997. That's 10 million more children

logging on from school from 1997 to 1999, or over 240% growth in the market in two years. These 14 million children now online represent 23% of all children ages 2-17, 28% of all school-age children (ages 5-17) and 55% of all children online.

Figure 6-1. Children Online From School
According to Parents of Children 2 - 17



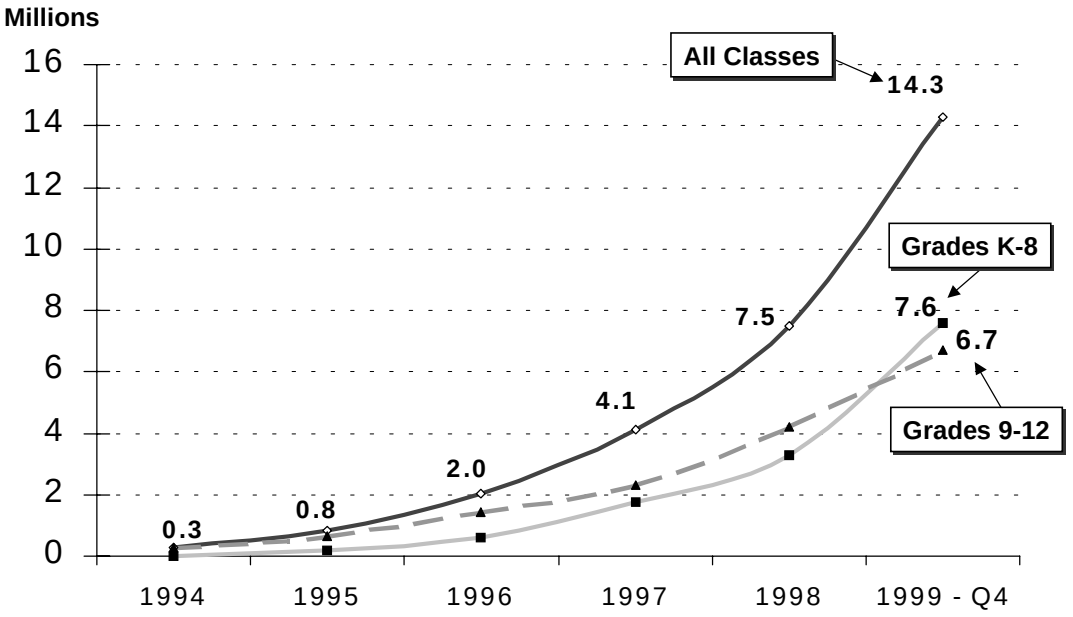
Source: Banner 1, Data Table 26a projected to millions of children 2-17
Banner 1, Data Table 26a - 1 projected to millions of children 2-17

Grunwald Associates

Figure 6-2 shows that there are more K-8 students who use the Internet at school than students in grades 9-12, an artifact of overall K-8 enrollments more than twice the number of 9-12 enrollments (38.3 million vs. 14.7 million). In terms of percentages of school populations, about 21% of K-8 students and 43% of 9-12 students use the Internet at school. These numbers strongly suggest that high schools are giving their students more Internet opportunities than middle or elementary schools, which as we will see, is further corroborated by other survey data.

Figure 6-2. Children Online at School by Grade

According to Parents of Children Ages 5 - 17



Banner 7, Data Table 44 projected to millions of children

Grunwald Associates

Table 6-1. Accessibility of Computers and Internet at School to Non-Users

	Parents' Responses					Children's Responses	
	All Target Children (2 – 17)	Age of Target Child				Age of Target Child	
		2 –5	6 –8	9-12	13 - 17	9 - 12	13 - 17
Does school provide children easy access to a computer?							
Yes	57%	30%	61%	72%	73%	69%	70%
No	31%	60%	28%	16%	12%	22%	22%
Don't Know/ Refused	12%	10%	11%	12%	16%	9%	8%
Does school have Internet access easily available to children?							
Yes	35%	10%	34%	44%	47%	41%	54%
No	33%	59%	34%	24%	20%	43%	38%
Don't Know/ Refused	32%	30%	31%	32%	33%	17%	9%

(Parent respondents with a target child (in school) who does not use the Internet and all target children respondents (ages 9-17) who do not use the Internet in school.
Source: Parents: Banner 2: Data Tables 203 – 204, 371 – 372
Grunwald Associates

According to the U.S. Department of Education's latest statistics, an astonishing 71% of instructional rooms are connected — that's a threefold increase in connected rooms since 1997. So, with nearly three of four instructional rooms reportedly connected to the Internet, how is it that, according to parents, only 28% of school-age children (ages 5-17) use the Internet at school? The explanation, in part, may be seen in Table 6-1. We asked children and parents of children who do not use the computer or Internet at school whether the school provides easy access to computers and the Internet. More respondents than not said that computers and the Internet are easily available to children in school. This was true across all age groups, except for parents of children ages 2-5. So to some extent, availability isn't the only issue — apparently, in some cases the technology is available, but the children aren't using it.

Whether or not the technology is made readily available to children, the large disconnects between the proportion of schools that are wired, the proportion that are taking advantage of the wiring, the proportion of children taking advantage of this availability, suggests obvious opportunities available to Internet companies interested in the school market. Educator surveys tell us that teachers do not have enough training, support, or time to learn to use technology in their instruction. Furthermore, we believe there is not enough appropriate content available that integrates well into the school curriculum to motivate either teachers or children to use the Internet in their schools.

To change this situation would seem to require a joint effort on the part of schools and content providers. Schools must make training and support of teachers a priority if they expect teachers to use the equipment and resources being rapidly acquired for schools. According to *Education Week*, schools typically spend less than 10% of their technology budgets on training, and only 28%-39% of most schools have a full-time technology coordinator (only 19% of disadvantaged schools have one).

Content providers must understand that the demands on teachers at this moment in time — from high-stakes testing to inclusion of special needs students — necessitate provision of resources to help teachers meet the challenges of daily instruction. The mere presence of the technology is clearly not incentive enough for teachers to use it.

6b. School Usage by Grade

If we look at distribution of Internet use by grade, we see in Figure 6-3 that children ages 9-17 report that frequency of Internet use peaks between 8th and 10th grades, then declines a bit in the later high school years. We suspect this is because online older high school students do not spend as much time in school (jobs, community-work programs, etc.) as younger students.

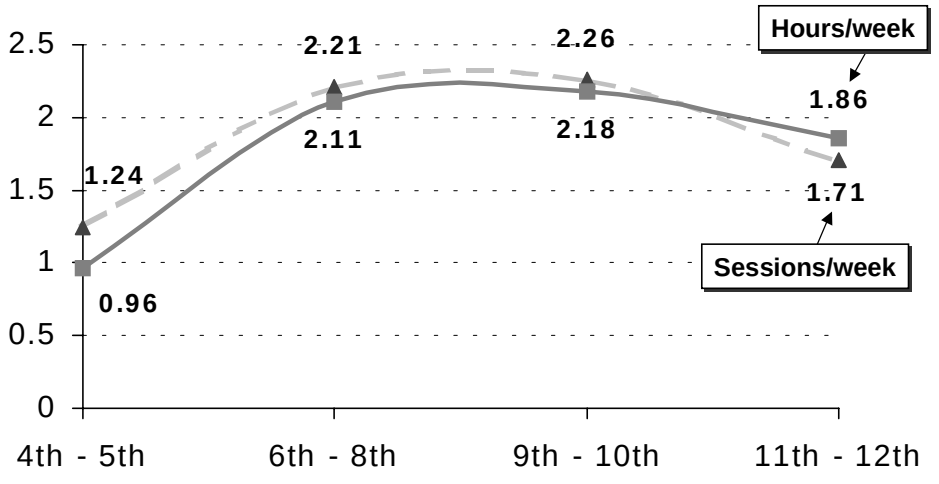
Most children, as seen in Table 6-2, began using the Internet within the last three or four years. (Not surprisingly, younger children began in the earlier grades.) This timing coincides with the growth of Internet use within the general public.

Table 6-2. Grade When Children Began Using Internet at School
Percentages of Children Online From School

	Parents' Responses			Children's Responses	
	Age of Target Child			Age of Target Child	
	6 – 8	9 – 12	13 – 17	9 –12	13 – 17
Prior to Grade 1	30%	2%	5%	--	--
Grades 1 – 2	62%	20%	2%	13%	1%
Grades 3 – 4	5%	49%	9%	54%	5%
Grades 5 – 6	--	22%	26%	29%	29%
Grades 7 – 8	--	--	29%	2%	34%
Grades 9 – 10	--	--	17%	1%	28%
Grades 11 – 12	--	--	3%	--	--
Don't Know/Refused	3%	7%	9%	2%	3%

Note: Children ages 2 – 5 are not included in this table because so few children of that age group used the Internet at school or preschool.
(Parent respondents with a target child who uses the Internet from school, all target child respondents (ages 9-17) who use the Internet from school)
Source: Banner 2: Data Table 187, 357
Grunwald Associates

Figure 6-3. School Usage by Grade
According to children 9 to 17



Source: Banner 8, Data Tables 300 and 358

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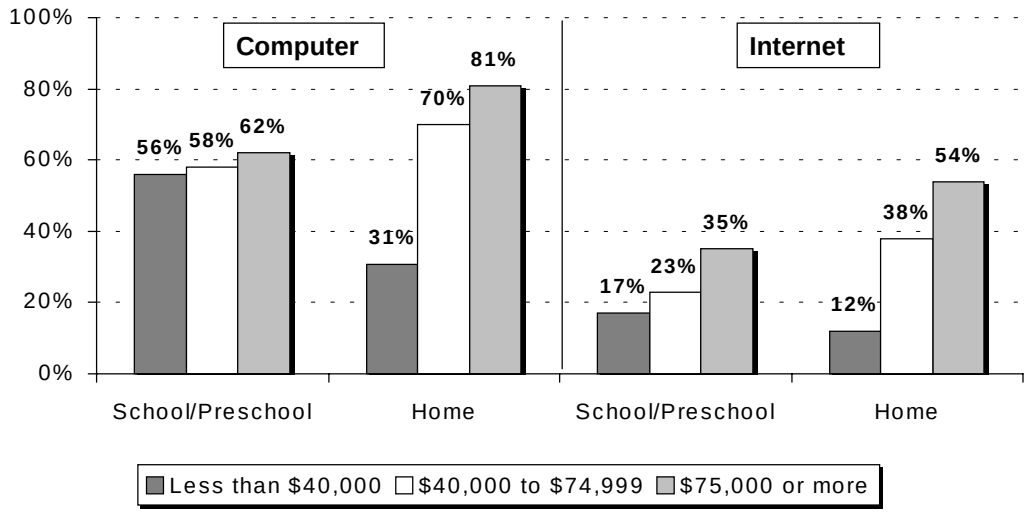
6c. Demographics of Students Online at School

The demographics of students online at school mirror those who use the Internet at home in that, overall, children from wealthier families tend to use the Internet more at school than children from low-income families. However, more low-income children use the Internet at school than do at home. Figure 6-4 shows the percentage of all children ages 2-17 who use the Internet at school and home by income.

Figure 6-4. Children's Computer and Internet Access from Home and School

by Income As a Percentage of All Children
(Parent's Answers)



Note: Figures shown above are a percent of all children 2-17.
(All children of parent respondents with children ages 2-17)
Source: Banner 1; Data Tables 21a, 26a

Grunwald Associates

Seventeen percent (17%) of low-income children use the Internet at school, compared to only 12% who use it from home. Although 35% of high-income children are school Internet-users — double the number of low-income users — their home use is 54%, considerably more than their school rate. Middle income children's use reflects a similar pattern: 23% connect at school, compared to 38% who connect at home.

The gap between low- and high-income children who use the Internet at school is 18 percentage points, compared to the 42 percentage point divide between low- and high-income home users.

These findings point to the school's critical role in giving low-income children opportunities to use the Internet. For the rest of the population, home provides

substantial opportunities. But for children in low-income families, the opportunity to go online is at school.

The importance of school access for low-income children holds true if we look at their school use as a percentage of low-income children's overall use of the Internet.

Table 6-3. Children Who Use the Internet from School, by Education, Occupation, Income, and Ethnicity (Parents' Responses)

		Percentage Of Internet-Using Children
Education	HS graduate or less	58%
	Some college/trade school	58%
	College graduate	53%
Occupation	Professional	58%
	Other	55%
Household Income	Less than $40,000	68%
	$40,000 - $74,999	48%
	$75,000 or more	57%
Ethnic Background	White	56%
	African-American	71%
	Other	53%

Source: Banner 1; Data Table 26b
Grunwald Associates

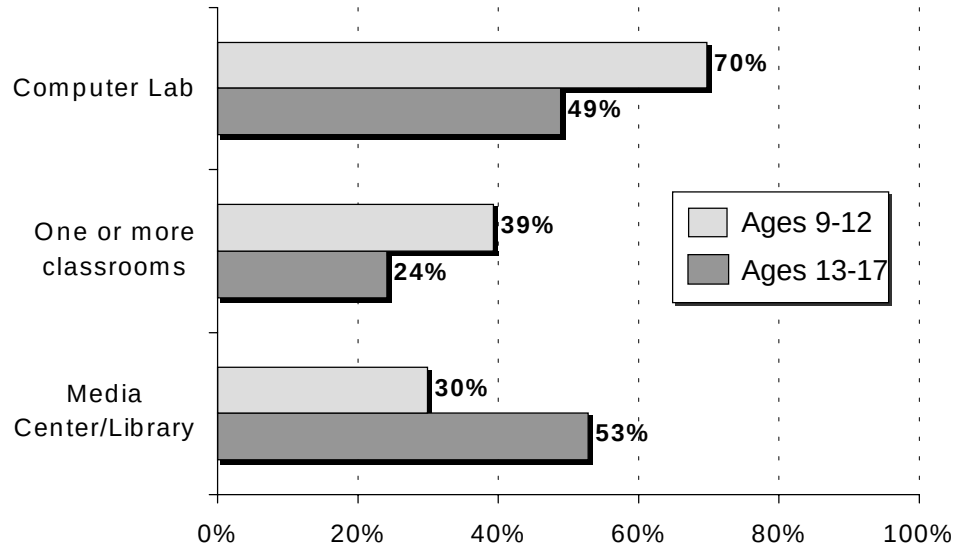
As we see in Table 6-3, close to two-thirds (68%) of low-income children who use the Internet use it at school; about half of middle- (48%) and high-income (57%) Internet-using children go online at school. An even more striking difference is that between African-American and non-African-American children: 71% of African-American children who use the Internet use it at school, compared with about half of whites (56%) and other ethnicities (53%). Furthermore, 56% of all low-income parents say their child's first Internet experience was in school, and 50% of African-American parents agree.

The implication for online companies attempting to target as yet underserved populations and/or to capture the portal relationship among potential home users who are not yet online is clear: schools are a critical path to developing these relationships. Nearly one in six parents (17%) in online households say that their child's school influenced them to use the Internet. Among the remaining non-user population, it seems clear that this proportion is likely to increase, based on the percentage of populations with low home penetration who are experiencing the medium first in their schools.

6d. Internet Access Locations at School

In spite of the sharp increase in instructional rooms with Internet access cited by the U.S. Department of Education, most children online report that they still access the Internet in a computer lab or media center/ library, as shown in Figure 6-5.

Figure 6-5. Target Child's School Internet Access Locations
(Children's Answers)



(All target children ages 9-17 who use the Internet at school)
Source: Banner 2; Data Table 361

Grunwald Associates

There are differences in access locations between age groups. Children ages 9-12 are most likely to use the Internet in a computer lab (70%), whereas high school students are most likely to use it in the media center or library (53%). Elementary and middle school students are more likely than high school students to use the Internet in the classroom (39% vs. 24%). These numbers make sense, given our knowledge of how schools are organized:

- High schools tend to have larger, high-tech libraries, and students are much more likely to use those centers for their schoolwork.
- Elementary or middle school labs are used for a variety of subjects (as opposed to high school labs that tend to be subject-specific) and therefore, are likely to provide more opportunities for going online.
- Elementary and middle schools are much more classroom-centric than high schools: more opportunities to use the Internet would likely occur in rooms

where students spend the majority of their time (vs. high schools, where students move from classroom to classroom throughout the day).

Although these 9-17 year old children's answers are representative of only students grades 4-12, they are perhaps the most likely indicator we have of actual student Internet use in school — that is, not where the official Internet access locations are, but where students really use the Internet in school. These responses tell us that the classroom lags behind other access locations.

These findings have important implications for companies who design instructional Internet products — the numbers suggest strongly that the majority of instructional Internet activity is still taking place outside the regular classroom. Instructional products for elementary and middle schools should probably be designed so that they can be adapted for use in the classroom or the computer lab. High school instructional products should have major library components that students can work on independently because teachers tend to "send" students to the library rather than conduct classes there.

6e. Children's Time on the Internet at School

As we learned in Chapter 4, the average number of hours that a child spends online at school is 2.1 per week, according to parents. In Table 6-4, parents report a 42-minute difference between children ages 9-12 (1.8 hours per week) and teenagers (2.5 hours per week) — nearly the equivalent of one class period. Children ages 9-12 and 13-17 report an even greater difference of 48 minutes per week. Once again, we see from our respondents that high schools are providing more opportunities to use the Internet than are elementary or middle schools.

Table 6-4. Average Number of Hours per Week Children Use the Internet From School

Age of Child	Average Hours/Week	
	Parents' Responses	Children's Responses
	Average	Average
6 – 8	0.9	NA
9 – 12	1.8	1.3
13 – 17	2.5	2.1

Note: Children ages 2 – 5 are not included in this table because so few children in that age group used the Internet at school or preschool.
(Parent respondents with a target child who uses the Internet from school, all target child respondents (ages 9-17) who use the Internet from school)
Source: Banner 2; Data Tables 120 and 300
Grunwald Associates

The advantages of high school are demonstrated further in Table 6-5, where we see that high school students use the Internet a little over two times per week at school, while children ages 6-8 and 9-12 use it around one and half times per week.

Table 6-5. Number of Times per Week Children Use the Internet at School

	Parents' Responses	Children's Responses	
Age of child	6 – 8	9–12	13 – 17
Less than once per month	--	4%	7%
Less than once per week	2%	20%	13%
Once per week	41%	33%	32%
Twice per week	21%	24%	11%
Three times per week	4%	7%	9%
Four times per week	--	2%	7%
Five times per week	--	4%	15%
More than 5 times per week	--	--	3%
Don't Know/Refused	32%	6%	4%
Average number of times per week	1.4	1.5	2.2

*Less than .5%.
Note: Children ages 2 – 5 are not included in this table because so few children in this age group used the Internet at school or preschool.
(Parent respondents with a target child who uses the Internet from school, all target child respondents (ages 9-17) who use the Internet from school
Source: Parents: Banner 2: Data Tables 188, 358
Grunwald Associates

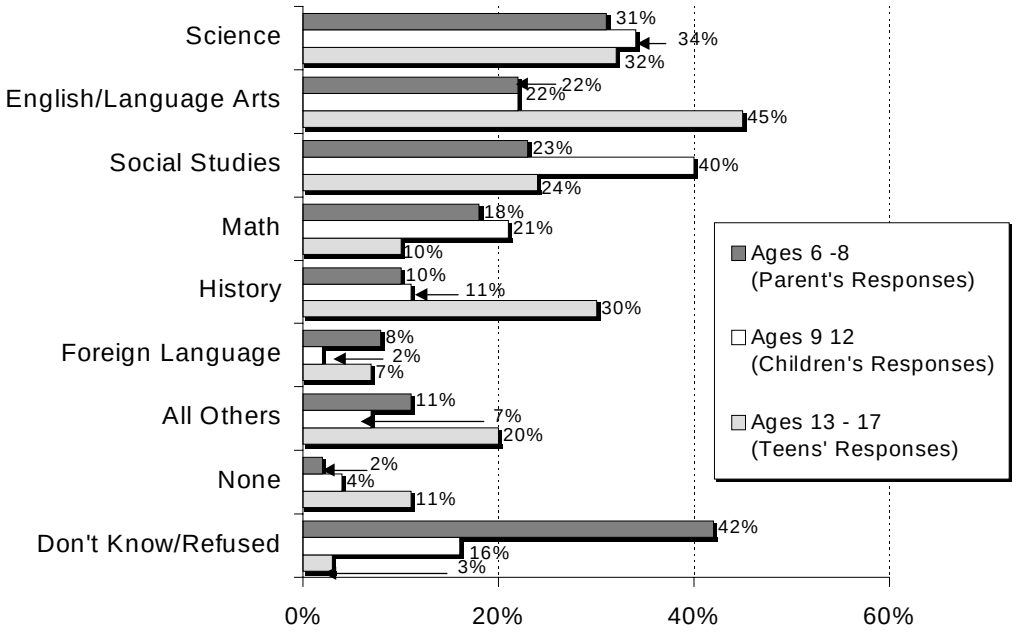
6f. Subjects for Which Children Use Internet at School

Figure 6-6 bears a remarkable resemblance to Table 4-9, which identified the subjects children use the Internet for at home.

As is true for home users, science is consistently the strongest subject across all grades: about a third of all age groups report using the Internet for science in school. In addition to science, high school students use the Internet primarily for English/Language Arts and history, children ages 9-12 report using it primarily for social studies, and parents of 6-8 year olds most commonly say they don't know what subjects their children use the Internet for at school.

