## Digital Divide

# Blacksburg Electronic Village 1996 \& 1999 Community Surveys Summary of Findings 

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This summary of findings was compiled by Kim Kirn, Research Assistant to the BEV, and Andrea Kavanaugh, Director of Research. The results were obtained by running frequencies and crosstabulations on random sample telephone survey data, collected in 1996 and 1999 in Blacksburg and the local calling area. In 1999, data was collected on Blacksburg only. There were 558 total survey respondents in 1996, and 409 in 1999. Filtering for students and Blacksburg residents, there were 156 respondents in 1996 and 320 in 1999. Unless noted otherwise, numbers are for non-student Blacksburg residents.

The results were obtained by running a series of crosstabulations on the 1996 and 1999 data to gain a clearer picture of how those respondents with Internet access compare to those who claim not to have access to the Internet.

## Income and Internet Access

A crosstabulation using 1996 data, with "income" as the independent variable and "access to the Internet" as the dependent variable indicates a rather weak relationship between the two variables.

Table 1. 1996 Internet Access According to Income

| Internet Access | INCOME |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Less than 30K | $30-50 \mathrm{~K}$ | $50-70 \mathrm{~K}$ | $70 \mathrm{~K}+$ |
| Yes | $55 \%$ | $75.7 \%$ | $72.7 \%$ | $88.9 \%$ |
| No | $45 \%$ | $24.3 \%$ | $27.3 \%$ | $11.1 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%(51)$ | $100 \%$ |

Chi-square $=11.45$
Significance $=.022$
Running the same crosstabulation with the 1999 data, however, produces a clearer and more significant positive relationship between income and Internet access.

Table 2. 1999 Internet Access According to Income

| Internet Access | INCOME |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Less than 30K | $30-50 \mathrm{~K}$ | $50-70 \mathrm{~K}$ | $70 \mathrm{~K}+$ |
| Yes | $56.7 \%$ | $72.7 \%$ | $74.4 \%$ | $86 \%$ |
| No | $43.3 \%$ | $27.3 \%$ | $25.6 \%$ | $14 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

Chi-square $=.18 .77$
Significance $=.001$

## Education and Internet Access

A crosstabulation with independent variable "education" and dependent variable "access to the Internet" for 1996 shows that a positive and significant relationship exists between the two variables.

Table 3. 1996 Internet Access According to Education

| Internet Access | EDUCATION |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Some HS or <br> Less | HS Grad/ Some <br> Coll | Coll Grad/ <br> Some Grad | Comp Grad |
| Yes | $12.5 \%$ | $52 \%$ | $82.1 \%$ | $83.1 \%$ |
| No | $87.5 \%$ | $48 \%$ | $17.9 \%$ | $16.9 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

Chi-square $=27.36$
Significance $=.000$

Running the same crosstabulation for 1999 shows a similar positive relationship between education and Internet access.

Table 4. 1999 Internet Access According to Education

| Internet Access | EDUCATION |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Some HS or <br> Less | HS Grad/ Some <br> Coll | Coll Grad/ <br> Some Grad | Comp Grad |
| Yes | $62.9 \%$ | $68.4 \%$ | $83.6 \%$ | $90.5 \%$ |
| No | $37.1 \%$ | $31.6 \%$ | $16.4 \%$ | $9.5 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

Chi-square = 19.35
Significance $=.000$

It is noteworthy that the biggest change (from 13\% in 1996 to 63\% 1999) among respondents reporting they have Internet access, is in the education group of "some high school or less" ( all respondents are 18 years of age or older).

## Newspaper Readership and Internet Access

The results of a crosstabulation with "How Often Read Newpaper" as independent variable and "Internet access" as dependent show neither a clear positive nor negative relationship between the two, and the results are of moderate significance. It is interesting to note that the highest percentage of people claiming Internet access in 1996 read at least one newspaper once a week or a couple of times per week.

Table 5. 1996 Internet Access According to Newspaper Readership

| Internet Access | HOW OFTEN READ NEWSPAPER |  |  |
| :--- | :---: | :---: | :---: |
|  | Never - Couple <br> Per Month | 1-Couple Per <br> Week | 1-Couple Per <br> Day |
| Yes | $53.8 \%$ | $81.5 \%$ | $64 \%$ |
| No | $46.2 \