Math gets some attention from the 6-8 and 9-12 age groups: 18% and 21% respectively use the Internet in math in school. But as with home Internet users, only 10% of high school students use the Internet for math in school. Since it is highly unlikely that high school students have all the math support and resources they need, this seems an important underserved and untapped market both at school and in the home.

Figure 6-6. Subjects for Which Students Use the Net in School



Source: Banners 2 , 3; Data Tables 192, 362, 362a;

Grunwald Associates

6g. Children's Attitudes About Using the Internet in School

Nearly two-thirds of parents of 6-8 year olds (63%) feel that their child's Internet use has positively affected his or her overall attitude toward school (Table 6-6). Children ages 9-12 respond similarly, with 64% saying that their Internet use has had either a very positive or a somewhat positive effect on their attitude toward school.

Yet only one-third of teens (33%) indicate that their Internet use has positively affected their attitude, while two-thirds (67%) say it has had neither a positive nor a negative effect on their attitude toward school. (Almost none of the age groups indicated that the Internet had a negative effect on children's attitudes.)

Probing children's and parents' attitudes toward the Internet and school further, we asked all respondents, whether or not the child used the Internet from school, to agree or disagree with two statements:

- "My (child's) teachers know a lot about the Internet."
- "My (child's) school is doing a good job of using the latest Internet tools."

Table 6-6. Effect of Internet on Children's Attitude Toward School

Effect	Parents' Responses	Children's Responses	
	Age of Target Child	Age of Target Child	
	6 – 8	9 – 12	13 – 17
Very positive effect	50%	27%	13%
Somewhat positive effect	13%	37%	20%
Neither positive nor negative effect	29%	36%	67%
Somewhat negative effect	2%	--	1%
Very negative effect	3%	--	--
Don't Know/Refused	4%	1%	--

Note: Questions were worded slightly differently for parents and children. The wording for the parents' question is included in this table.
Note: Children ages 2 – 5 are not included in this table because only one child of that age group used the Internet at school or preschool.
(Parent respondents with a target child (ages 6-8) who uses the Internet at school, all target children (ages 9-17) who use the Internet from school)
Source: Banner 2; Data Tables 195 and 365
Grunwald Associates

Table 6-7. Parents' and Children's Agreement Levels With Statements About School and the Internet

Statement	Children Ages 9-17			
	Parents' Responses		Children's Responses	
	Strongly or Somewhat Agree	Strongly or Somewhat Disagree	Strongly or Somewhat Agree	Strongly or Somewhat Disagree
My [child's] school/ preschool is doing a good job of using the latest Internet education tools.	47%	15%	60%	19%
My [child's] teachers know a lot about the Internet.	43%	12%	55%	19%

(Parent respondents)
Source: Banner 2, Data Tables 248, 249; banner book 3 tables 386, 387
Grunwald Associates

Table 6-7 reveals that children give their teachers and their schools higher marks than do their parents — over half (55%) of the 9-17 year olds agree that their teacher knows a lot about the Internet, whereas about four in ten of their parents agreed with the statement. Sixty percent (60%) of children praise their school for the job it is doing with the Internet, compared with only 47% of parents.

Children without a computer in the home were most likely to strongly agree with the statement about teachers' knowledge, perhaps because they have the least experience to judge another person's technical knowledge. Among parents, non-college educated respondents were most likely to strongly agree, and college-educated parents were most likely to somewhat or strongly disagree about their child's teacher's Internet knowledge. Similarly, non-college educated parents were most likely to agree that their child's school is doing a good job with the Internet, and college-educated adults were most likely to somewhat disagree with the statement.

These results suggest at least three interpretations, none of which are mutually exclusive:

- Parents' relatively greater dissatisfaction about school Internet use may reflect their belief that their children are not getting to use the Internet resources they think are readily available in the school (Table 6-1).

- Parents who are better educated are also more likely to be Internet users and more likely to be less satisfied. These parents may feel — accurately or inaccurately — more savvy about the Internet than their children's teachers and thus more critical of the job teachers are doing, which suggests potential opportunities for marketers of home-based supplementary education services.

- Teachers and schools may not be communicating clearly to parents the ways in which schools *are* using the Internet. This has particular marketing implications for an Internet company that understands communication to help schools better connect with parents about the Internet by using the Internet.

Finally, we asked the children ages 9-17 who are not using the Internet in school to agree or disagree with this statement: "I want to be on the Internet in school." Over half (55%) of the children strongly or somewhat agreed with the statement, about 20% neither agreed nor disagreed, and a surprising 22% disagreed (either somewhat or strongly).

Whether children want to be on the Internet at school or not, they fully expect they will be. In Table 6-8, we see that over half (56%) of 9-12 year olds and 72% of high school students who do not currently use the Internet at school, believe they will do so within the next 12 months. Their parents are even more optimistic: 64% of parents of offline 9-17 year olds think their children will be using the Internet from school within the year. This finding echoes previous Grunwald household studies, which have consistently identified a tremendous optimism on the part of families about the likelihood of schools providing Internet access to children. The implications of this optimism for consumer marketers is potentially a level of inertia that will have to be overcome to convince these users to take responsibility for their children's Internet education – for example, by signing up for home-based services. For school marketers, this optimism means that their school customers are facing significant expectations from parents.

Table 6-8. Child Will Use Internet From School/Preschool In The Next 12 Months

	Parents' Responses					Children's Responses	
	All Target Children	Age of Target Child				Age of Target Child	
		2 – 5	6 – 8	9 – 12	13 – 17	9 – 12	13 – 17
Yes	46%	18%	34%	64%	64%	56%	72%
No	33%	68%	37%	18%	16%	25%	21%
Don't Know/ Refused	21%	14%	30%	18%	20%	19%	7%

Grunwald Associates

Conclusion

The school market is ripe with opportunity, particularly to reach populations not otherwise accessible through the home. To create business in the school market, Internet companies would be wise to focus on:

- Creating content that teachers can easily integrate into the curriculum
- Developing content that can be adapted to classroom-, lab-, or library-based instruction
- Creating high school math Internet-based resources, in particular, addressing a completely untapped market need
- Helping schools better communicate to parents what schools are doing with the Internet

The market opportunity – and challenge – for content providers interested in the school market is to create and make available relevant, usable resources. For those marketers interested in the school primarily as a way to reach children, we provide this caution: it is difficult to reach students without the teachers. Most companies require a teacher-oriented solution to succeed in schools.

C H A P T E R S E V E N

School-Home Connection

Chapter Outline

7a. School Web Sites
7b. Parent Interest in Communicating with Schools
7c. School-Home Business Opportunities

Introduction

The cross-influences between the school and home markets appear to offer a number of opportunities to information, media, and technology companies. First, as is clear from previous chapters, education is a key driver in families' decisions concerning technology purchases. Secondly, schools' rapid expansion of Internet links (if not their full use of this capacity) reflects influence from parents and the public. For products and services that are perceived by teachers and parents as having educational value, positioning in both the school and home markets may be a critical marketing strategy for success.

At present, these opportunities remain untapped, largely because a key digital "connection" between home and school — the school web site — is still in nascent form. Our survey shows that schools' attempts to connect to the home through the web have not found an audience. Among the relevant findings:

- A strong majority of parents are interested in online communication with teachers.
- Parents are also interested in viewing their children's schoolwork online.
- One-third of parents believe their child's school has a web site, while about 40% do not know whether the school has one or not.
- Older children report their school has a web site much more frequently than their parents.
- Of the parents who acknowledge a school web site, most do not use it as it exists today.

7a. School Web Sites

Many Internet companies are exploring school web sites as a way to reach the home. Strategies range from building and maintaining school web sites to provide instructional, administrative, and community information to creating web-based marketing/fundraising programs.

There is a critical condition for the success of these marketing approaches: parents must know about and be interested in Net-based school information. Yet our survey finds that although parents are interested in school-home communications, they don't have much awareness about their child's school web site — and those who do know about school web sites don't see much compelling information posted there.

According to Table 7-1, a third (33%) of all parents believe their child's school has a web site, compared to the 41% who say they don't know. The younger a child is, the less likely the parent is to think there is a school web site. But parents have less knowledge of school sites than their children do, sometimes considerably less. For example, 59% of high school students say their school has a web site, while only 43% of their parents think so.

What's even more interesting is that of the parents who believe that their child's school has a web site, a full 65% of them say they do not use it. Parents of older children are more likely to use the school web site than parents of younger children, but all parents are more likely to skip the school web experience than are likely to partake in it.

When we asked parents who said their school does not have a web site whether they'd be interested in the school having one, almost half (43%) expressed an interest (Table 7-1). Another 18% were ambivalent, and about a third (32%) expressed little or no interest.

Table 7-1. School/Preschool Web Site Profile

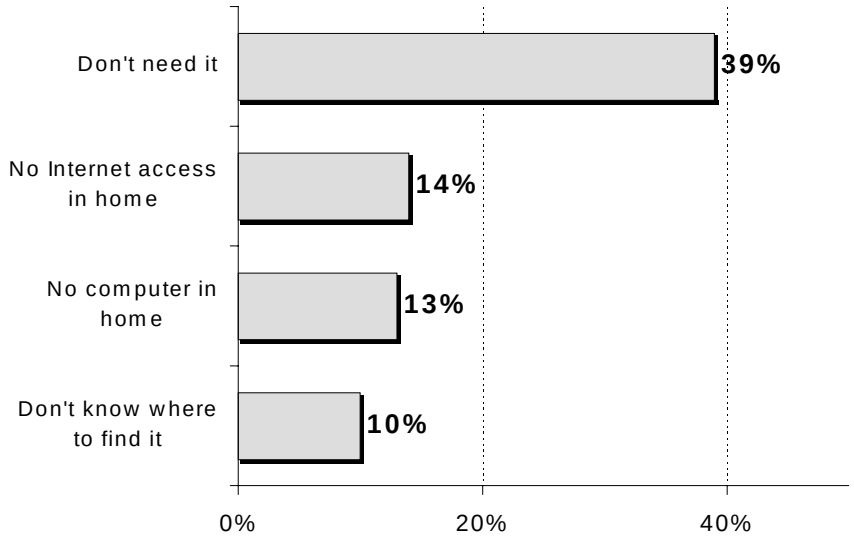
	Parents' Responses					Children's Responses	
	All Target Children	Child's Age				Child's Age	
		2 – 5	6 – 8	9 – 12	13 –17	9 – 12	13 – 17
Does school/preschool have Web site?							
Yes	33%	11%	34%	33%	43%	43%	59%
No	26%	43%	25%	24%	20%	22%	16%
Don't Know/Refused	41%	46%	41%	43%	38%	35%	25%
(If Yes) Does family use the Web site?							
Yes	32%	24%	24%	32%	38%		
No	65%	76%	74%	65%	59%		
Don't Know/Refused	3%	--	2%	3%	3%		
(If No) How interested would you be in the school/preschool having a Web site?*							
Very Interested	30%	27%	30%	33%	31%		22%
Somewhat Interested	13%	12%	8%	19%	13%		43%
Neither Interested/Not Interested	18%	17%	24%	13%	20%		30%
Somewhat Not Interested	6%	7%	6%	5%	6%		--
Not at all Interested	26%	35%	25%	23%	23%		4%
Don't Know/Refused	6%	2%	8%	8%	7%		1%

*Parent's and Children's questions are worded slightly different. The Parents' version is included in this table.
(Children ages 2 – 17; and all parents)
Source: Banner 2: Data Tables 205 – 207, 373-374.
Grunwald Associates

Clearly, parents have some interest in the idea of a school web site. But why don't parents who know about the school web site use it? When we asked this question, we found that the explanation is not lack of Internet access. Only 14% of parents said they don't use the school site because they don't have the Internet at home; another 13% cited the lack of a computer. The most common answer (39%) was that the parent feels no need for it, as indicated in Figure 7-1, which shows the top four answers.

Our impression is that many marketers — and many schools — aren't realistic about how labor intensive and difficult it is to put together and update a compelling web site. It is not a trivial task. Part of the challenge in developing school web sites is finding ways to make educators' jobs easier. Even when it is kept up-to-date, school web information tends to be organized around limited themes: school schedules, sporting events, and educational philosophy or general school information. Some school web sites are more innovative than others, offering updated homework assignments, curriculum information, newsletters, examples of student work, and so forth. But the majority of school web sites have not put together a package that attracts parents.

Figure 7-1. Reasons Family Does Not Use School/Preschool Web Site



(Parent respondents whose child's school has a Web site that the family doesn't use)
Source: Banner 1; Data Table 208

Grunwald Associates

Clearly, there is an opportunity here for companies to help schools accomplish this important task. The company that succeeds through a realistic strategy will have a significant leg up on its competitors, not to mention a perhaps otherwise unattainable inroad into the home.

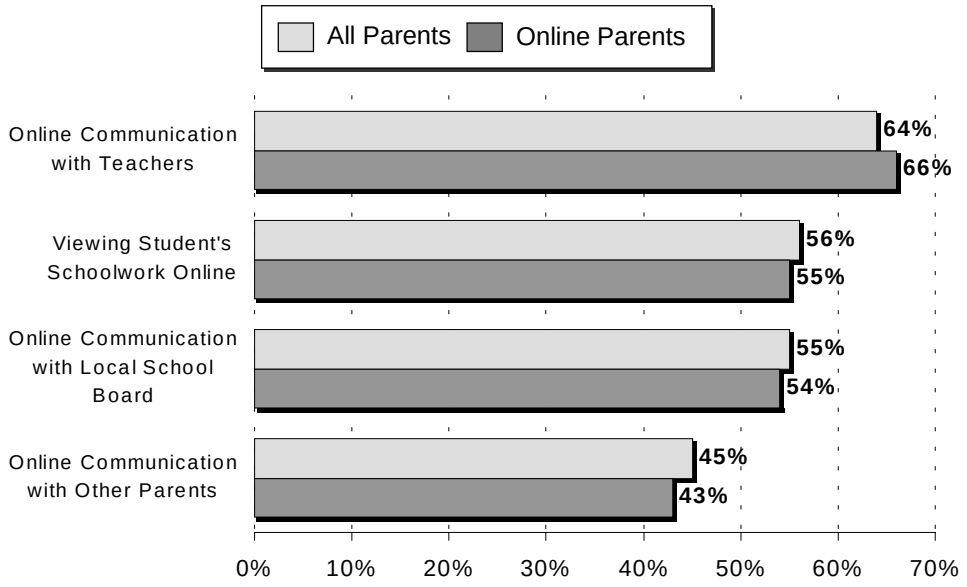
The key concept here is "realistic" strategy. "Build a web site and they will come" has not worked. Schools and their corporate partners need to understand what will draw parents to use the school web site and then create online environments that support those needs and interests.

7b. Parent Interest in Communicating with Schools

What will drive parents to connect to local schools via the Internet? We tested parental interest in four different online concepts, all of which involve communication — between parents and teachers, parents and other school officials, and other parents. The last concept, viewing children's schoolwork online, is another form of communication between parent and teacher (i.e., "This is what Johnny did in class this week"), although it also suggests the possibility of *doing* schoolwork online, which we discuss in section 7c, below. We examined all parents' reactions, as well as those of online parents, to the concepts in Figure 7-2.

Figure 7-2. Parent Interest in Communicating with Schools

(Percent of Very or Somewhat Interested Responses)



Source: Banner 1; Data Tables 217, 217a, 218, 218a, 219, 219a, 221, 221a Grunwald Associates

All the communication concepts tested well. Communication with teachers was the most popular, with online parents particularly enthusiastic about this idea (66% say they're interested). It is noteworthy to find in testing online concepts that users and non-users show similar interest. Often, non-Internet users, who are included in "all" parents in Figure 7-2, show more interest in online concepts than do users, who may have enough experience to be a little jaded about Internet applications. But in our survey there was virtually no difference between the responses of parents who use the Internet and all parents, which suggests that there is a solid interest in the *ideas* themselves, and not in the glitz of the technology.

Parents seem to be equally interested in communicating with the school, regardless of the age of their child (Figure 7-3). Parents of 9-12 year olds are a bit more likely to be interested in the school having a web site, but otherwise the age of the child does not seem to be a factor in parents' interest.

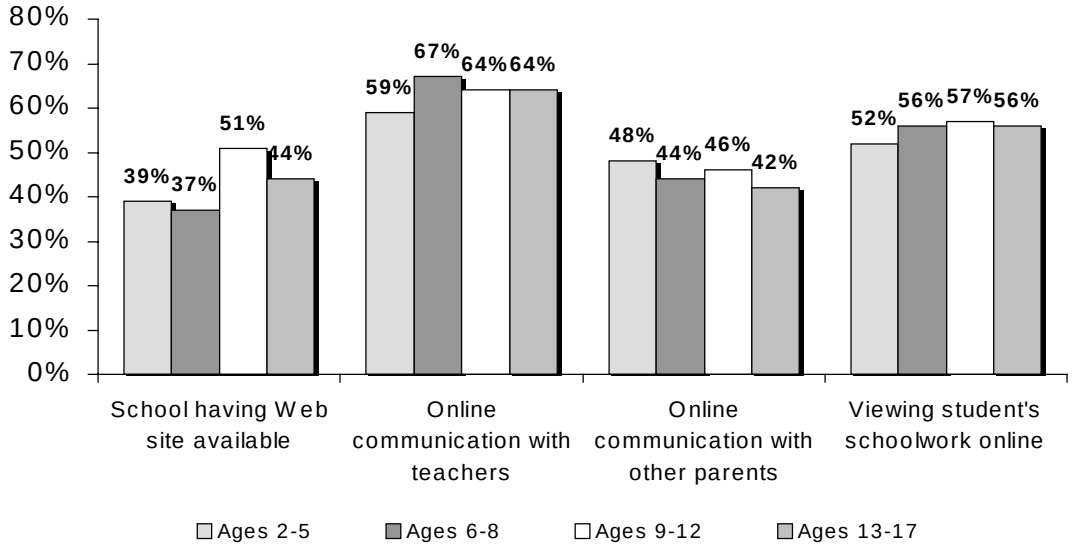
Profile of Parents Most Interested in Communication

Looking more closely at the data, we can create profiles of parents most interested in the different online communication concepts (Table 7-2).

For instance, for communication with teachers, women were most likely to be very interested. Beyond that, the profile of a mother desiring online communication with teachers would be 30-44 years old, with some college education, in a household earning less than $40,000 a year.

Figure 7-3. Parents' Interest in Online Communication by Age of Child

(Percent of Very or Somewhat Interested Responses)



(Parent respondents with children age 2-17 whose school/preschool does not currently have a Web site; all parent respondents)
Source: Banner 2; Data Tables 206, 217, 218, 221

Grunwald Associates

For communicating with other parents, the most likely customer would be an African-American parent (mother or father), with a high school or some college education, in a household earning less than $40,000 a year. The parent most likely to be "not at all interested" would be a young — under 29 — college graduate.

School Board communication seems to most interest African-American mothers under 45, with a high school or some college education, living in a household that earns under $40,000 annually. (Older white fathers, college graduates, living in $75,000+ households, are least likely to be interested.)

African-American, non-professional parents (mothers or fathers), with some college, under age 45, are most likely to be interested in viewing their children's schoolwork online. (Older, white, college-educated professional parents are least likely to be interested.)

Table 7-2. Profile of Parents Most and Least Likely to be Interested in Communication Concepts

Concept	Parent Mostly Likely to be Interested	Parent Least Likely to be Interested
Online communication with teachers	Mother, 30-44 years old, some college education, household earnings less than $40,000/year	Parent of a 2-5 year old child, particularly a son
Online communication with other parents	African-American parent, high school or some college, household earnings less than $40,000/year	Age 45 or older
Online communication with School Board	African-American mother, under 45, high school or some college, household earnings less than $40,000/year	White father, 45 or older, college graduate, household earnings $40,000 +/annually
Viewing children's schoolwork online	African-American, non-professional, some college, under 45	White, 45 or older, college-educated professional

Source: Banner Books 1 and 2, tables 217, 218, 219, 221 TM TABLE
Grunwald Associates

A recurring theme in these results is the role of mothers: mothers, often the predominant online parent in the household, are more likely to want online communication with teachers and schools than fathers are. Once again we see how mothers' interests can be a window of opportunity for reaching into the home Internet market.

Another theme that emerges from this data echoes other findings of the survey: school-based Internet use is of critical importance to lower-income, less-educated, and African-American households. The most important echo of previous findings is that parents view the Internet as a tool for their children's learning, and that seems to include connecting with school. Parents appear to have a deep interest in using the Internet as a means to communicate with the people responsible for their children's education. This interest in parent-school online communication strongly suggests that companies should consider incorporating powerful communications tools and environments in their school Internet offerings.

7c. Potential School-Home Business Opportunities

Communication tools — email, bulletin boards, chat rooms, listservs — are essentially free on the Web now. Therefore, much of the perceived opportunity for businesses lies in providing products or services *around* these free communication tools. For companies who wish to exploit the rich connection between home and school, there are several business models for offering products and services.

Advertising
Advertising is a way to reach students as direct consumers or as influencers of their parents' consumer habits. Schools are notoriously sensitive about advertising, but they do accept it in exchange for something they perceive to be of real value. For example, a number of companies offer to set up and maintain school web sites in return for selling advertising on these and related sites. Some companies such as Zap Me! are making inroads, albeit controversial ones, in donating computers and Internet set-ups in exchange for advertising. Other companies are starting to offer free ISP services to communities in concert with local schools.

All these models, to some degree, bank on advertising to bring in significant revenues, something that has not yet been proven effective on the Internet. However, an advertising-based model does not preclude employing other business models as well, and most advertising-based sites also depend on e-commerce as a revenue stream.

E-commerce
One of the more immediate ways to move into school-home e-commerce is to exploit the school-home commerce activity that already exists in schools — yearbooks, fund-raising, class rings, school photos, and so forth. Offering Internet-based school-home businesses that parents, teachers, and children are already familiar with clears an immediate hurdle: acceptance as part of the school culture. One of the more visible e-commerce school-home models is the web-based school fund-raising site. Several companies offer online stores that earn dollars for schools each time a parent makes a purchase. They also offer schools free web sites as the incentive to register with their fund-raising program. Whether any company can survive on the Web relying solely on this model is questionable.

Straight e-commerce sites offering educational products such as software or books to both home and school customers need some sort of a "hook" to get that school-home connection. For instance, Scholastic Book Clubs, a company operating offline, offers free books to teachers who "sponsor" a book club by sending home catalogs and collecting orders for the club every month. Scholastic owns this market in the non-digital world by virtue of its 50+ years of offering school book clubs. Any company wishing to enter this lucrative space online will find administrators cautious and teachers reluctant to take on sponsorship unless the benefits to the teacher and the school are immediate and valuable (and the amount of work required is minimal).

Premium or Subscription Services
Despite the merits of advertising and/or e-commerce, skepticism is increasing in the Internet industry as a whole about relying exclusively on either as a source of revenue. Consequently, some companies are looking at premium or subscription education services that offer instruction.

Several education companies, as of this writing, are either offering curricula especially designed for the Web or exporting their shrink-wrapped CD-based curricula to the Internet, charging subscriptions for its use. For schools, the subscriptions replace the old "site licenses."

But to sell to homes, companies must make a different kind of subscription proposition. For instance, offering monthly or unit-based subscriptions, offering free trials to the

customer who considers him/herself an occasional user, offering a critical mass of free content with embedded value-added subscription-based opportunities may make more sense in a home-business model.

Many of these strategies are predicated on the notion that public school administrators must participate either explicitly or implicitly as marketing partners. School testimonial support, along with participation in a web site, can be important marketing tools, particularly with parents of older children. As we can see in Table 7-3, one-fifth of parents of 9-12 year olds, and almost a quarter of parents of teenagers report that they have been influenced by their child's school to use the Internet. Clearly, these are parents who may be open to a school-home marketing strategy.

Table 7-3. Influence of Child's School on Household Decision to Use the Internet (Parents' Responses)

	Child's Age			
	2 – 5	6 – 8	9 – 12	13 –17
Yes	3%	13%	20%	22%
No	96%	84%	80%	77%

(Parent respondents with children ages 2-17 with either adult or any child who uses the Internet)
Source: Banner 2; Data Table 211
Grunwald Associates

However, schools will not be willing to give implicit or explicit support to a service unless its educational value is perceptible to the school and community. In addition, educators will be hesitant about collaborating with services available only to those who can afford it. A solution to this problem – and a potential means of expanding the size of the market – may lie in school systems' subsidy of low-income families' use of valuable Net-based educational services. Companies should consider offering a "community site license" through the school, whereby any child who attends a subscribing school would have free (or discounted) access to the content from home (or library or community center).

Conclusion

Parents are ambivalent about school web sites as they currently exist, but they are enthusiastic about communicating online with teachers and schools and using the Internet to engage with their children's schoolwork. Companies may exploit the inherent relationship between home and school through existing Internet business models with the following provisos:

- Because communication tools are available and increasingly free on the Internet, companies offering these tools should be wrapped in something of perceived educational value.

- Advertising-based models may be good for home, but less acceptable for schools that are traditionally sensitive about advertising. There are exceptions, but the school must perceive great value in the exchange.

- E-commerce has the potential to transition well into schools if the commerce is in a niche that already exists in the school-home market (e.g., fund-raising, yearbooks, etc.). Other e-commerce ventures, such as selling educational products, will find it difficult to partner with the school if the benefit to the school is not immediate, and the burden minimal.

- Premium services and subscription curriculum content yield another opportunity to reach the home through the school, if the school is willing to give its imprimatur to the product and if the service/subscription model does not disproportionately favor advantaged households.

C H A P T E R E I G H T

Purchasing, Purchasing Influences, and Premium Services

Chapter Outline

8a. Online Product Searching and Purchasing By Parents
8b. Online Product Purchasing By Children
8c. Child and Child-Related Influences on Household Purchases
8d. Technology Purchases
8e. Online Premium Services
8f. A Premium Services Case Study: Online Tutoring

Introduction

The children's market has been one of the most challenging for online marketers of children's products and one of the most promising for site developers who believe in a premium services model. Key findings in our survey related to online e-commerce and premium services include:

- Parents today are relatively heavy product-searchers for their children, but engage in much less online purchasing.
- Parents who do purchase online for their children make significant expenditures doing so.
- Direct purchasing online by children is rare, and "electronic wallet" or "virtual allowance" technologies may not change this in the near future.
- Children who search for product information online for their families are potentially powerful influencers of household purchases, and many children are already doing these searches for their families.
- An important subset of parents tells us they are already subscribing to premium online services for their children, and most of these services are educational.
- Online tutoring provides an instructive example of the issues and opportunities facing would-be providers of online premium services for children.

8a. Online Product Searching & Purchasing By Parents

Product Searching By Parents

Parents are relatively heavy users of the medium as a source of product information for their children. Of the parents we surveyed who use the Internet, a large majority (70%) acknowledge having used the medium for this purpose. Furthermore:

- Sixty-five percent (65%) have used the Internet to look for product information for their children in the last year.
- More than half (52%) use the Internet at least once a month to look for product information for their children.
- Nearly a third (31%) use the Internet at least once a week for this purpose.
- Fifteen percent (15%) use the Internet at least two to six times a week for product searches.
- Only 5% use the Internet at least once a day for product searches.

There are surprisingly few strong demographic differences among those who do product searches or in their frequency. One of them is fairly predictable, the others a bit less so:

- Significantly fewer individuals with low incomes have ever done a product search.
- Parents whose children use the Internet themselves are significantly more frequent product searchers than those whose children are not online —19% of parents whose children are online do at least two to six product searches a week, versus only 9% of parents whose children are not online.
- Parents with some college or trade education are more frequent product searchers than their better or less educated peers —20% of these parents search at least two to six times a week, versus 9% of less educated and 14% of better-educated parents.

Product Purchasing By Parents

Significantly fewer online parents (27%) have ever made a purchase of a product online for their children than have searched for a product online. The combination of relatively frequent product information searching and relatively infrequent product purchases by parents for children suggests that marketers face both significant challenges and opportunities in selling to parents. In fact, the market for children's products could be literally doubled simply by attaining the same search-to-purchase rates that apparently exist for ordinary consumers.

Demographically, there are few significant trends or surprises in the divisions between those who have purchased online and those who haven't.

- Better- and mid-educated parents (33%) are more likely to have made purchases than less-educated parents (13%).
- Couples (31%) are more likely to have made purchases than single parents (20%).
- Professional parents (31%) are more likely to have made purchases than non-professionals (20%).
- High-income parents are significantly more likely to have made purchases than low-income parents (38% vs.19%).
- Thirty percent of white parents have made purchases as compared to 10% of African-Americans.

Parents whose children are on the Internet themselves are significantly more likely to have made purchases than those whose children are not online — 31% versus 23%. The fact that this is true for both searching and purchasing suggests obvious opportunities for online marketers, particularly since it seems likely that this phenomenon represents an outgrowth of children's influence over purchasing, which we will discuss at greater length later in the chapter. Table 8-1 below combines frequency of product searches and online purchasing for key demographic groups.

Table 8-1. Shopping and Buying Online for Children

Variable	Category	% Who Shop Once per Week or More	% Who Bought
All Parents		31%	27%
Respondent Education	HS graduate or less	29%	13%
	Some college/trade school	35%	33%
	College graduate	29%	33%
Respondent Occupation	Professional	32%	31%
	Other	31%	20%
Household Income	Less than $40,000	28%	19%
	$40,000 - $74,999	32%	29%
	$75,000 or more	34%	38%

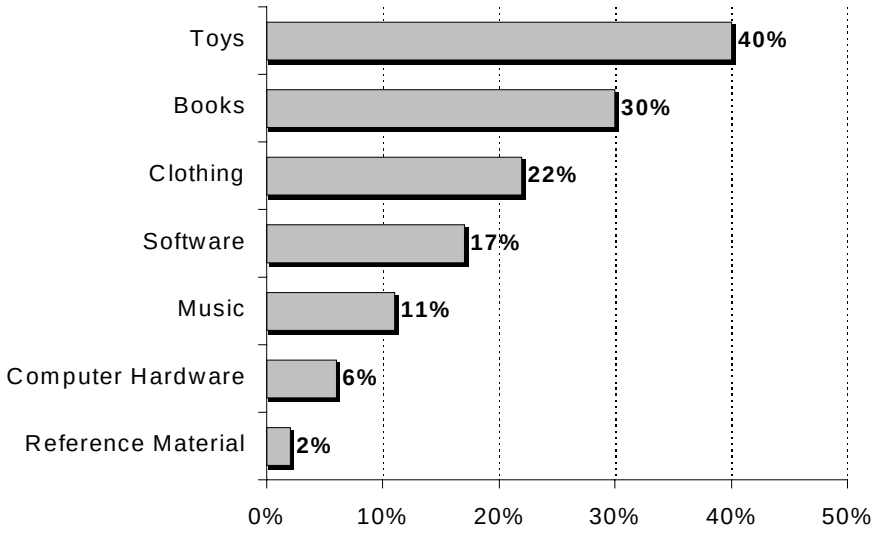
(All parent respondents who use the Internet)
Source: Banner 1; Data Tables 64 and 65
Grunwald Associates

Types and Amounts of Parent Purchases

As seen in Figure 8-1 below, by far the most frequent purchase by parents for their children is toys, followed by books, clothing, software, and music. With the obvious

exception of toys, these categories are not dissimilar to the leading purchase categories for consumers overall.

Figure 8-1. What Parents Purchased Online for Children



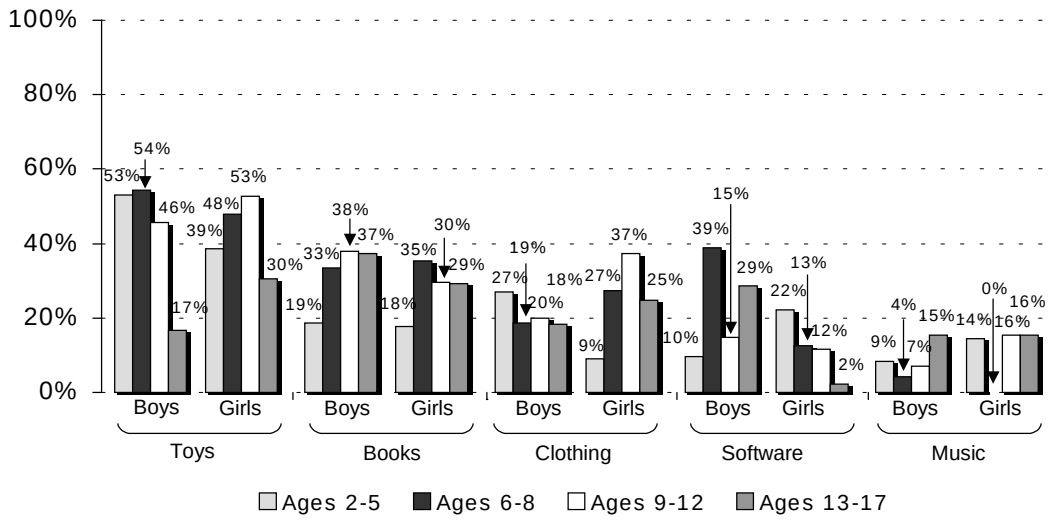
(Parent respondents who bought things online for children in the last year)
Source: Banner 1; Data Table 67

Grunwald Associates

Demographically, there are few differences of note. Parents over the age of 30 are significantly more likely to buy books for children than those under 30, a result at least partially, though not completely, explained by the age of their children (only 11% of parents under 30 bought books online for their children versus 18% of all parents of children ages 2-5). Software marketers should be aware that a much higher percentage of parents of boys ages 6-8 (39%) are making software purchases for their children than the overall average (17%). A second peak in software purchasing occurs with parents of boys ages 13-17 (29%). And not surprisingly, parents of children under the age of 13 are significantly more likely to buy toys for their children than those whose children are teens. Figure 8-2 below illustrates overall trends in purchase types by age and gender of child.

Figure 8-2. Type of Products Bought Online

By Target Child's Age and Gender
(Parents' Responses)



(Parent Internet users who made purchases online for their children ages 2-17)
Source: Banner 2; Data Table 67

Grunwald Associates

Parents who do purchase products online for their children spend significant dollars doing so. In the last year, these parents spent more than $100 online last year in nearly every category we looked at. Specifically:

- $229 on toys
- $193 on books
- $295 on clothing
- $179 on software
- $83 on music
- $429 on computer hardware
- $183 on reference materials
- $292 on all other items

Again, these numbers illustrate the substantial size of the opportunity available to marketers who can convert more parent searchers into parent purchasers.

8b. Online Product Purchasing By Children

As part of our survey we not only looked at online purchasing by parents, but also by children, using either their direct purchasing power (e.g. their allowance) or their indirect power (e.g. their ability to get their parents to hand over their credit cards).

Children's Purchasing Power

The direct purchasing power of children is not insignificant. Of the parents we surveyed, 44% indicated that their child receives an allowance, and the average weekly amount of that allowance is $9.58 per week, or nearly $500 per year in purchasing power. Parents whose children are online appear to provide them with higher allowances, an average of $10.94 per week, versus $8.38 per week for children who are not online, though this difference was not statistically significant.

Not unexpectedly, there are also differences in allowance received by age, with significant jumps between 6-8 year olds who receive an allowance and 9-12 year olds, and again between 9-12 year olds and 13-17 year olds. Younger children, ages 2-5, who receive an allowance average $299 in purchasing power per year, 6-8 year olds average $213, 9-12 year olds average $373, and teens (ages 13-17) average $850 purchasing power per year solely from their allowances (not including income from jobs).

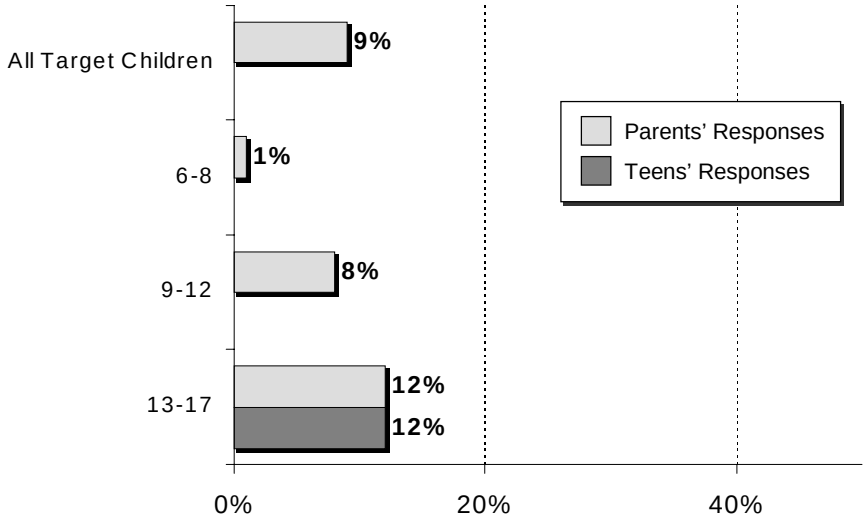
Children's Purchasing Online

So far, however, not a lot of the purchasing power described above has translated to purchases online. While 27% of parents have made online purchases for their children, as seen in Figure 8-3 below, only 9% of children themselves have done so, according to parents. Predictably, older children —12% of teens and 8% of 9-12 year olds, have made most of these purchases. Twelve percent (12%) of teens themselves also report buying products online.

The kinds of purchases made online by children appear to mirror those of their parents — toys, music, clothing, and books lead the way (although relatively few teens, speaking for themselves, reported buying clothing online). The number of children making purchases is too small to make strong comments about the relative frequency of different types of purchases, although it's notable that computer software does not appear on the list of top purchases reported by either teens or parents. Other items such as concert tickets, audio equipment, and reference materials that appear relatively low on the list of parent purchases, or not at all, appear more prominently on the list of purchases by children.

The small number of child purchasers also makes it difficult to comment on the amount of money children are spending online, although the data we have suggests that the purchases made are not strictly limited by the size of the child's allowance. The most common method of payment, according to both parents (83%) and children (60%) is a parent's credit card. Only 5% of parents identify a child-based form of payment (children's check) as the method of payment for these purchases.

Figure 8-3. Age of Children That Made Online Purchases in Past Year



(Parent respondents with a target child who uses Internet at home, all teen respondents who use Internet from home.)
Source: Banner 2; Data Tables 167 and 340

Grunwald Associates

Electronic Wallets — A Solution?

Clearly, the reliance on parents and adult forms of payment is one of the key factors limiting the potential of unlocking child purchasing power online. Several companies want to solve that problem, through "virtual allowance" or "electronic wallet" technologies that allow parents to put money into online accounts for their children, and permit children to spend this money online as they see fit. As part of our survey, we tested interest in this concept among both parents and children to determine its likely adoption rate. The results are not promising for marketers hoping to sell online directly to children:

- While 40% of teens were interested in the concept and 16% were very interested, only 8% of parents expressed any interest at all, and only 4% were very interested.

- More tellingly, 78% of parents said they were not at all interested, and even 36% of teens — almost as many as those who expressed any interest at all — said they had absolutely no interest in this method of payment.

- To the extent that there was any above-average interest demographically, it tended to be among groups likely to have less money to spend.

Of course, selling directly to children isn't the only way children can be involved in household purchasing decisions.

.8c. Child and Child-Related Influences on Household Purchases

Short of direct purchases, it's long been accepted that children can cause purchases of specific products by influencing household purchasing decisions. As the Internet grows as an e-commerce medium, children's relative facility with the medium seems likely to offer new opportunities for children to influence household purchasing. We probed this possibility with a number of questions whose results are described below.

Children's Product Searches For Their Families

When asking parents about product searches, we also asked them about the extent to which their children did searches for product information on the Internet on their behalf, or on behalf of other members of the family. As can be seen in Figure 8-4 below, nearly a third of all children who are online do product searches for their families, according to their parents, including nearly half of all teens. Children ages 9-17 say that even more of them do product searches for their family than parents do, with more than six in ten teens reporting they've done such searches. The gap in parent and child responses likely means only that parents are not completely aware of the sources of product information their children bring to their attention. Demographically, it's noteworthy that this phenomenon is particularly prevalent in high-income families (41% of children in wealthy families do product searches) and professional families (39%), though many families that have achieved high income and professional status have older children as well.

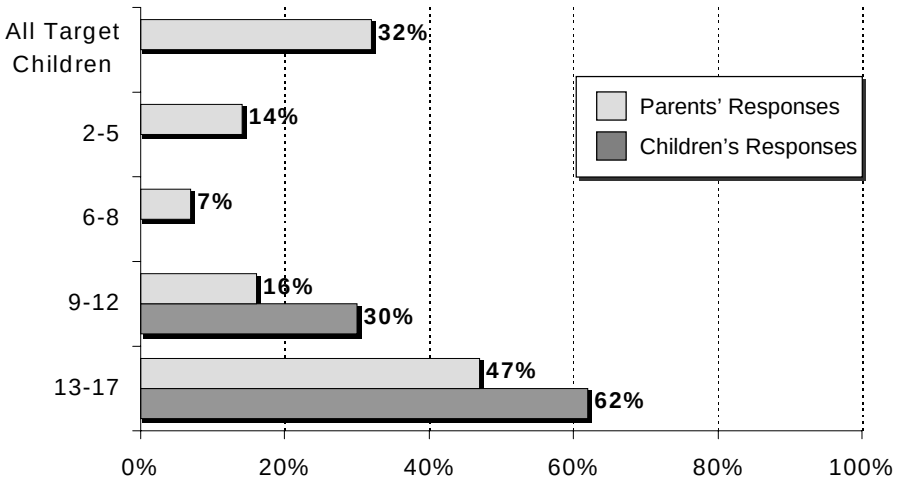
To drill down further on the extent of this phenomenon, we asked both parents whose children perform product information searches and children who say they perform them how often they undertake these searches. Key findings included:

- Most product-searching 9-17 year olds (57%) say they retrieve product information online for their families at least once a month, and 62% of their parents agree.

- Nineteen percent (19%) of the parents of 9-17 year olds and 16% of the 9-17 year olds themselves say they retrieve product information for their families at least once a week.

- Boys are more frequent information retrievers than girls, according to parents, with 27% of boys (vs. 8% of girls) retrieving information for their families at least once a week. Children ages 9-17 report a narrower, statistically insignificant gap between boys and girls, but even if the children are right, the fact that parents are more aware of boys' product retrievals is important for marketers to know.

Figure 8-4. Target Child Has Used the Internet to Retrieve Product Information for a Family Member



(Parent respondents with a target child who uses the Internet from home, all target child respondents ages 9-17 who use the Internet from home)
Source: Banner 2; Data Tables 176 and 349

Grunwald Associates

Children's Influence On Household Spending

It seems intuitive that child product information retrieval would have an influence on household purchases. To verify this, we began by asking all parents in our survey the extent to which their children influence household purchases. By way of comparison with the numerous other studies that have covered this general territory, we found that:

- Forty-three percent (43%) of parents somewhat or strongly agreed that their child influences household purchases.
- Twenty percent (20%) of parents strongly agreed that their child has influence on these decisions.
- Mothers were significantly more likely to agree that their child has influence than fathers – 47% of mothers felt they were influenced, and 22% strongly agreed.
- Young parents (ages 18-29) were significantly more likely to agree that their child influences their purchases than older (ages 45 or older) parents. More than half (51%) of young parents felt their child has influence, and 27% strongly agreed.
- Low-income parents (50% vs.26% strongly agree) were more likely to see influence than middle class parents (41% vs.17%), and African-American parents (53% vs. 27% strongly agree) were more likely to see influence than white parents (41%/19%).

There were no strong trends involving age or gender of the child.

With this data in hand, we cross-referenced children's influence against (a) children's use of the Internet, and (b) children's use of the Internet to retrieve product information. As seen in Table 8-2 below, there was no significant correlation between the likelihood that a child influences household purchases and his/her Internet use alone. But parents whose children use the Internet to retrieve product information were both more likely to agree and less likely to disagree that their child has influence over household purchases. The result is an overall level of agreement that these children have influence that is significantly different from parents whose children do not retrieve product information.

Table 8-2. Target Child Influences Household on Purchases by Target Child's Internet Use
(Parents' Responses)

How much do you agree or disagree that (Target Child) influences your household purchasing of products and services?	*Total*	Target Child (ages 2-17) Uses Internet		Target Child (ages 2-17) Uses Internet to Retrieve Product Information	
		Yes	No	Yes	No
Strongly/Somewhat Agree	43%	42%	43%	43%	37%
Strongly Agree	20%	18%	21%	22%	16%
Somewhat Agree	23%	23%	23%	22%	20%
Neither Agree nor Disagree	17%	20%	15%	25%	19%
Somewhat Disagree	12%	12%	12%	12%	13%
Strongly Disagree	27%	26%	28%	20%	30%

(Parent respondents with children ages 2-17)
Source: Banner 6; Data Table 247
Grunwald Associates

The implications of these findings to marketers and site developers are two-fold. First, marketers and developers should make efforts to get more children to do product information searches and/or make it easier for children to find their product information, even if they've decided against attempting to make direct sales to kids. Secondly, marketers and developers who target products to families should try to make their online information appealing to children who, in a surprising number of cases, may be the information providers who influence family purchases.

School and Pre-School Purchase Influence

Finally, we asked several questions of parents designed to ascertain the influence of schools on household Internet use. We focused our questions mainly on the types of materials and services that schools would be most likely to influence, such as reference materials and software, as well as on the decision to purchase Internet access.

For all product types that we looked at, we found small but significant influences by schools on purchase decisions, ranging from 10-20% of parents who have purchased

the products as a result of some form of influence by the school. The most significant influence, not unexpectedly, was on reference purchases, with 19% of parents saying their child's school influenced them to buy a dictionary, encyclopedia, or other reference materials. Interesting patterns within this overall data included the following:

- Mothers (21%) were more likely to be influenced by the school to make reference purchases than fathers (15%).

- Parents without a computer in the home (24%) were more influenced in reference purchases than those with computers.

- Parents with four or more children (29%) were more influenced in reference purchases than parents with one child (16%).

Schools had much less influence on software decisions than on reference, with only 10% of parents reporting an influence. The only factor significantly enhancing the school's influence was, not surprisingly, the child's use of technology.

- Parents whose child uses a computer appeared slightly more likely to be influenced by schools to buy software.

- Parents whose child uses the Internet appeared slightly more likely to be influenced by schools to make software decisions.

- When it comes to Internet access, 17% of parents said their child's school had influenced them or another household member to use the Internet.

- As with software, the child's technology use significantly enhanced the school's influence over the home Internet access decision (18% of parents whose children use computers vs. 4% of those who don't; 23% of parents whose children use the Internet vs. 6% of those who don't).

But here there's clearly an age effect, as we found that parents of young children (3%) and young parents (11%; 89% uninfluenced) were significantly less likely to have been influenced by schools to come online.

This last result suggests that, at least for the well-served portions of the population, the direct school effect on the decision to come online may be waning. This does not mean, however, that schools may not continue to play a significant role in influencing which Internet services and sites are used in the home.

The implications of school influence for Internet marketers are two-fold. The current level of influence that exists is certainly large enough to be worth trying to exploit, particularly for online reference providers and for portals at all levels seeking to capture new customers or to cement allegiances. Schools can provide free authoritative marketing of a value proposition and authoritative training on how to leverage that proposition. In this respect, they are unique.

At the same time, the influence schools have on consumer purchasing decisions is probably not large enough, in most cases, to justify consumer sites' hiring large school

sales forces or undertaking other, typically expensive, endeavors to gain access to the school market. Instead, site marketers can try to form alliances with companies who have already established significant footprints in schools as a core part of their business, and/or develop relatively inexpensive, grass-roots/evangelist programs, in order to really gain the benefits of "free" school marketing. Low cost testimonial support and some marketing power can be obtained through positioning among education associations and educational opinion leaders.

8d. Technology Purchases

We asked parents with at least one child who uses a home computer, and their children, a few questions about specific software types they have purchased in the last year, and about plans for future technology purchases.

Current Software Purchasing Patterns

The results for educational software purchases break down as follows:

- Thirty percent (30%) of these parents purchased general educational software in the last 12 months.
- Twelve percent (12%) of parents purchased subject-specific skill building programs.
- Eight percent (8%) of parents purchased reference programs.
- Four percent (4%) purchased interactive books and learning adventures.
- Three percent (3%) purchased creativity programs.
- One percent (1%) purchased foreign language programs.
- One percent (1%) purchased test preparation programs.

The importance of this data to Internet marketers and developers is that it essentially provides a snapshot of at least a portion of likely future demand in children's online services. As bandwidth widens and Internet programming becomes increasingly sophisticated, the kinds of experiences that these software packages provide will be increasingly in demand online — and will likely be paid for, as they are today.

Future Software Purchasing Plans

Looking to the future, 19.6% of all parents anticipate buying children's software within the next 12 months. Parents' plans for software purchases continue to emphasize educational products, as shown in Table 8.3 below.

Table 8-3. Planned Software Purchases In the Next Twelve Months
(Percentages of Parents who Anticipate Purchasing Children's Software)

Software	All Children 2-17	Age of Target Children			
		2 - 5	6 - 8	9 - 12	13–17
General Educational Software	46%	47%	52%	48%	35%
Subject-specific Skill Building Programs	23%	29%	25%	17%	24%
Games	18%	12%	17%	22%	21%
Reference Programs	8%	6%	5%	7%	13%
Interactive Books and Learning	7%	13%	9%	5%	2%
Entertainment Programs	4%	2%	3%	6%	6%

(Parent respondents who anticipate purchasing children's software within the next 12 months)
Only software named by 4% or more parents are included in this table
Source: Banner 2; Data Table 228
Grunwald Associates

It's unclear, of course, whether parents will actually be able to maintain these good intentions in the face of demand by their children for other kinds of products and their inevitable budget constraints, but it indicates the receptivity parents may have to educational products.

Future Technology Purchases

Looking beyond software to the entire spectrum of potential home technology purchases within the next 12 months, additional patterns emerge, as seen in Table 8-4 below. Noteworthy findings include:

- More than one in ten — nearly one in five parents of teens — plan to get high speed Internet access, but to the extent that this represents the Internet equivalent of a computer upgrade, it lags far behind planned new computer purchases.

- Among households not already online, low-income households will lead the way in obtaining new Internet access within the next 12 months.

- As many parents will buy a new electronic video game system as obtain Internet access in the next 12 months.

- Nearly a third of all parents do not plan to make any technology purchases at all within the next 12 months.

Table 8-4. Anticipated Technology Purchases
(Parents' Responses)

	All Children (2-17)	Target Child's Age				Household Income		
		Age 2-5	Age 6-8	Age 9-12	Age 13-17	Less than $40,000	$40,000 to $74,999	$75,000 or more
Children's Software	43%	49%	56%	51%	28%	42%	52%	53%
Computer	32%	30%	26%	39%	31%	35%	32%	33%
Electronic Video Game System	20%	20%	22%	21%	17%	23%	20%	21%
Internet Access	19%	18%	25%	25%	13%	25%	18%	11%
High Speed Telephone or Cable Connection	13%	7%	11%	10%	18%	11%	16%	21%
None	31%	30%	30%	25%	37%	30%	26%	23%

(Parent respondents with children ages 2-17)
Source: Banners 1, 2; Data Table 225
Grunwald Associates

Among other things, the results seem to indicate that a substantial number of parents haven't yet seen the value proposition in Internet access based on what's online today. It's not just a matter of price, either, not if more people are willing to pay for a new computer than Internet access, and not if the most likely new entrants are low-income households.

8e. Online Premium Services

Where will new value and perceived value come from? As online services careen from revenue model to revenue model, there has been increased and periodic temptation to revisit what has been called the "original sin" of Internet business —charging subscriptions for access to content. Doubts are increasing about business models that rely on a potpourri of e-commerce and advertising alone. Nevertheless, many online research firms are on record as saying that premium services will never attract a significant number of users on the Internet.

Supporters of premium services, on the other hand, have predicted that services for children would be one of the first places that premium models would prove to have some traction. Our findings seem more supportive of premium services, though they also illustrate that long distance premium services still need to travel to gain widespread consumer acceptance.

We asked both parents and teens whether they were paying for any online premium services for their child (or themselves in the case of the children) today.
According to our findings, 6% of all parents whose children use the Internet at home and 13% of teens who use the Internet at home indicated that a premium service had been purchased for the child in the last 12 months.

The higher percentage of teens claiming paid subscriptions was not mirrored by the responses of parents of teens (only 5% of whom said they had paid for a premium service for their child), indicating either that the parent answering was not aware of a purchase made by the other parent, or that teens were not recalling with accuracy.

Next, we asked both parents and teens what kind of premium services they had paid for. Because only a small number of respondents are paying for these services today, our results here are tentative, but still worth noting:

- Sixty-eight percent (68%) of parents said the premium service they paid for was for research or help with school for their child.

- Thirty percent (30%) of parents said they had paid for a games service, and 7% said they had paid for an entertainment service for their child.

- Teens were more mixed in their responses — 37% said they or a parent had paid for a service that provided research or help with school, 28% said they had paid for an entertainment service, 15% said they or a parent had paid for a games service, and 20% refused to say.

Finally, we asked both parents and teens how much they (or their parents, in the case of teens) were paying per month for services of various kinds. Individually, the numbers are too small to report, but collectively, most of the service types were between $20-$22/month. The exception was online games services as reported by parents, who said they were paying an average of $40/month for this service.

The bottom line, in our opinion, is that at least in the children's/educational space, premium services could be more significant than most pundits have predicted for the consumer population overall. However, the relatively small numbers indicate that premium services have a long way to go to achieve widespread acceptance.

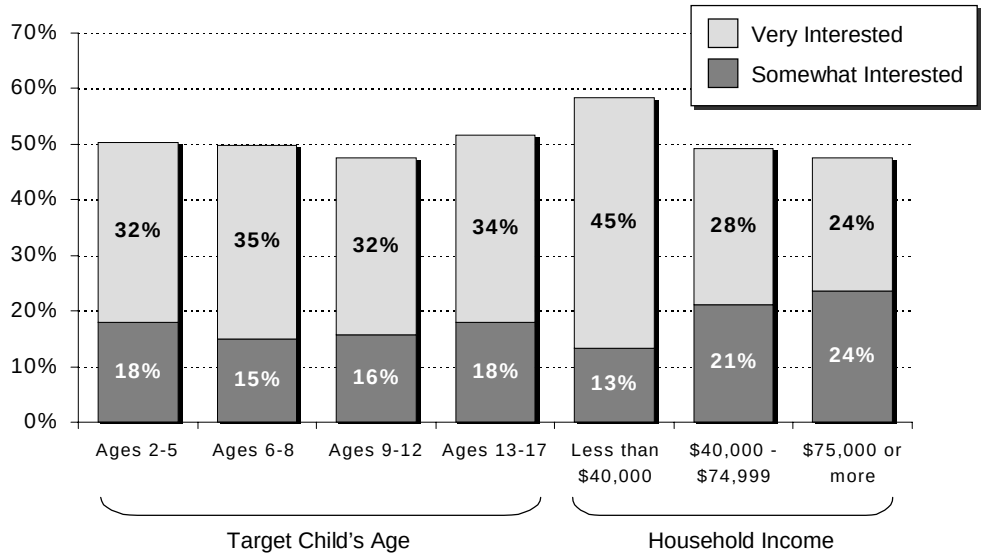
8f. A Premium Services Case Study: Online Tutoring

To conclude this chapter, we'd like to take a closer look at one candidate for the educational premium service model, online tutoring.

Interest In Online Tutoring

First of all, we asked both parents and teens how interested they were in online tutoring services. Overall, both groups indicated relatively high levels of interest, and there were numerous pockets of particularly high interest. Figure 8-5 shows the high general level of interest expressed by parents, as well as some of the demographic differences in interest. Overall, 50% of parents expressed interest, and 54% of teens did as well; 33% of parents said they were "very interested," and 30% of teens concurred.

Figure 8-5. Interest in Online Tutoring
by Age of Child and Income
(Parents' Responses)



(Parent respondents with children ages 2-17)
Source: Banners 1, 2; Data Table 223

Grunwald Associates

In addition to what's shown in Figure 8-5, other demographic trends of potential interest included:

- Non-professional parents showed significantly stronger interest (35% very interested) than professionals did, less-educated parents showed more interest (38% very interested) than more-educated parents, parents from families with 4 or more children (59% interested, 45% very interested) showed more interest than families with one child.

- Significantly more African-American teens (82%) indicated interest than whites (47%), with 61% indicating they were very interested (vs. 22% of whites). This was echoed by African-American parents, 67% of whom expressed interest, with 58% very interested.

In short, there appears to be strong interest in tutoring, though it's worth noting that many of the families that express the most interest are least likely to be able to afford it. In any event, the percentage of parents and children in high-income demographic groups that have expressed interest is still substantial.

How Real Is The Need?

We looked at a few gauges of how much online tutoring might actually be needed — how much homework children have today and how much they use tutoring services of

any kind (offline or on). Of course, even children who don't have much homework might need a tutoring service if they are performing poorly on in-class work such as exams, but homework is a good indicator of the frequency with which children face educational challenges in homes where parents may not be available to help.

According to parents of 2-8 year olds, their children spend about 1.2 hours per night doing homework, a surprisingly high number for children this young. Children ages 9-17 say they spend an average of 1.6 hours per night doing homework.

To what extent are parents demonstrating that they see tutoring as a potential way to address their children's needs in this area? How much are they using the tutoring options that exist, offline and on? Here's what we learned:

- Twenty-two percent (22%) of parents say they have had their children tutored in the last year.

- African-American and non-white, non-African-American ethnicities are the most likely to say they have had their child tutored (46% of African-American parents and 34% of other non-white ethnicities report tutoring use).

- Parents of 6-8 year olds (32%) are the most likely to report having used tutoring, significantly more than parents of 9-12 year olds (19%). Twenty-two percent (22%) of parents of teens report use of tutoring in the past year.

- Parents report tutoring services are used an average of 4.5 hours per week.

These results indicate that parents do believe that tutoring is a potential solution to their children's educational needs, but far fewer parents are availing themselves of the existing options than have expressed a desire to use online tutoring programs. This could indicate that there's not just a need, but an unmet need in today's tutoring marketplace.

Is There A Premium Market?

We asked parents who were using tutoring services today if they were paying for the services their child was using, and here's what we found:

- Sixty-nine percent (69%) of parents said they were paying nothing for their children's tutoring services.

- Significantly higher percentages of low-income families (80%) indicated they were not paying anything.

- High percentages of African-American families (80%) indicated they were not paying as well, though this was not significantly different from white parents.

On the other hand, we also asked the parents who were paying for tutoring services how much they were paying, and these results suggest that more of an opportunity exists than first appears:

- Parents who pay for tutoring pay an average of $52 a week for tutoring services.

- Low-income parents who pay for tutoring pay an average of $102 a week.

These results are mirrored in the responses we received to questions we asked about other types of educational services. For example:

- Seventy-five percent (75%) of parents pay nothing for test preparation services or materials, but those who do pay spent an average of $106 in the last year.

- Fifty-eight percent (58%) of parents pay nothing for reference materials, but those who do pay spent an average of $140 in the last year.

Of course, online tutoring entrepreneurs would be mistaken to think that they could charge as much for an online tutoring service as for an offline experience. Indeed, if the parents who pay for tutoring today represent the bulk of all those who would be willing to pay, price differentiation may be required to attract them. But the amounts being paid suggest that a disconnect exists between those who are willing to pay and those who are not, rather than between particular price points. For people unwilling to pay, a tutoring service that costs $1 per year may be too much. For those who are willing to pay, $50 per week is apparently a reasonable price to pay. On the Internet, where paying or not paying for services rises almost to the level of a religious issue, this divide is likely to be particularly acute.

This, in turn, leads us to suggest that a new business model may be appropriate for premium children's services such as online tutoring. In today's market, most of these services are charging something between $9.95 and $29.95 per month in hopes of generating large numbers of paying customers. In effect, they are averaging the price that non-payers and payers are willing to pay in order to arrive at their offering price. Based on the large number of parents and children who are interested in online tutoring services – many more than are actually using them – they don't appear to be hitting their mark. We suspect that, instead, they are failing to attract any of the parents who are unwilling to pay, while not getting enough money out of the parents who *are* willing to pay to support their businesses and allow them to deliver the quality of service that would meet the needs of their market. The results of our study indicate that a tutoring business can't average the price that payers and non-payers would pay to arrive at a price point that it hopes will drive market share.

In a venture and stock market where share is so highly valued, it would be a mistake to ignore the 70% of parents who use tutoring services but are so far not paying for them. Ignoring this population means leaving money on the table, including advertising and sponsorship revenues, e-commerce opportunities, and repeated opportunities to convert this population into paying customers. This suggests that the optimal pricing strategy for an online tutoring service (and other premium reference services) is to provide a critical mass of free tutoring-related content that has low marginal costs, and charge substantial premiums – higher than those being charged by most sites today – for services with high marginal costs, such as live personal assistance.

Tutoring and Other Services

Our survey data also points to interesting connections between tutoring use, the willingness to pay for other educational services, and the interest in new educational services. As seen in Table 8-5 below, parents who are paying for tutoring services today

appear to be better candidates for paid reference services, paid test preparation services, and school-to-home services such as viewing schoolwork online. The only service type that they appear to express less interest in than other groups is, not surprisingly, online tutoring. More noteworthy to us is that, despite the fact that they already have and use a paid tutoring service of some kind, more than four in ten parents who currently pay for tutoring are apparently willing to add or switch to an online tutoring solution, further substantiating the market potential of online tutoring.

Table 8-5. The Connection Between Tutoring Use and Use/Interest in Other Educational Services

	Parents' Responses for Children/Teens (Ages 9-17)		
	Receives Paid Tutoring	Receives Free Tutoring	Does Not Receive Tutoring
Purchased online games or research or help for school or preschool	12%	2%	6%
Purchased reference materials	60%	39%	36%
Purchased test prep services or materials	34%	23%	21%
Very/Somewhat interested in viewing schoolwork online	70%	65%	54%
Very/Somewhat interested in online tutoring	42%	67%	47%

(Parent respondents with children ages 9-17 who use the Internet at home, parent respondents with children ages 9-17)
Source: Banner 4; Data Tables 182, 212, 213, 221, 223
Grunwald Associates

Parents whose children receive free tutoring also appear to be better candidates for most educational services than those parents whose children do not receive any tutoring at all, though the differences are not as great. Not surprisingly, parents whose children receive free tutoring appear particularly less likely to have paid for premium online services and are particularly interested in online tutoring services, which they may hope/expect to get free. The larger take-away we think these results suggest is that premium service bundles or alliances between premium service providers of different types may be worth exploring, since parents who are willing to pay for one are apparently likely to be relatively willing to pay for many.

Conclusion

Multiple strategies are suggested by each set of results we've discussed. Overall, however, we feel that the following sets of findings and/or potential directions stand out:

- Substantial e-commerce revenue opportunities are available for marketers who can bring the conversion rate of parent product searches to parent purchases in line with the rest of the consumer market.

- Marketers who want to involve children in purchasing decisions should focus on influence, not direct sales-based strategies, and help more children become better seekers of product information for their families.

- Significant opportunities to gain consumer customers exist for companies that can successfully piggyback on established school sales programs and/or develop relatively inexpensive grassroots school marketing campaigns.

- Site developers need to increase the value proposition they're offering; it lags behind the perceived value of offline educational and children's technologies substantially, and therefore will become a competitive issue as bandwidth and Internet programming continue to advance.

- Content providers probably should not rely on offering a diluted service entirely for free, or try to average pricing between those currently willing and unwilling to pay. Instead, a content provider should seriously consider developing free-pay services in which a critical mass of content is available free as well as premium services that have a substantial price.

C H A P T E R N I N E

Family Attitudes/Roles and Media Trade-offs

Chapter Outline

9a. The Effect of the Internet on Children's Offline Activities
9b. Parental Attitudes About the Internet and Other Media
9c. The Role of the Parent in Children's Internet Use

Introduction

Overall, parents are positive about the benefits of the Internet to their children. Despite the prevalent stereotype that Internet use may adversely affect the social lives of online children, our findings suggest that this is not the case:

- Not only is Internet use not socially isolating, but both children and parents report that since children have come online they have engaged in more social activities
- Children who use the Internet are more likely to decrease the amount of time they spend watching television than children who don't use the Internet.
- Demographics, particularly the age of the child, have a significant effect on the attitudes of parents toward the Internet.
- Parents see themselves more as guides to their children's Internet use than as watchdogs.

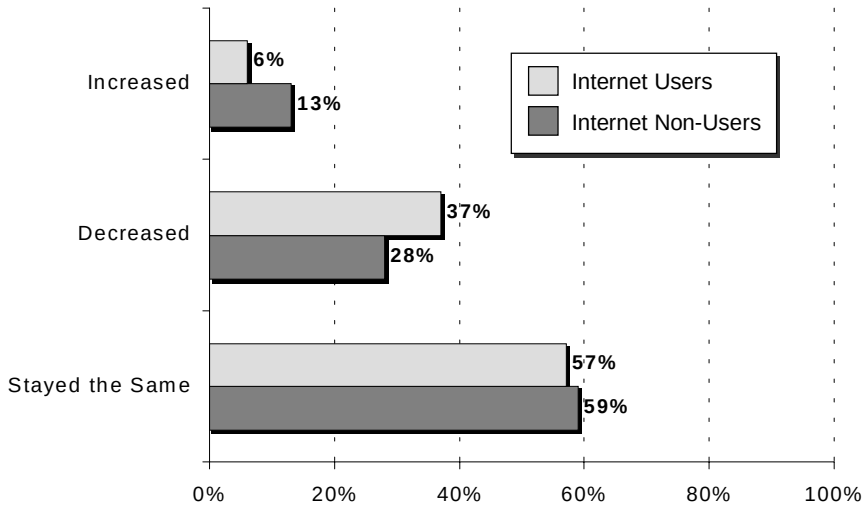
9a. The Effect of the Internet on Children's Offline Activities

The Internet has entered children's lives at a time when those lives are becoming increasingly crowded and complicated. It seems logical that in competing for time with other activities, Internet use may have a negative impact on at least some of the ways children have traditionally spent their time — but which ones? Based on the results of our survey, the primary activity superceded by Internet use is television viewing. In Figure 9-1, we can see that television viewing decreased among Internet-using children at a higher rate than among non-users (37% vs. 28%), according to parents.

Non-Internet users were also more likely to experience an increase in their TV viewing than children who use the Internet (13% vs. 6%).

When we asked teenagers about their television viewing *since* using the Internet at home, over half (53%) said it had decreased. Only 7% said it had increased, with 41% reporting that their TV viewing had remained the same. In Table 9-1, we see that consistently across all age groups, television viewing decreased considerably more than it increased among Internet users.

Figure 9-1. Change in Children's Television Watching During the Past 12 Months
(Parents' Answers)



(Parent respondents with children ages 2-17 who watch television at home)
Source: Banner 2; Data Table 97

Grunwald Associates

These findings confirm a trend spotted in our 1995 *American Learning Household Survey*, which reported that children in online households watched an hour less of television per week than children in households without computers. Because many factors could be affecting the data, our results cannot suggest causation, i.e., children watch less television because they use the Internet. One factor, for instance, is that overall, teenagers tend to watch less television as they get older, regardless of Internet use. However, as we will see below, according to parents, their child's television viewing is the *only* activity that decreases with the onset of Internet use.

Table 9-1. Change in Children's TV Watching Since Started Using the Internet From Home

	Parents' Responses for Children/Teens					Teens' Responses
	All Children (2 – 17)	2 – 5	6 – 8	9 – 12	13 – 17	13 – 17
Increased	5%	9%	6%	7%	3%	7%
Decreased	37%	37%	29%	30%	42%	53%
Remained the Same	58%	54%	65%	62%	55%	41%

(Parent respondents with children ages 2-17 who use the Internet at home, all target children ages 13 - 17 who use the Internet at home)
Source: Banners 2, 3; Data Tables 133, 308
Grunwald Associates

Much has been made of the isolating effect of the Internet. Some studies have suggested that people who use the Internet do not spend enough time engaging in other social behaviors. This is not what our survey found. In fact, respondents have told us that children are *more* likely to spend time with such activities as reading, spending time with family and friends, and making arts and crafts since using the Internet at home (Table 9-2). In fact, as mentioned above, the *only* activity parents report has declined with the onset of home Internet use is television viewing, which they say has decreased since their child went online at home.

Table 9-2. Change in Child's Activities Since Using The Internet From Home

Activities	Parents' Responses		
	Increased	Remained Same	Decreased
Listening to Music (including radio)	32%	62%	6%
Reading Books	30%	56%	14%
Spending Time with Friends/Family	16%	78%	6%
Watching Television/Videos	5%	58%	37%
Reading Newspapers/Magazines*	22%	65%	10%
Using the Telephone**	32%	53%	13%
Making Arts and Crafts***	31%	58%	6%
Playing Outside***	14%	74%	11%

(All parent respondents with a target child who uses the Internet from home)
*Asked about children ages 4-17.
**Asked about children ages 5-17.
***Asked about children ages 2-9.
Source: Banner 1; Data Tables 133 – 140.
Grunwald Associates

Teenagers report a very similar pattern of changes in activity, with the exception that more teens note that, along with their television viewing, their book reading has decreased rather than increased since using the Internet (Table 9-3). Before attributing this decrease to Internet use, however, it should be noted that teenagers, as a rule, read less and, as noted above, watch less TV, than younger children, so the extent to which the decrease is due to age, Internet-use, or some other combination of factors is uncertain.

What is certain is that few in family households are reporting the Internet as an isolating force in children's lives. For more discussion on this topic, see *Safe And Smart*, the National School Boards Foundation report at www.nsbf.org.

Table 9-3. Change in Teens' Activities Since They Started Using The Internet From Home (Parents' and Teens' Response Comparison)

Activities	Increased		Decreased	
	Parents' Responses	Teens' Responses	Parents' Responses	Teens' Responses
Listening to Music (including radio)	36%	41%	7%	9%
Reading Books	14%	18%	17%	26%
Spending Time with Friends/Family	16%	30%	7%	5%
Watching Television/Videos	3%	7%	42%	53%
Reading Newspapers/ Magazines	20%	20%	13%	19%
Using the Telephone	34%	27%	16%	23%

(Parent respondents with a target child (ages 13-17) who uses the Internet from home, all teen respondents who use the Internet from home)
Source: Banner 2; Data Tables 133 – 138 and 308 – 313
Grunwald Associates

9b. Parental Attitudes About the Internet and Other Media

In the course of the survey, we also asked parents a number of different questions to probe their attitudes toward the Internet and its role in their child's life today — both alone and in comparison with other media — and their hopes for its future role. What emerged was a generally positive, but complex, picture of the medium.

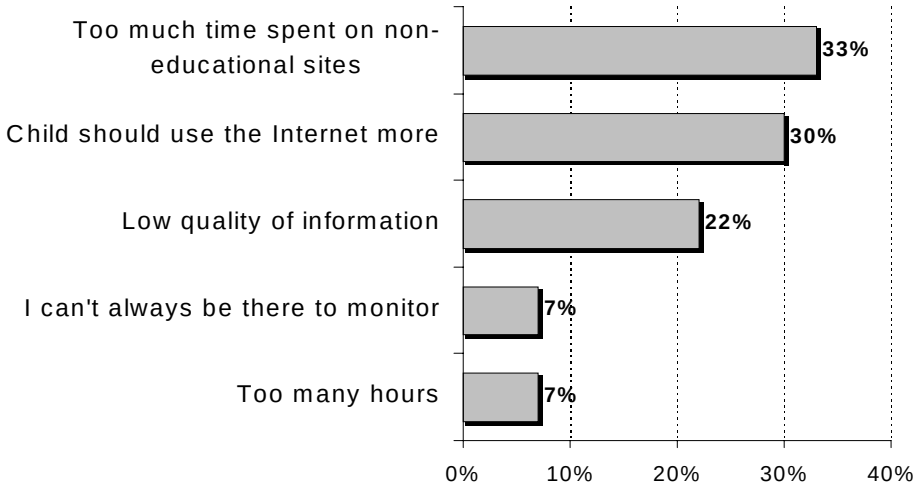
Satisfaction With Internet Use

Fairly early in the survey, we asked parents whose children use the Internet how satisfied they were with their child's use. More than three quarters of all such parents (77%) said they were satisfied with their children's Internet use, and nearly half (49.8%) said they were very satisfied. The educational quality of the medium was the leading

reason for this satisfaction. More than half of those satisfied (51%) cited the perception that the medium is "educational" as their reason for satisfaction, dwarfing by more than 4:1 the next most commonly cited reason, which was itself, at least quasi-educational: that the medium encourages children to "explore new things" (13%). There were no significant socioeconomic differences in either the level of satisfaction or reasons for it.

Among dissatisfied parents, some patterns emerged. Parents of 6-8 year olds were significantly less satisfied with their children's Internet use than other age groups. Only 64% of parents of 6-8 year olds expressed satisfaction, versus 84% of parents of 2-5 year olds, 81% of 9-12 year olds, and 77% of 13-17 year olds. As reflected in Figure 9-2, the primary reasons for dissatisfaction among all groups were "time spent on non-educational sites" (33% of dissatisfied parents), "low quality information" (22%) and "insufficient Internet use" [by their children] (30%). Issues traditionally pushed by the media such as online safety (e.g. monitoring sexual or violent content) and excessive use were far back on the list of concerns, garnering less than 10% support each.

Figure 9-2. Parental Dissatisfaction with Target Child's Use of the Internet
(Top 5 Reasons)



(Parent respondents with children ages 2-17 who are not satisfied with target child's Internet use)
Source: Banner 1; Data Table 128

Grunwald Associates

It's important to remember that all of the information about reasons for dissatisfaction applies to only a small minority of parents. That said, parents' responses about their dissatisfaction reflect clear opportunities for site providers and may point to competitive opportunities that will also speak to parents who proclaim themselves to be satisfied.

Role of the Internet In Children's Lives—The Future

The general level of satisfaction parents profess with the Internet translates into a fairly optimistic view about the role they expect the medium to play in their children's lives. We asked parents how important they thought each of three media – computers, television, and the Internet – will be to their child's education and development.

As we can see in Table 9-4, the computer scored the highest marks, with 82% of parents declaring it very or somewhat valuable. Over half (55%) of parents see the Internet as valuable to their child's education, with an equal percentage (54%) of parents saying that television was "not very" or "not at all" valuable to their children's education or development.

Table 9-4. Parents' Perceptions of the Value of Different Media to Their Child's Education

Level of Value	Media		
	Television	Computer	Internet
Very or Somewhat Valuable	22%	82%	55%
Neither Valuable or Not Valuable	23%	12%	22%
Not Very/Not at all Valuable	54%	6%	18%

(Parent respondents)
Source: Banner 1; Data Tables 251 – 253
Grunwald Associates

If we look at these numbers through a demographic prism, we see some predictable patterns emerge. Parents of 2-5 year old boys, for instance, were the most likely to think the television has value to their child; this is the "Sesame Street" audience, a program that actually plays an instructional role in children's lives. Contrast this with the perceptions of parents of older children (ages 9-17), both boys and girls, who were significantly more likely to say that television has no value to their children's education or development. However, 59% of parents of teens consider the Internet to be valuable, and 32% consider it to be "very valuable." Considering what most older children watch on TV, their parents' attitudes are not surprising.

Role of the Internet In Children's Lives —The Here And Now

In addition to asking parents about how they see the Internet playing a role in their children's future, we also asked parents to agree or disagree with statements that probed the role that computers, the Internet, and other media play in the lives of their children today. We asked these questions of all parents, including parents who don't have a computer or the Internet in their household.

What we learned seems almost at odds with what parents had told us previously about how they saw the computer and the Internet as important learning tools for children. Their responses, shown in Table 9-5, reveal an ambivalence that's important to consider.

About half the parents (49%) told us that they think the computer, like the television, is something to keep children busy and occupied, and almost a third (30%) agreed that the

computer is more a source of entertainment than education (only 39% disagreed with this statement). More than four in ten (44%) believe that "the Internet runs the risk of becoming just another commercial outlet," with only 30% disagreeing. Finally, only a third (32%) think it's important for their child to be on the Internet — almost half (48%) say it's not important. (This contrasts sharply with the 70%-77% of 9-17 year old children who are not on the Internet at home but told us they want to be.)

These responses seem to reveal skepticism about the computer and Internet, which, we believe, reflects parents' overall skepticism about the importance of media in general. Though parents see the Internet as valuable, they do not see it as a panacea. When we asked parents to rate the Internet as a positive influence in their child's lives today, we found that the medium trailed friends (60% of parents cited friends as a positive influence on their child), movies (39% positive), CD-ROMs and computer software (38% positive), and even popular music (38%). With only 26% of parents citing the Internet as a positive influence, it led only videogames (18%) and Gameboys (14%) as a positive influence in children's lives. However, the Internet was also less likely to be seen as a negative influence than any factor other than friends and computer software, and some key demographic groups, such as mothers, more educated parents, older parents, and high-income parents, held a relatively high opinion of the Internet's influence on their child.

Table 9-5. Parents' Agreement/Disagreement With Statements About Computers and the Internet

Statement	Strongly or Somewhat Agree	Strongly or Somewhat Disagree
The computer, like the TV, is something that helps keep the kids busy and occupied.	49%	32%
The computer/Internet is more of a source of entertainment than education.	30%	39%
It is important for a child to be on the Internet.	32%	48%
The Internet runs the risk of becoming just another commercial outlet.	44%	30%

(Parent respondents)
Source: Banner 2, Data Tables 243 – 246
Grunwald Associates

In addition, if we look at the data broken out by age as well as socioeconomic factors, we discover some factors consistent with other survey findings that would influence parents' agreement or disagreement with these statements. For instance, single, non-college-educated parents, and parents of boys ages 2-5 or 9-17 were most likely to strongly agree that the computer keeps their children busy and occupied. Parents of 2-5 year old boys were likewise significantly more likely to think of the computer as a source of entertainment than any other parents. Both of these results are in keeping with what

we know about the amount of time teenage boys spend online (*see* Chapter 4), and about young boys' frequent use of the computer and Internet for entertainment (*see* Chapter 5).

Parents of teenagers were most likely to think it is important for their child to be on the Internet (as well as to see the Internet as a positive influence on their child's life), whereas parents of younger children were most likely to disagree (and, by contrast, to see television and movies as particularly positive). This, again, is consistent with what the survey has told us. First, teenagers use the Internet significantly more than young children, and secondly, teenagers are big users of the Internet for education both at home and in school. It would make sense, therefore, that parents of teenagers would more readily see the value of the Internet for their child. Finally, and not surprisingly, parents of children who use the Internet were most likely to think it's important for their child to be on the Internet, while parents of non-users were most likely disagree.

These attitudinal findings are important because they remind us not to view the "family household market" as a monolith — behind the enthusiasm and the skepticism of the general numbers are subtleties that Internet marketers must acknowledge in order to accurately target their online products and services.

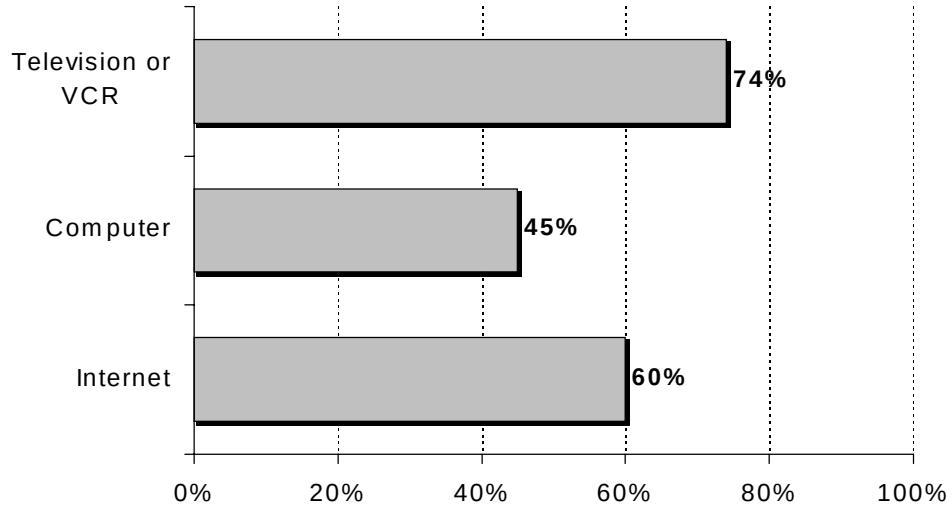
9c. The Role of the Parent in Children's Internet Use

Consistent with the balanced approach that children seem to have in using the Internet, parents seem to feel trusting toward their children's online use. This is not to suggest that parents do not restrict their child's use of the Internet. Six in ten (60%) parents with children who use the Internet at home restrict access in some way, with limitations on use of specific sites (37%) and limits on time spent on the Internet (25%) the leading restrictions. (Parents of boys are also relatively likely to impose "time of day" restrictions.) Parents of 9-12 year olds (83%) are significantly more likely to impose restrictions than other groups, and in general, older children face more restrictions than younger ones – which may suggest that new parents are increasingly comfortable with the medium. (Although this could also be simply the result of the fact that young children use it less, and much less often on their own.)

More generally, parents are more likely to restrict television use than parents of online kids restrict Internet use (Figure 9-3), and very few parents are either directly monitoring their child's use (13%) as a form of restriction or restricting access to chat rooms and instant messages (12%). The latter finding appears to demonstrate a significant decline in restriction compared to findings in years past by publications like *Family PC*, and is fairly remarkable in light of the anti-chat media discussion parents have seen over the years.

Parents' approaches to restricting Internet use are influenced by their concerns about the Internet. The top two concerns expressed are the possibility of exposure to pornography (46%) and meeting undesirable adults online (29%), with violent/hate content (20%) a strong third. Parents of girls are particularly concerned about their child meeting undesirables online, while parents of boys are particularly concerned about

Figure 9-3. Parents' Restrictions on Children's Use of Television, Computer and Internet



Source: Banner 1; Data Tables 103, 115, 179

Grunwald Associates

exposure to violent/hate content. Very few parents are worried that the Internet "isolates [my] child from the real world" (1.4%), "inhibits hands-on learning" (1.0%), or "makes kids stay inside instead of encouraging them to go out" (0.6%).

Perhaps most tellingly, most parents surveyed chose the role of "guide to the good content" rather than a "watchdog," when presented with two alternative statements (Table 9-6) about their appropriate role with respect to the Internet. To help them in their role as guide, 63% of parents say they would be very or somewhat interested in using a "trusted guide to what's useful and safe on the Internet," while 25% of parents of kids online from home say they use AOL Parental Controls, and another 10% report using filtering software. More than eight in ten parents (82%) say their child controls the keyboard any time they are using the computer together.

There is some divergence in the extent to which parents and teens think parents are present during children's Internet use. While 65% of parents of 13-17 year olds think their child mainly uses the Internet alone, 77% of children ages 13-17 say they use the medium alone.

Table 9-6. Most Important Role of a Parent In Regard to the Internet

Statements	Percent Agree
"In regard to the Internet, the most important role of a parent is as a guide to the good content."	67%
"In regard to the Internet, the most important role of a parent is as a watchdog."	24%
Neither	4%
Don't Know/Refused	5%

(Parent respondents)
Source: Banner 1; Data Table 250
Grunwald Associates

But in the role of guide, at least half or more of parents feel they are "very knowledgeable" about the sites their children are visiting online (Table 9-7)**,** with more than three-quarters claiming to be either very or somewhat knowledgeable, and for the most part, children agree. Parents of older children claim less awareness than parents of younger children, but only among teens and parents of teens is there some divergence (38% of teens vs. 47% of parents said parents were "very knowledgeable"), and as gaps go, this one is not large, within the statistical margin of error. Overall, even teens say, in large numbers, that their parents have at least a working knowledge of the sites they are visiting: 68% say their parents are "somewhat" knowledgeable or "very" knowledgeable about their online use.

Table 9-7. Parental Knowledge of Web Sites Children Visit Online at Home

	Parents' Responses					Children's Responses	
	All Target Children	Age of Target Children				Age of Target Children	
		2 – 5	6 – 8	9 – 12	13 – 17	9 – 12	13 – 17
Very Knowledgeable	53%	74%	68%	53%	47%	54%	38%
Somewhat Knowledgeable	24%	20%	9%	20%	29%	12%	30%
Neither Knowledgeable nor Not Knowledgeable	13%	6%	13%	14%	13%	20%	16%
Not Very Knowledgeable	7%	--	5%	9%	7%	9%	10%
Not At All Knowledgeable	3%	--	4%	4%	3%	1%	5%
Don't Know/Refused	1%	--	3%	1%	*	4%	--

(Parent respondents with a target child who uses the Internet from home, all target child respondents (ages 9-17) who use the Internet from home)
Source: Banner 2; Data Tables 162 and 333
Grunwald Associates

Conclusion

Parental attitudes toward the Internet carry several important implications for Internet marketers:

- An Internet solution marketed as a panacea will not sell. Parents are too skeptical about the importance of media in general to swing at such a pitch.

- One marketing message does not fit all. Although parents as a group believe in the educational uses of the Internet, messages to market segments must be more individualized. It might be better to sell the educational advantages of an Internet product to parents of older children and stress the entertaining, diversionary, engaging benefits of a product geared toward young children.

- Children who use the Internet at home watch less television, and parents (except those of the very young) believe the Internet has more value than television. Marketing messages that reinforce those habits and perceptions would be readily received.

- Messages aimed at parents' fears may not sell Internet products or services. Most parents do not seem to be afraid of their children's Internet use. They more often have common sense concerns that can be addressed by marketers without the fear factor.

C H A P T E R T E N

Children Who Don't Use the Internet

Chapter Outline

10a. Reasons To Be Offline
10b. Desires And Motivations To Be Online
10c. The Offline Who Expect To Be Online

Introduction

Getting offline children to use the Internet is a complex undertaking, because children are usually not self-governing. This chapter may help Internet companies better understand how to attract this group. Some key findings include:

- Bringing offline children onto the Internet will require a variety of messages targeted at different demographic clusters and online histories.
- Time constraints are the most commonly reported reason online children don't use the Internet more, and also the most common explanation for a decline in Internet usage.
- Children's education is the dominant motivation for offline families who plan to come online within the next 12 months.
- Substantial proportions of the offline parent and child populations believe they will be online within the next 12 months, regardless of demographic.

10a. Reasons To Be Offline

There are at least two distinct populations we are interested in — children who have never been online and children who had been online, but now are not. We also wanted to know about children whose time online is decreasing, and why all children are not using the medium more.

The Never Online

We asked both parents of children who are offline and offline children themselves why they weren't using the Internet. The results are shown in Table 10-1 below. In general, parents of children ages 2-8 responded that their child was too young for Internet use, while parents of children ages 9-17 were most likely to say that their child lacked easy computer access. Children ages 9-17 were most likely to cite computer access as the most common problem, though less strongly than parents, particularly in the case of 9-12 year olds.

Table 10-1. Reasons Why Children Are Not Online

	Parents' Responses					Children's/Teens' Responses	
	All Target Children	Age of Target Child				Age of Target Child	
		2 – 5	6 – 8	9 – 12	13 – 17	9 – 12	13 – 17
Child too young	35%	61%	31%	7%	1%	4%	2%
No easy computer access	28%	22%	27%	39%	38%	14%	32%
Parents are not online	13%	8%	18%	17%	15%	10%	13%
Parents forbade it	9%	6%	11%	16%	7%	12%	--
Danger/Parent's safety concerns	4%	1%	7%	6%	3%	1%	2%

(Parent respondents with a target child not using the Internet and children (ages 9-17) who are not using the Internet)
Source: Banner 2: Data Tables, 198, 368
Grunwald Associates

Few parents or children cited danger or safety concerns, although about one in six parents of 9-12 year olds and the second largest number of 9-12 year old children said they were not online because their "parents forbade it." The second most frequently cited response from children ages 9-17 was "not enough time," (12%), with nearly one in five offline teens (19%) mentioning it. "No need for information" also made the children's top five responses (at 7% overall, and 10% of teens).

As children grow older, their reasons for not being online — and their parents'—become increasingly diffuse: more than half of teen reasons and nearly half of those of their parents, for example, don't fall in the top five reasons for being offline, whereas all but 10% of the answers of parents of 2-5 year olds fit the same five categories.

Demographically, there are a number of interesting splits between groups regarding reasons for being offline.

- Parents of higher socioeconomic status were significantly more likely than those of lower socioeconomic status to say their child was "too young" to use the Internet. Forty-seven percent (47%) of well-educated parents (vs. 26% of less-educated), 39% of respondents in two-parent households (vs. 25% of single

parents), 40% of professionals (vs. 29% of non-professionals), and 44% of high-income parents (vs. 27% of low-income) shared this perception.

- Parents of lower socioeconomic status were, not surprisingly, much more likely to cite "no easily accessible computer." Thirty-seven percent (37%) of less-educated parents (vs. 15% of well-educated parents), 36% of single parents (vs. 22% of two-parent households), and 34% of low-income parents (vs. 15% of high-income parents) made this claim.

- Parents of girls appeared more likely to say that their child was "too young" (40% of parents of girls vs. 31% of parents of boys), while parents of boys were significantly more likely to say that the problem was the lack of an accessible computer (33%-24%).

- African-American parents (along with parents of 6-8 year olds) were the only demographic to be significantly more likely than peers to keep their children offline because of danger/safety concerns. Eleven percent (11%) of African-American parents did so, versus only 3% of white parents.

The bottom line, assuming parents know and are telling us why their children aren't online, is that Internet marketers are going to have to develop programs to tackle different offline rationales for different age groups and demographics. For example, it might be useful to design sites and marketing programs aimed at convincing younger parents and those of higher socioeconomic status that the service can deliver an age-appropriate environment for their children.

The Once Online

As reported by their parents, a small percentage of children who are currently offline (8%) were once online and have since moved offline. [Table 196] Offline 9-12 year olds and teens (16% and 22% respectively) were more likely than other children to have experimented with Internet use before resuming their offline state. We asked these parents and the children themselves why this happened and found that though the number of responses was small, those responses illustrate trends worth discussing (Table 10-3).

According to parents, the primary reason for children moving offline was that the child got too far ahead of the rest of the family. "Parents not online," which was only the third most cited reason for children never having been online, is the top reason children quit, according to 26% of parents, followed by computer access problems (22%). But according to 9-17 year olds, the top reasons they went offline were, first, the lack of an easily accessible computer (21%) and second, they had no need for the information (14% overall, and nearly one in five – 19% – of teens).

Table 10-2. Reasons For Leaving The Internet

Why did target child stop using the Internet?	Parents' Responses			Children's/Teens' Responses	
	All Target Children	Age of Target Child		Age of Target Child	
		9 – 12	13 – 17	9 – 12	13 – 17
Parents are not online	26%	45%	15%	3%	9%
No easy computer access	22%	11%	27%	14%	30%
No easy Internet access	12%	13%	11%	11%	13%
Parents forbade it	10%	6%	13%	19%	2%
No longer offered at school	8%	7%	11%	--	--
Danger/Parent's safety concerns	8%	3%	14%	--	3%
Not enough time	6%	8%	5%	8%	--

Grunwald Associates

Other interesting findings include:

- Like those children who had never been online, a large percentage of these 9-12 year olds (though not their parents) said they had stopped going online because their parent forbade use of the medium.

- Twice as many parents here cited safety than the parents whose children had never used the medium.

- Relatively large percentages of 9-17 year olds cited boredom (11%) as the reason they quit. And not surprisingly, lack of "easy" Internet access (12% of both parents and children) was more of a factor with the "quitters" than the "never-beens," most of whom probably don't have access at all.

- Many more parents of girls (43%) than boys (11%) cited "parents not online" as the reason their child stopped using the Internet – it's not clear whether this was the child's decision, or whether parents of girls are less willing to let their children roam the Internet without knowing what they might be up to.

Decreased Usage

In addition to children who've never been online and children who've left, we also looked at children whose usage has decreased in the last year. According to parents, they represent about 10% of the population of online children; 15% of online teens say they have used the medium less in the last year.

According to both parents (49%) and children (50%), the number one reason —by far — for decreased Internet use is an increase in offline activities. The next most common reason, trailing by a wide margin but common to both groups, is boredom, cited by 13% of parents and 11% of teens. Eleven percent (11%) of teens also say they don't think "there is any good stuff on the Internet." No other reasons garner more than 10% support from either group.

At An Impasse
Finally, we looked at all children ages 9-17 who use the Internet and asked them why they aren't using it more. Their top reason, by far, was very similar to the answer given by those whose Internet use has decreased: 54% of these children (and 60% of teens) said "not enough time" is the chief barrier to increased use.

The next three most frequent answers — no easily accessible computer (12%), parents not online (7%), and parents forbade it (4%) – are all similar to rationales given by users who are offline. "No need for information" (3%), a common theme throughout, rounded out the top five. Apart from a relatively high percentage of low-income children (12%) citing "parents not online" as a reason not to go online more, there were no statistically significant demographic differences between groups.

The fact that a substantial number of children cite "not enough time" as a reason both for "not using the Internet more" and for declining Internet use should be a little disconcerting to site developers. The importance of the "not enough time" explanation implies that site developers should respect children's time as they would other consumer populations in terms of design, download time, and other time-dependent variables. Site developers must also be prepared to compete fiercely for mind-share with other sites in the space.

10b. Desires And Motivations To Be Online

Having examined the reasons why children are offline today, the next questions to address are:

- Do they want to be online?
- Are there motivations and offerings that would help put them on the Internet?

How Badly Do They Want to be Online?
To address the first question, we asked children ages 9-17 the extent to which they agreed with the following statements:

- "I want to be online from school."
- "I want to be online from home."

Majorities of offline children agreed with both statements, with particularly strong interest in getting online from home. For instance, nearly three quarters of offline 9-17 year olds (74%) said they wanted to be online from home, more than half (57%) strongly agreed that they wanted to be online from home, and only 10% strongly disagreed that they

wanted to be online from home. Similarly, more than half of offline children (55%) said they wanted to be online from school, over one third (38%) strongly agreed they wanted to be online from school, and only 12% strongly disagreed that they wanted to be online from school.

Demographically, there were some significant trends among these 9-17 year olds:

- Eighty-three percent (83%) of offline children of single parents agreed they wanted to be online from home, and 71% strongly agreed (vs. 63% of children of couples who strongly or somewhat agreed).

- More than three out of four low-income offline children (77%) and 79% of middle-income offline children want to be online from home — 61% of low-income and 62% of middle-income children strongly agree.

- By contrast, only 51% of offline high-income children want to be online from home, and only 39% strongly agree they'd like this kind of access.

- Fifty-seven percent (57%) of offline low-income children want to be online from school, and 46% strongly agree with this desire (vs. 36% of high-income offline children who want school access, and only 22% who strongly agree).

Two of the most interesting observations derived from these results is the extent to which populations of lower socioeconomic status stand out for wanting access in schools, while offline populations of higher socioeconomic status aren't nearly as interested in school access. The second interesting finding is the strong resistance of high-income offline children to coming online from any location, which mirrors our findings in the second section of the chapter — an interesting challenge for marketers to tackle, if they find this potential segment of their audience attractive.

Offline Family Motivations For Coming Online

Children who want to come online at home can certainly lobby for it, and as we saw in Chapter 8, have a reasonable chance of success, so the results above are meaningful. But in most cases the parent will make the final decision. So we wanted to know about the motivations of parents who planned to bring their families online at home in the next 12 months.

Table 10-3 tells a familiar story. Children's education was cited more than 2:1 over any other reason offline families plan to get online within the next 12 months, and as the leading reason among parents of every children's age group. Among parents of 9-12 year olds, children's education was cited almost three times as often as the next highest reason to go online, and among parents of 13-17 year olds, a majority of parents (56%) name it as a reason, again, almost three times the next most frequent response.

Table 10-3. Reasons for Household Plans to Obtain Internet Access From Home: Parents' Responses

Reasons	Total Children	Age of Target Children			
		2 – 5	6 – 8	9 – 12	13 – 17
Children's Education (all education codes combined)	39%	28%	22%	46%	56%
Email with Friends/Relatives (nearby/distant)	17%	18%	14%	17%	20%
Search/Surf the Internet	13%	20%	6%	11%	16%
Education/Learning for Adults	13%	12%	10%	11%	17%
Entertainment for Adults	11%	14%	2%	18%	8%
Business Use	9%	9%	13%	5%	7%
Purchase Goods and Services	8%	6%	19%	2%	3%
Entertainment for Children	6%	11%	3%	6%	6%

(Parent respondents who anticipate purchasing Internet access in the next 12 months)
Only reasons given by 5% or more parents are included in this table.
Source: Banner 2; Data Table 226a;
Grunwald Associates

Though there were few socioeconomic differences across groups for any reason, other interesting demographic trends arose among families who plan on obtaining home Internet access. For instance, 44% of parents of boys cited children's education as a reason to come online as compared to 31% of parents of girls. Also, significantly more parents of girls than boys (8% vs. 1%) named "to obtain local information on my community" as a reason they would come online.

Ethnicity, too, appeared to show a trend. Nineteen percent (19%) of non-white, non-African-American parents and 14% of white parents said they would be coming online for their own education, while only 2% of African-American parents cited this as a reason. Finally, 19% of African-American parents said they would be coming online to purchase goods and services, a reason cited by only 3% of white parents.

We note that a large number of possible reasons for coming online failed to garner any significant mentions, including "an activity to involve parents and children together," "business news," "news/weather," "sports information," "parenting information," "travel," "chat," "health & medical information," "financial," "product reviews," and "food/restaurant/recipes."

The bottom line for marketers seems simple: if you want to bring offline families to the medium, education or learning should be an integral part of your pitch.

The Offline And New Concepts

Finally, we cross-referenced interest in a variety of new concepts against target children not online but who expect to be within the next 12 months. Then we looked at that group more closely, identifying whether the parents were online and, if not, whether they had a computer at home. As Table 10-4 shows, we have reprinted a table discussed earlier in

the report. It illustrates that for virtually every new concept, there was apparently more interest among the offline population than among those online.

Table 10-4. Relative Interest In New Concepts By Internet Users and Non-Users

Very or Somewhat Interested in…	Target Child Not Online at Home – Expect to Be Within 12 Months And… (Parents' Responses)		
	Parents Online from Home	Parents Not Online from Home, Household Has Computer	Parents Not Online from Home, Household Does Not Have Computer
Online communication with teachers	75%	78%	78%
Online communication with other parents in the community	50%	65%	60%
Online communication with local school board	55%	72%	73%
Using older children's electronic "wallet" allowing them to purchase online	2%	10%	16%
Viewing student's schoolwork online	65%	72%	70%
Using a trusted online guide to what's useful and safe on the Internet	66%	84%	86%
Online tutoring	54%	65%	71%
Internet access via a game console or a simple Internet appliance	20%	29%	40%

(Parent respondents with target children ages 2-17 who expect to be online from home within 12 months)
Source: Banner 5 (Special Banner); Data Tables 217 – 224
Grunwald Associates

To some extent, differences in interests among offline and online parents are not the result of greater enthusiasm on the part of offline parents, but muted enthusiasm on the part of the (perhaps more jaded) online population. It's notable, too, that most parents' reactions seem stronger to new concepts that speak to their children's education and their roles as parents.

10c. The Offline Who Expect To Be Online

Our survey also sought to answer the question of who are the offline children who will be online in the next 12 months, and how many of them will there be?

Parents Expected To Be Online

To some extent, offline children who expect to be online are dependent on whether their parents get online. We asked parents who were offline whether they expected to be online in the next 12 months from any location.

- Thirty-five percent (35%) of offline parents said that one or both would be online within the next 12 months.
- Eighteen percent (18%) of offline parents named themselves as the one who would be online, 3% named the other parent, 15% said both would be online.
- More than half of offline parents (52%) said neither would be online within the next 12 months, and 13% didn't know or refused to say.

There were some notable demographic trends in this data, including the finding that offline mothers were significantly more likely to say they would be coming online within the next 12 months than offline fathers (20% and 11%, respectively), echoing trends identified elsewhere in this report.

Perhaps not surprisingly, less educated offline parents (HS graduates or less) were significantly more likely (58%) than more educated groups to say that neither parent would be online in the specified time period. In a similar pattern, parents with a computer in the home (28%) were significantly more likely to say they, personally, would be coming online than those who don't (11%).

Parents whose children don't use the Internet from any location (54%) were significantly more likely to say that neither parent was coming online than those who do have children who use the Internet (42%). More parents whose children are online said they were coming online as well – 43% versus 33% of parents whose children are not online.

This last result suggests that, once again, children have a significant indirect influence on household decisions to get online, even though when explicitly asked, few parents acknowledge children's role in making this decision.

Children Expected To Be Online

We asked parents whose children were offline if they expected their children to be online from any location within the next 12 months and found that 40% of parents of offline children said they expected one or more of their children to be online within 12 months, 46% said they did not expect any of their children to be online within the specified time period, and 14% said they didn't know.

We also asked parents whose children were offline from school whether they expected their child to come online from school within the next 12 months and parents whose children are offline from home whether they expected their child to be online from home within the next 12 months. It's important to note that each of these populations is different from the population of parents whose children are not online from any location discussed above.

As shown in Table 10-5 below, most parents whose children are offline from school think their children will be online within the next 12 months, with large majorities of parents of 9-17 year olds believing this. On the other hand, more parents of 2-8 year olds think their children will not be online from school. Meanwhile, a solid majority of those whose children are offline from home believed they would remain offline 12 months from now, and only in the 9-12 year old age group did more parents believe their offline children would be online than those who didn't.

Table 10-5. Anticipated New Children's Online Use In Next 12 Months

Will the target child be using the Internet from school/preschool in the next 12 months?
Will the target child be using the Internet from home in the next 12 months?

	Parents' Responses					Children's Responses	
	All Target Children	Age of Target Child				Age of Target Child	
		2 – 5	6 – 8	9 – 12	13 – 17	9 – 12	13 – 17
From School/Preschool							
Yes	46%	18%	34%	64%	64%	56%	72%
No	33%	68%	37%	18%	16%	25%	21%
Don't Know/ Refused	21%	14%	30%	18%	20%	19%	7%
From Home							
Yes	36%	21%	41%	49%	42%	45%	48%
No	54%	75%	48%	40%	44%	31%	44%
Don't Know/ Refused	10%	4%	11%	12%	14%	24%	9%

(Parent respondents with a target child in school/preschool who is not using the Internet at school/preschool)
(Parent respondents with a target child not using the Internet at home)
Source: Banner 2: Data Tables 199, 200, 369, 370

Grunwald Associates

Table 10-5 also shows the answers of children ages 9-17. As shown, their replies track quite closely with those of parents. Slightly more teens think they'll be online from both locations within the next 12 months than their parents, and more teens report one way or another about what their online status will be than 9-12 year olds, many of whom answered "Don't Know/Refused" for both locations.

Demographically, there are a number of interesting and significant trends in the data beyond those in the table above:

- Fathers (56%) are significantly more likely than mothers (44%) to believe their child will be online from school within the next 12 months.

- Fathers (43%) are also significantly more likely than mothers (35%) to believe their child will be online from home in the next 12 months.

- Parents who have a computer in the home (54%), parents whose child uses the computer (51%), and parents whose child already uses the Internet (70%), are all significantly more likely to believe their child will be online from school in the next year.

- Significantly more middle-income (50%) and high-income (54%) parents believe their child will be online from home than low-income parents (35%).

The bottom line is that a substantial number of offline parents think both they and their children — but especially their children — are going to be online in the coming year, and they'll be coming from all ages and socioeconomic groups.

Conclusion

The findings in this chapter suggest a variety of tactics for companies such as Internet service providers and portals that hope to gain offline children as new subscribers. Some of the more important inferences to be drawn include:

- Development of relationships and packages with computer manufacturers may be necessary to address the significant barrier presented by a lack of a home computer for many non-users.

- Family willingness to embrace — and spend on — new technologies and services seems less dependent on income than generally recognized, and there are significant pockets of "desirable" family demographics that have so far successfully resisted the Internet's siren song, while many of lower socioeconomic status may be great, enthusiastic customers for online products.

- Children's learning should be a key part of any message aimed at offline families. More generally, it's important not to assume that the Internet value proposition has been proven to these families — it hasn't; few are mentioning money as a reason why they're offline.

- Time constraints of the ultimate audience must be respected — companies need to treat children like any other (adult) consumer audience in this area.

- Companies must endeavor to attract both the parent *and* child online to avoid "parents not online" attrition of the audience.

- Above all, companies must prepare for the possibility that large numbers of offline families will be making their ISP and portal decisions within the next 12 months.

C H A P T E R E L E V E N

Projections

Chapter Outline

11a. Children Online from Home
11b. Children Online from School
11c. All Locations Total

Introduction

Combined with our earlier research, these current survey results provide a useful framework for forecasting children's Internet use in coming years. Of course, creating forecasts is always challenging; this is especially so when predicting a market that combines the explosive Internet industry with the fickle nature of children's preferences. Nevertheless, forecasts can be important for planning purposes – particularly when they are based on sound survey data gathered over several intervals.

We broke down our forecast based on the two major categories of Internet access: from home and from school. We further segmented our forecast based on children's ages. (Forecasts broken down by gender did not seem necessary since the level of Internet access by boys and girls is essentially the same, and we expect it to remain so.) Our projections are based on responses from parents, since this represents the largest projectable sample, and our previous surveys generated only parental responses. The full forecast can be seen in Tables 11-1 and 11-2, while the figures in this chapter help highlight particular elements of the projections.

In developing a set of projections for children's future Internet use, we had to consider a wider set of variables than ever before. For the next few years, the main influences over children's Internet use will continue to be household computer use and school connections to the Internet. After that, we think the more important issue will be how Internet use is defined. Three or four years down the road, a variety of new platforms may allow children to access the Internet. Some of these will allow Internet access in a way that feels very different from the current online experience. In fact, toward the end of our projections period, we believe that the Internet could be nearly transparent – accessing the Internet will not be a separately identifiable activity, but a seamless element of an educational, entertainment, or communications application.

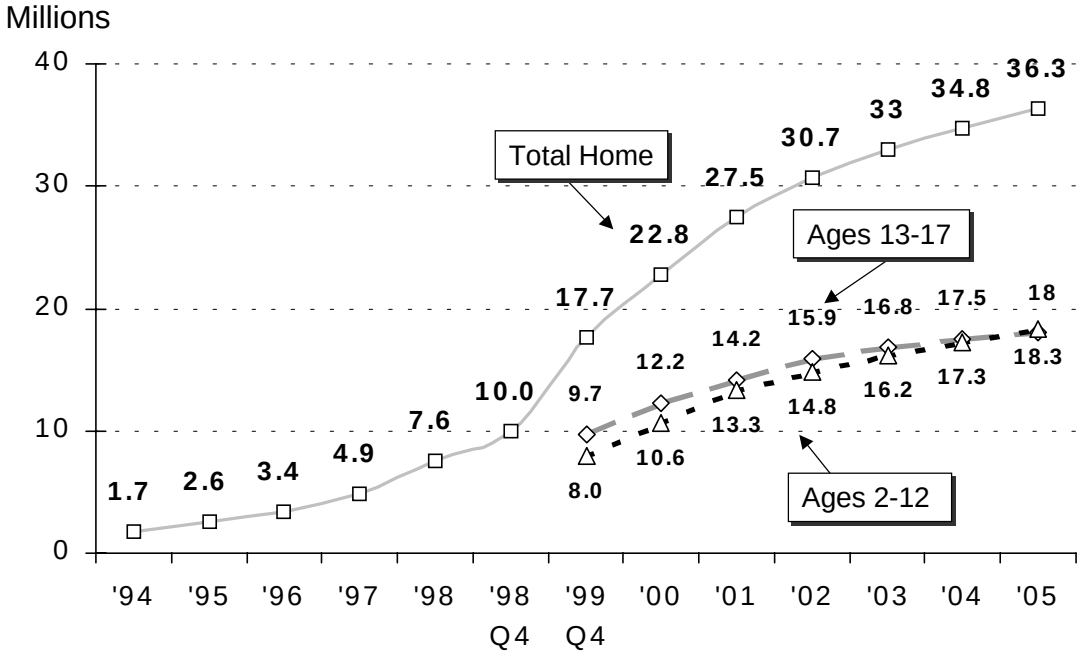
For example, wireless hand-held devices may become an access vehicle for many children, and the primary access point for children who wouldn't otherwise be on the Internet. Inexpensive hand-held devices could be an important music and game platform (and games may very well be a "Trojan Horse" for getting many younger children – especially boys – online). As prices drop, an important part of the appeal to children could be the convenience and hardiness of hand-held devices, along with easy communications. This may create an environment in which children and parents won't be thinking of "the Internet" or "online" when they use these devices.

We believe that hand-held devices and other alternative Internet access paths may become increasingly significant toward the end of our forecast period, and have incorporated that assumption into our home forecast below and, to a lesser degree, into the school forecast as well.

11a. Children Online from Home

The current and predicted growth curve for children's use of the Internet at home is shown in Figure 11-1.

Figure 11-1 Home Internet Use by Children 1995-2005



Source: previous Grunwald surveys, current findings, and projections

Grunwald Associates

We estimate that 17.7 million children ages 2-17 were using the Internet from home as of the end of 1999, and project that this number will increase to 36.3 million in 2005. This represents an increase from 28% of children ages 2-17 currently using the Internet from home to 57% using the Internet from home by 2005. Note that in 2001 we project there will be about as many 2-12 year olds online from home as 13-17 year olds.

Several key assumptions guided us in the home use projections:

- More parents will see the Internet as a valuable tool for their children's education and development. As we have discussed earlier in this report, parents already have a very high degree of confidence in the value of computers. We believe this confidence will transfer to Internet services, and we know that children's needs guide many parental technology purchase decisions.

- Trends in the computer industry will continue to support growth of home Internet use by family households. Computer pricepoints are coming down, and it is rare to see a computer offered without a modem, and often Internet access, as part of the product bundle.

- Telecommunications providers may begin to rely on children's online services and online educational offerings as one way to increase sales of broadband into the home.

- Conventional Internet access will become more affordable, with at least a near-term increase in free access offerings from some Internet service providers.

- Younger children will continue to lag behind older peers in Internet use. Especially at the youngest ages covered by our study – ages 2-5 – we don't expect use of the Internet to come near the levels of older age segments. Older children enjoy higher rates of Internet usage, and we believe that this will continue. In the outer years of our projections period, growth in the older segment will slow as near-saturation levels of use are reached.

- As mentioned above, hand-held devices and other platforms may offer "Trojan Horse" services that will insinuate the Internet into many family households. These families will increasingly use the Internet as simply part of everyday life. We should note that television set access to the Internet will play a role in the home, but we don't believe it will be as significant as many expect in the next few years because of the difficulty of overcoming two major obstacles. First, family expectations: in most rooms, the television is a relatively distant box dispensing non-interactive programming *at* viewers. Secondly, parental attitudes may be resistant to a new role for television: many parents feel strong distrust toward the television as a tool for their children's development.

- Entertainment – and especially music – will drive many children's Internet usage, especially once record companies embrace the technology.

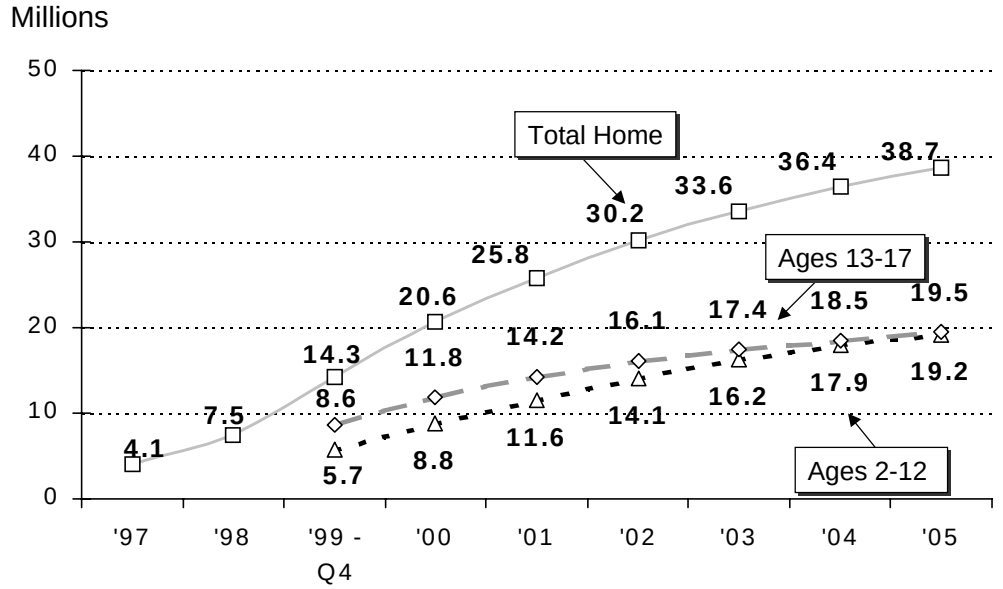
- As with any technology, some proportion of the population will remain resistant to the Internet because of economic, cultural and other reasons.

11b. Children Online from School

Figure 11-2 presents the growth curves of Internet use from school from 1997-2005. We estimate that 14.3 million children ages 2-17 were using the Internet from school as of the end of 1999, and that this number will increase to 38.7 million in 2005. This represents an increase from 23% of children ages 2-17 currently using the Internet from school to 61% online from school by 2005. Looking specifically at 13-17 year olds, we estimate that 8.6 million teens are online from school, a percentage that will likely rise to 19.5 million in 2005. This represents an increase from a current 44% of this age group to 92% by 2005.

As discussed earlier in this report, schools have become a critical access point for lower income and other children who wouldn't otherwise be Internet users. We expect this role to continue, partially because of political pressures encouraging schools to make more and better use of technology and the Internet. In addition to public interest in technology (and in its potential educational benefits) indirect influences include the political pressure for educational accountability and standards.

Figure 11-2. Children Online at School 1999-2005



Source: previous Grunwald surveys, current findings, and projections Grunwald Associates

In the next few years, we believe schools will continue to respond by improving technical infrastructure, in particular continuing to connect classrooms to the Internet. Major initiatives have focused on infrastructure – foremost among them is the so-called E-rate. While the e-rate has finally built a political constituency, it has yet to make its full impact felt, especially in elementary and middle schools. (Some schools with older physical plant may not be able to retrofit in order to provide access to all instructional rooms; we believe that wireless technology may provide an answer in some of those cases.)

However, it is unclear whether schools will rise to an equally important challenge: the need for better use of the Internet in instruction, and better training (or professional development) and support for teachers. There is a real possibility of a taxpayer backlash if schools fail to use technology effectively in instruction and administration.

Currently, grades 10-12 enjoy a disproportionate amount of the funding for educational technology. Although that will probably change, we expect that high school Internet access will remain high compared to other grade levels.

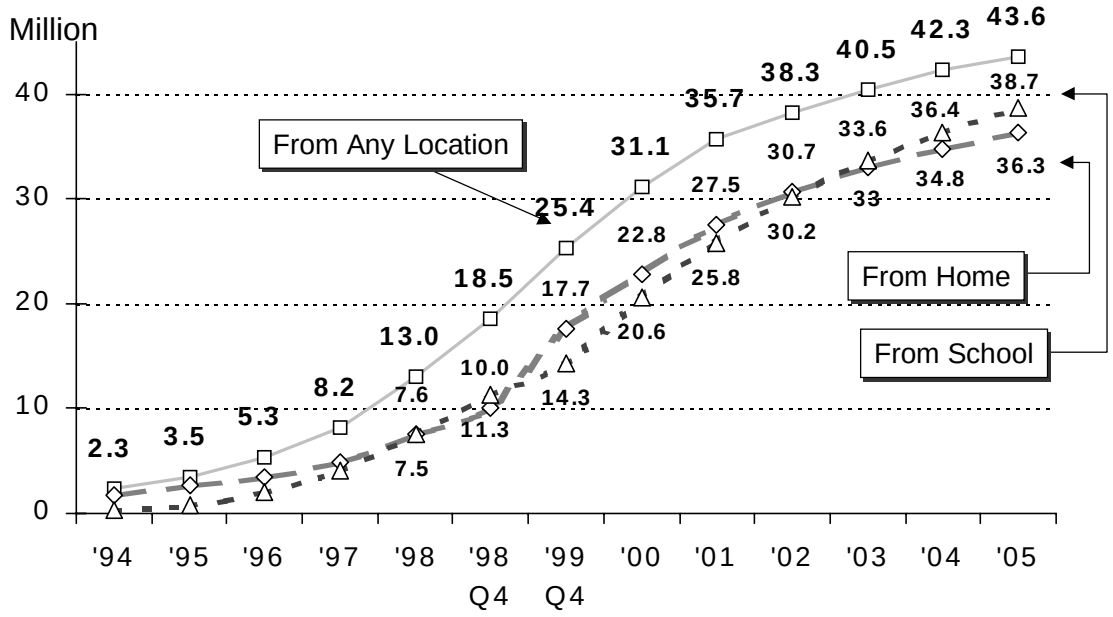
High school teachers typically are more risk-averse than elementary/middle school teachers, which could tend to dampen high school Internet use. However, high school students generally have a bit more independence to pursue some of their own interests. Further, a high school student usually sees a number of teachers in a typical school day; if even one of these teachers (and/or the schools' media center coordinator or librarian) is an Internet enthusiast, then the student will likely have opportunities to go online.

School use will continue to suffer a damping effect from the lack of compelling online instructional content for at least a while longer. When companies finally start to address this need in the out years of our projection period, school use will increase more sharply (and overtake Internet use from home as an access point for children).

11c. All Locations

Figure 11-3 shows the forecast growth curve for access from all locations, with breakouts for school access and home access.

Figure 11-3 Children Online Totals 1994-2005



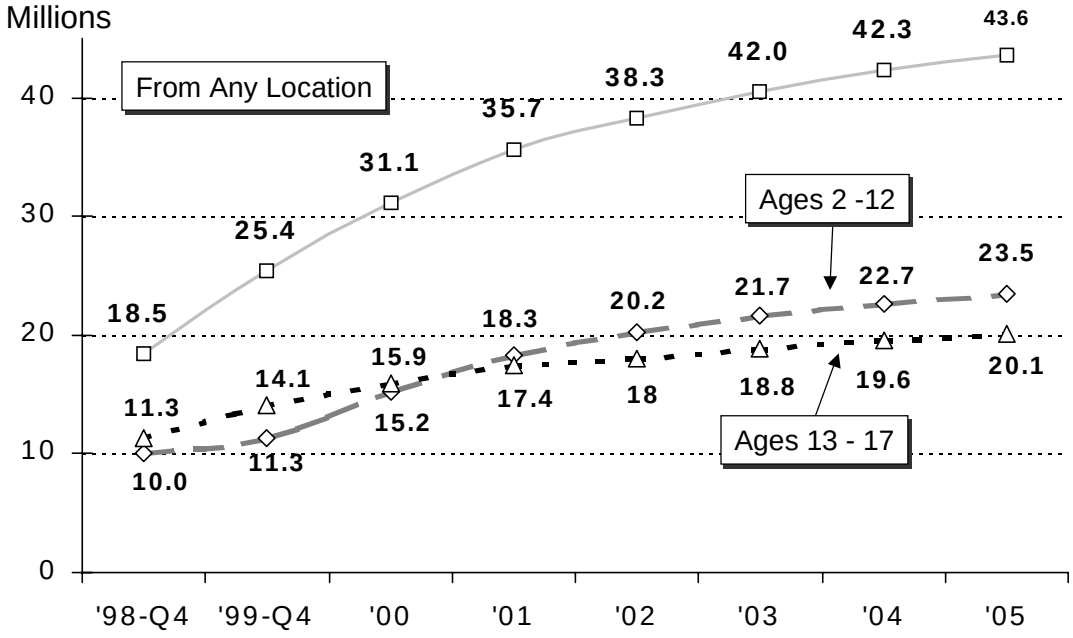
Source: previous Grunwald surveys, current findings, and projections

Grunwald Associates

The numbers of children accessing the Internet from school and the number from home are roughly comparable, and in fact, their growth curves cross twice during the range of this forecast. We should note that many children are enjoying access from both school and home. Our total for all locations takes this overlap into account so as to avoid double counting; it also includes other locations such as libraries.

Figure 11-4 shows the total outlook for 1999 forward and breakdown by age segments.

Figure 11-4 Internet Use From Any Location 1999-2005
(by Age)



Source: previous Grunwald surveys, current findings, and projections

Grunwald Associates

Tables 11-1 and 11-2 present the detailed projections discussed in this chapter.

Table 11-1. Children Online Forecast in Percentages

	Actual Data	Projected Data					
	1999	2000	2001	2002	2003	2004	2005
Overall Internet Use (Percentage of Children Using the Internet from Any Location)							
Ages 2-5	6%	9%	12%	14%	16%	18%	20%
Ages 6-8	27%	35%	42%	48%	53%	57%	60%
Ages 9-12	48%	60%	70%	76%	80%	83%	85%
Ages 13-17	71%	81%	88%	90%	92%	94%	95%
Total overall Internet use	40%	50%	57%	61%	64%	66%	68%
Internet Use From Home (Percentage of Children Using the Internet from Home)							
Ages 2-5	5%	7%	9%	11%	13%	14%	15%
Ages 6-8	18%	22%	26%	28%	31%	33%	35%
Ages 9-12	32%	43%	54%	60%	65%	70%	75%
Ages13-17	49%	62%	72%	79%	82%	84%	85%
Total Internet use from home	28%	36%	44%	49%	52%	55%	57%
Internet Use From School (Percentage of Children Using the Internet from School)							
Ages 2-5	1%	3%	5%	7%	8%	9%	10%
Ages 6-8	12%	20%	26%	34%	40%	45%	50%
Ages 9-12	26%	37%	47%	55%	63%	70%	75%
Ages13-17	44%	60%	72%	80%	85%	89%	92%
Total Internet use from school	23%	33%	41%	48%	53%	57%	61%

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Table 11-2. Children Online Forecast (in Millions)

	Actual Data	Projected Data					
	1999	2000	2001	2002	2003	2004	2005
Overall Internet Use (Number of Children Using the Internet from Any Location)							
Ages 2-5	0.9	1.4	1.8	2.1	2.4	2.7	3.1
Ages 6-8	3.2	4.1	4.9	5.5	6.0	6.5	6.8
Ages 9-12	7.6	9.8	11.6	12.6	13.2	13.5	13.7
Ages 3-17	14.1	15.9	17.4	18.1	18.8	19.6	20.1
Total overall Internet use	25.4	31.1	35.7	38.3	40.5	42.3	43.6
Internet Use From Home (Number of Children Using the Internet from Home)							
Ages 2-5	0.8	1.1	1.4	1.7	2.0	2.1	2.3
Ages 6-8	2.2	2.6	3.0	3.2	3.5	3.7	4.0
Ages 9-12	5.2	7.0	8.9	10.0	10.7	11.4	12.1
Ages 13-17	9.7	12.2	14.2	15.9	16.8	17.5	18.0
Total Internet use from home	17.7	22.8	27.5	30.7	33.0	34.8	36.3
Internet Use From School (Number of Children Using the Internet from School)							
Ages 2-5	0.1	0.5	0.8	1.1	1.2	1.4	1.5
Ages 6-8	1.4	2.3	3.0	3.9	4.5	5.1	5.7
Ages 9-12	4.2	6.0	7.8	9.2	10.4	11.4	12.1
Ages 3-17	8.6	11.8	14.2	16.1	17.4	18.5	19.5
Total Internet use from school	14.3	20.6	25.8	30.2	33.6	36.4	38.7

Note: Age segment numbers do not sum exactly to overall totals due to rounding variance
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A P P E N D I X

Methodology

In this study, we conducted interviews with 1,735 parents or guardians of children ages 2 – 17, and 601 interviews with children ages 9 – 17. Interviews were conducted by The Dieringer Research Group, Inc., which also tabulated results. Interviews took place between October 26 and December 23, 1999 with the survey questionnaire administered via telephone interviewing, using a Random Digit Dial (RDD) sampling methodology.

To qualify for the primary "adult" questionnaire, a respondent had to be 18 years of age or older and a parent or guardian of least one child between the ages of 2 and 17. Respondents or their children did not have to own or use a computer or have access to the Internet to qualify for this study.

Within each interview, parents/guardians were asked questions regarding their household and their children, such as: TV, computer, and Internet usage/practices, outside activities, attitudes, perceptions, and other issues. In order to streamline the data collection of this information, one "target" child was selected randomly (by most recent birthday, regardless of birth year) from all children ages 2 – 17 living in the household.

We also interviewed target children directly. Although parents of children ages 2 – 17 were interviewed, only target children between the ages of 9 and 17 were spoken to directly, given the practical limitations imposed by young children's ability to understand and respond to a telephone interview.

To facilitate the target child interview, two additional questionnaires were developed, one for children ages 9 – 12 and another for teenagers ages 13 – 17. These questionnaires were tailored in terms of the number of questions and the wording of questions appropriate to the respective age levels. Therefore, the target child interviews were shorter than the adult interviews and asked questions regarding only the target child's attitudes and behaviors. The target child interviews were completed after the primary adult interviews and were conducted with the parent's or guardian's permission. Once the adult interview was concluded, children's interviews were completed with the help of multiple call-backs if necessary. In all, 53,759 households were called (many with up to four callbacks) in order to complete our sample.

Summary Table 1 presents the age distribution of all target children discussed (frequency and percent of total interviews) and the target children interviewed (frequency, percent of total target child interviews and as a percent of target children discussed).

Summary Table 1
Target Child Age Distribution

Age of Child	Number of Target Children Discussed	Percent of Total Interviews	Number of Target Children Interviewed	Percent of Total Target Child Interviews
Children 2-8	**695**	**40.1%**		
2	104	6.0%		
3	107	6.2%		
4	91	5.2%		
5	85	4.9%		
6	107	6.2%		
7	94	5.4%		
8	107	6.2%		
Children 9-12	448	25.8%	257	42.8%
9	109	6.3%	63	10.5%
10	111	6.4%	57	9.5%
11	104	6.0%	64	10.6%
12	124	7.1%	73	12.1%
Teens 13-17	592	34.1%	344	57.2%
13	128	7.4%	77	12.8%
14	116	6.7%	62	10.3%
15	121	7.0%	79	13.1%
16	122	7.0%	72	12.0%
17	105	6.0%	54	9.0%
Total	1,735	100.0%	601	100%

Sample Sizes

We spoke with 1,735 parents/guardians households of children ages 2 to 17. All respondents were started with a “screener,” which included initial questions to ensure that they met qualifications for the study. The screener also included some general computer and Internet usage questions.

Of the 1,735 adult respondents that completed this screener portion of the study, 1,456 parents/guardians also completed the rest of the interview. In the remaining 279 households, our priority was to augment the number of children in our study as well as capture basic demographic and usage information from the parent. The 279 parents/guardians were asked to complete the initial screener portion of the interview along with a few select usage questions in the main survey, followed by permission for us to then interview their children.

Statistical Reliability

As a generalization, a sample of 1,735 randomly selected respondents, such as we have for our total completed interviews, will generate data reliable with 95% confidence and a ± 2.4% sampling error for responses provided by the whole sample. That is to say, if a similar survey were conducted repeatedly, results within ± 2.4% would occur for any one question 95 out of 100 times. Looking at it another way, if a question received a "yes" answer by 60% of the 1,735 respondents, the chances are 95 out of 100 that between 57.6% and 62.4% of the total population would lodge a similar "yes" response, if asked. When results are reported for smaller subsets of respondents, the sampling error is correspondingly higher, as reflected in Summary Table 2.

Summary Table 2 presents the sampling error for selected sample subsets.

Summary Table 2 Sampling Error of Select Sample Sizes At a 95% Confidence Level	
Sample Size	**±**
50	13.9%
75	11.3%
100	9.8%
200	6.9%
300	5.7%
400	4.9%
500	4.4%
600	4.0%
700	3.7%
800	3.5%
900	3.3%
1000	3.1%
1200	2.8%
1400	2.6%
1600	2.4%

Weighting for Response Bias

In order to correct for response bias, our data were weighted to match the United States Census Bureau population estimates for several demographic factors. The survey focused mainly on household behaviors and children's behaviors, and therefore, the weighting methodology consisted of two levels, household and children. For all questions asked about the household, the household weighting was used. For all questions asked about the TARGET child, the children weighting was used.

Summary Tables 4 and 5 detail the weighting variables for both levels respectively, as well as the corresponding weighting percentages.

Household Weighting
Data were weighted to reflect all households with children under age 18 in the United States.

Summary Table 3
Household Weighting

Weighting Variables	U.S. Census Data	Total Unweighted Sample	Total Weighted Sample
Region:			
Northeast	18.4%	18.7%	18.5%
Midwest	23.9%	22.9%	23.9%
South	35.1%	34.5%	35.2%
West	22.6%	23.9%	22.6%
Household Type:			
Married Head of Household	69.2%	78.7%	70.2%
Male Head of Household	6.6%	4.1%	5.9%
Female Head of Household	24.2%	17.2%	24.1%
Age:			
18 to 34	33.1%	31.9%	32.6%
35 or Older[1]	66.9%	67.8%	67.6%
Education:			
High School or Less	47.2%	25.9%	46.4%
Some College	28.0%	35.6%	28.0%
College Degree or Higher	24.8%	38.3%	25.8%

[1]The original weighting variable breakouts for the Age category were 18 to 34, 35 to 54, and 55 or older. Because our survey data had very few respondents that fell into the 55 or older category, for weighting purposes, we merged the 35 to 54 and 55 or older categories to get the 35 or older category listed above. The sparse data in the 55 or older category is very logical given the qualifiers for this survey and it mirrors the U.S. Census Data for households with at least one child ages 2 – 17.

Children Weighting

Data were weighted to reflect all children ages 2 to 17 in the United States. The children weighting incorporates the household weighting.

Summary Table 4 Children Weighting			
Weighting Variables	**U.S. Census Data**	**Total Unweighted Sample**	**Total Weighted Sample**
Region:			
Northeast	18.7%	18.7%	18.8%
Midwest	24.1%	22.9%	24.1%
South	33.3%	34.5%	33.4%
West	23.8%	23.9%	23.8%
Child's Gender:			
Male	51.3%	52.9%	51.4%
Female	48.7%	47.1%	48.7%
Child's Age:			
2 to 5	24.7%	22.3%	24.7%
6 to 8	19.1%	17.8%	19.0%
9 to 12	25.1%	25.8%	25.2%
13 to 17	31.1%	34.2%	31.2%

Summary of Questionnaire Topics

QST #	QST	ADULT	CHILD	TEEN
	SCREENER			
A	Age 18 yrs or older and one of heads of household	x		
B	Number of children ages 2-17 in household	x		
C	Parent or legal guardian for any of the children in household	x		
D	Is there a computer in household that is actively used?	x		
F	Guardian/parent in household currently use Internet from any location?	x		
F.1	Anticipate any other parent/guardian in household will be using the Internet in 12 months?	x		
G	Which location do you use the Internet?	x		
G.1	Which location does other parent/guardian use the Internet?	x		
H	How often typically use the Internet?	x		
H.1	How often other parent/guardian typically uses the Internet?	x		
I	Gender	x		
J	Highest education level attained	x		
K	Age	x		
L	Age range	x		
M	Ages, grades, genders of each child in household	x		
N	Any of children ages 2-17 living in household currently use computer for any purpose from any location	x		
N.1	Anticipate any children ages 2-17 in household will be using a computer in next 12 months from any other location	x		
O	Any children in household currently use computers	x	x	x
P	Place the child uses the computer	x	x	x
	Home	x	x	x
	School/Preschool	x	x	x
	Child's work	x (if target child >= 14)		x >=14
	Library	x	x	x
	Friend/Relative's Home	x	x	x
T	Any of children in household currently use Internet from any location	x		
T.1	Anticipate any children in household will be using the Internet from any location in next 12 months?	x		
T.2	Which child/children specifically do you anticipate will be using Internet within the next 12 months from any location	x		
U	Which children in household currently use the Internet from any location?	x	x	x
V	From where does child currently use the Internet?	x	x	x
	Home	x	x	x

QST #	QST	ADULT	CHILD	TEEN
	School/Preschool	x	x	x
	Child's work	x (if target child >= 14)		x >=14
	Library	x	x	x
	Friend/Relative's Home	x	x	x
W	How often does child typically use the Internet?	x	x	x
X	Random selection of target child (child with most recent birthday)	x		
X.1	Name of child with most recent birthday	x		
X.1a	Name of the child (if just one)	x		
X.2	Are you the primary or an equal caregiver of child?	x		
Y	Sample assignment - Household computer owner/Non-owner	x		
Z	Sample assignment - Adult Internet User/Non-user	x		
Z.1	Sample assignment - Other Parent/Guardian Internet User/Non-User	x		
AA	Sample assignment - Any Child Computer User/Non-User	x		
AB	Sample assignment - Target Child Computer User/Non-User	x	x	x
AC	Sample assignment - Any Child Internet User/Non-User	x		
AD	Sample assignment - Target Child Internet User/Non-User	x	x	x
AE	Sample assignment - Target Child Internet User Locations	x	x	x
	HOUSEHOLD COMMUNICATIONS & CONSUMER ELECTRONICS			
1.1	Number of Televisions actively used in household	x		
1.1a	Locations televisions are used in household	x		
1.2	Number of hours there is at least one TV being watched in household	x		
1.3	Does household have satellite or cable TV services?	x		
1.5	Number of telephone lines currently in household	x		
1.5b	Does (target child) have a phone line dedicated to his/her own use?	x		
	COMPUTERS IN THE HOME			
2.1	Number of computers actively used in home	x		
2.1a	Locations of computers actively used in home	x		
2.2	Year first purchased a computer for home	x		
2.3	Reasons for buying a computer for home	x		
2.4	Main uses of the computer in home	x		
	INTERNET CONNECTIONS & MOTIVATION			
3.1	Household connection with Internet using PC or TV such as WebTV	x		
3.2	Which Internet connections does household have for PC?	x		
3.3	What service/services use to access the Internet from home?	x		

QST #	QST	ADULT	CHILD	TEEN
3.4	Original reasons household obtained access to Internet from home	x		
	PARENT INTERNET USE			
4.1	When first started using Internet from home	x		
4.2	When was the last time used the Internet?	x		
4.3	Number of hours use the Internet per week	x		
4.4	What you currently use the Internet for	x		
4.5	How often use Internet to search online for product info specific for children even if didn't purchase online	x		
4.6	Have ever made product or service purchases online for children?	x		
4.6a	For which child made a product/service purchase online?	x		
4.6b	What did you purchase online for children?	x		
4.6c	In last year how much spent on online purchases of (4.6b) for children?	x		
4.7	When first started using Internet, received any help from children…	x		
4.7a	Age of child when helped set up home computer and modem	x		
4.7b	Age of child when helped teach how to use the Internet	x		
	CHILD (AND PARENT) GENERAL ACTIVITIES			
5.1	Type of school (target child) attends	x		
5.2a	Number of hours (target child) spends doing homework on average day	x	x	x
5.3	Is (target child) in day care/after school care program?	x		
5.3a	Number of hours (target child) spends in day care/after school program	x		
5.4	Currently employed outside the home (besides babysitting)?			x
5.5	Does (target child) receive an allowance?	x		
5.5a	How much per week does (target child) receive?	x		
5.6	Which of the following activities has the (target child) participated in?	x		x
	Community service	x (if target child <= 12)		x
	Hobbies/interests	x (if target child <= 9)		
	Listening to music	x (if target child <= 12)		x
	Organized sports (at or outside of school)	x (if target child <= 12)		x
	Spending time with friends (outside of school)	x (if target child <= 9)		

QST #	QST	ADULT	CHILD	TEEN
5.6 con't.	Trips with parents	x (if target child <= 9)		
5.6a	Number of hours per week (target child) spends in (5.6 answer)	x		x
5.7	Attended any school/preschool events for children?	x		
5.7a	Number of school/preschool events attended this year for any children	x		
	CHILDREN'S TELEVISION VIEWING			
6.1	Number of hours (target child) watches/plays TV/Games on TV	x		x
6.2	Where at home (target child) usually watches TV	x		
6.4	In past 12 months, has (target child's) time spent watching TV increased,…	x		x
6.4a	Why has it increased?	x		
6.4b	Why has it decreased?	x		x
6.5	Types of TV programs (target child) watches on a regular basis	x	x	x
6.6	Does (target child) usually watch alone or with others?	x		x
6.6a	Who does (target child) usually watch TV with?	x		x
6.7	Does any parent/guardian in household restrict TV/Video viewing in some way?	x		
6.7a	In what way does parent/guardian restrict the TV/Video viewing?	x		
6.8	How satisfied with (target child's) TV viewing?	x		
6.8a	Why not satisfied with (target child's) TV viewing?	x		
6.8b	Why satisfied with (target child's) TV viewing?	x		
	CHILDREN'S USE OF COMPUTER			
7.1	Number of hours (target child) uses computer from home for non-Internet activities	x		x
7.2	Where at home (target child) usually uses computer?	x		x
7.3	Does (target child) have a computer dedicated to his/her own use?	x		
7.4	In past 12 months, has amount of time (target child) spent using a computer at home increased….	x		x
7.5	Types of non-Internet activities (target child) uses home computer for	x	x	x
7.6	Does (target child) use home computer alone or with others?	x		x
7.6a	Who (target child) uses the computer with	x		x
7.7	Does any parent in household restrict computer use in some way?	x		
7.7a	Ways restrict computer use	x		
7.9	Types of software purchased for any of the children in the last year	x		
7.9a	Amount spent on software programs for children in last year	x		

QST #	QST	ADULT	CHILD	TEEN
	CHILDREN'S INTERNET USE			
8.1	Number of hours per week (target child) uses Internet from	x	x	x
8.2	From which location did (target child) first start using the Internet?	x		x
	Home	x		x
	School/Preschool	x		x
	Child's work	x (if target child >= 14)		x
	Library	x		x
	Friend/Relative's Home	x		x
8.3	Age of (target child) when he/she first started using the Internet	x		x
8.3a	Number of months ago (target child) first started using the Internet	x		x
8.5	How satisfied with (target child's) Internet use?	x		
8.5a	Why not satisfied with (target child's) Internet use?	x		
8.5b	Why satisfied with (target child's) Internet use?	x		
	CHILDREN'S INTERNET USE FROM HOME			
9.1	Who did (target child) use the Internet with during the first home use?	x		
9.2	Age of (target child) when he/she first used Internet from home	x		
9.3	Original motivation for (target child) to use the Internet from home	x	x	x
9.4	Has (target child's) time on these activities increased, decreased…	x		x
	Watching television/videos	x		x
	Listening to music (includes radio)	x		x
	Using the telephone	x (if target child >= 5)		x
	Reading newspapers/magazines	x (if target child >= 4)		x
	Reading books	x		x
	Spending time with friends/family	x		x
	Playing outside	x (if target child <= 9)		
	Making arts and crafts	x (if target child <= 9)		
9.6	Length of time of (target child's) typical Internet session from home	x	x	x
9.7	In past 12 months, amount of time spent using the Internet@home has increased, decreased…	x		x
9.7a	Why increased	x		x
9.7b	Why decreased	x		x
9.8	Does the (target child) use the Internet at home alone or with others?	x		x

QST #	QST	ADULT	CHILD	TEEN
9.8a	Who does (target child) usually use Internet with?	x		x
9.9a	Who controls keyboard majority of the time when child using Internet w/parent/guardian?	x		
9.10	Age (target child) was allowed to "surf" the Internet at home alone	x		
9.11	Main things (target child) is using the Internet for at home	x	x	x
9.11a	How often (target child) uses the Internet at home for the following:	x	x	x
	Schoolwork	x	x	x
	General learning activities not connected with school	x	x	x
	Entertainment	x	x	x
	E-mail with friends or relatives	x	x	x
	Chats/Chat rooms or Instant messaging	x	x	x
	Games	x	x	x
	Internet radio	x	x	x
	Download music for the Internet	x	x	x
9.11b	Subjects (target child) is using the Internet at home for school work	x	x	x
9.11c	How useful is the Internet for (target child's) schoolwork and research	x	x	x
9.11d	Number of songs (target child) has downloaded from the Internet in past month	x	x	x
9.12	How knowledgeable is parent/guardian about Web sites (target child) visits from home?	x	x	x
9.13	Sites (target child) is most likely to visit online from home	x	x	
9.13a	Has (target child) visited any of the following websites more than once	x	x	
9.14	Web sites (target child) most likely to go to online from home			x
9.14a	Has (target child) gone to any of the following Web sites more than once?			x
9.15	How does (target child) learn about different sites to visit online	x	x	x
9.16	How much does parent/guardian influence specific sites (target child) visited online?	x	x	x
9.17	Has (target child) made any product/services purchase online from home?	x		x
9.17a	What did (target child) purchase online from home?	x		x
9.17b	Amount (target child) spent for (9.17a) purchased online from home in past year	x		x
9.17c	Method used to pay for this online purchase(s)	x		x
9.18	Has (target child) used the Internet to retrieve product info for any family member?	x	x	x
9.18a	How often (target child) uses Internet to retrieve product info for family?	x	x	x
9.19	Activities (target child) currently does while using Internet	x (if target child < 9)	x	x

QST #	QST	ADULT	CHILD	TEEN
9.20	Do any parent/guardian in household restrict Internet use of (target child)?	x		
9.20a	What ways is Internet restricted for (target child)?	x		
9.20b	Name of software used for Internet filtering	x		
9.21	In last 12 months, has parent/guardian paid for Internet service for (target child)?	x		x
9.21a	What was the paid online service for?	x		x
9.21b	Amount spent per month on (9.21a)	x		x
	CHILDREN'S INTERNET USE FROM SCHOOL			
10.1	Grade (target child) was in for their **first** school Internet use	x	x	x
10.2	Number of times (target child) uses Internet from school per week	x	x	x
10.4	Expect (target child) to use Internet from school in next 12 months?	x	x	x
10.5	Length of (target child's) typical Internet session from school	x (if target child < 9)	x	x
10.6	From which location(s) does (target child) use the Internet at school?	x (if target child < 9)	x	x
10.7	Subjects (target child) is using the Internet for from school	x (if target child < 9)	x	x
10.9	Does (target child's) school use filtering software to restrict students access to certain Internet sites?	x	x	x
10.10	Does (target child) get too much,…time on the Internet at school?	x	x	x
10.11	How has (target child's) Internet use at school affected their overall attitude towards school?	x (if target child < 9)	x	x
	NON-USERS			
11.1	Did (target child) use the Internet in the past and then stop?	x	x	x
11.1a	Reasons (target child) stopped using the Internet	x	x	x
11.2	What keeps (target child) from being on the Internet today	x	x	x
11.3	Anticipate (target child) will be using the Internet from school in next 12 months?	x	x	x
11.4	Anticipate (target child) will be using the Internet from home in next 12 months?	x	x	x
	HOME AND SCHOOL WEB SITES			
12.1	Any members of household currently have a personal Web site?	x		
12.1a	Which member of family currently has Web site?	x		
12.3	Does (target child's) school provide students with easy access to computer?	x	x	x
12.4	Does (target child's) school have Internet access easily available to children?	x	x	x

QST #	QST	ADULT	CHILD	TEEN
12.5	Does (target child's) school have web site to provide info to parents, etc?	x	x	x
12.5a	How interested in (target child's) school having a Web site available?	x		x
12.6	Does the family use the school Website?	x		
12.7	Why doesn't family use the school Website?	x		
	SCHOOL INFLUENCE ON FAMILY DECISIONS			
13.1	Has (target child's) school influenced anyone in household to buy reference materials?	x		
13.2	Has (target child's) school influenced anyone in household to buy software?	x		
13.3	Has (target child)'s school influenced anyone in household to use the Internet?	x		

QST #	QST	ADULT	CHILD	TEEN
	ONLINE AND GENERAL SAFETY			
17.1	Tell me the influence each of these activities has on (target child):	x		
	Television (broadcast and cable)	x		
	Movies	x		
	Popular music	x		
	Friends/Peers	x		
	Internet	x		
	CD-ROM and other computer software	x		
	Video games	x		
	Game Boy or other handheld game	x		
17.2	Amount of worry about (target child's) physical safety at school/other settings	x		
17.3	Two top concerns about (target child) using the Internet	x		
17.4	Has (target child) ever met someone in person after initially meeting them on the Internet	x	x	x
17.4a	Age of (target child) at that time	x	x	x
17.4b	Age of person (target child) met face to face after initial meeting on the Internet	x	x	x
	INFORMATION PRODUCTS AND SERVICES			
14.1	Amount spent on reference materials in the past year	x		
14.2	Amount spent on test preparation services or materials for (target child)	x		
14.3	In past year, has (target child) been tutored in any subject	x		
14.3a	Number of hours per week (target child) has been tutored	x		
14.3b	Amount spent per week on (target child's) tutoring	x		
	OTHER CONCEPTS/FUTURE INTERESTS			
15.1	Amount of interest in the following Internet applications:	x		x
	Online communication with teachers	x		x
	Online communication with other parents in community	x		
	Online communication with local school board	x		
	Older children's electronic "wallet" allowing them to purchase online	x		x
	Viewing student’s schoolwork online	x		
	A trusted online guide to what’s useful and safe on the Internet	x		x
	Online tutoring	x		x
	Internet access via a game console or simple Internet appliance	x		
	ANTICIPATED PURCHASES AND MOTIVATIONS			
16.1	In next 12 months, anticipate family will purchase any of the following for use at home:	x		x
	Computer	x		
	Children's software / Software for teens	x		x

	Electronic video game systems	x		x
QST #	**QST**	**ADULT**	**CHILD**	**TEEN**
	Internet access	x		
	High speed telephone or cable connection	x		
16.2	Reasons household plans to obtain Internet access from home	x		
16.3	For whom will computer be purchased	x		
16.4	Types of software plan on purchasing in next 12 months	x		
	ATTITUDES			
18.1	Things that keep (target child) from using the Internet more often	x	x	x
18.2	How much do you agree or disagree with each of the following statements:	x	x	x
	The computer, like the TV, is something that helps keep the kids busy & occupied	x		
	The computer/Internet is more of a source of entertainment than education	x		
	The computer/Internet runs the risk of becoming just another commercial outlet	x		
	It is important for a child to be on the Internet	x		
	(Target child) influences your household purchasing of products & services	x		
	(Target child not using Internet from Home) I want to be on the Internet from home		x	x
	(Target child not using Internet from School) I want to be on the Internet from school		x	x
	Teachers know a lot about the Internet	x	x	
	(Target child's) school is doing a good job of using the latest Internet education tools	x	x	x
18.2a	Which statement do you agree with more…	x		
18.3	How valuable are each of the following to (target child's) education:	x		
	Television	x		
	Computer	x		
	Internet	x		
	DEMOGRAPHICS			
19.1	Marital status	x		
19.2	Description of household	x		
19.3	Employment status	x		
19.3a	Number of hours per week of work	x		
19.4	Primary occupation description	x		
19.5	Ever do any kind of work at home related to job or to supplement income	x		
19.5a	Number of hours per week worked at home	x		
19.6	Range of total annual household income before taxes	x		

19.7	Description of ethnic background	x		
19.8	First name	x		
QST #	**QST**	**ADULT**	**CHILD**	**TEEN**
19.9	Confirmation of phone number	x		
19.9a	Correct phone number	x		
19.10	Willingness to participate in additional brief follow-up research study	x		
19.11	Full name for follow-up purposes	x		
19.12	Email address	x		
19.12a	What email address should we use?	x		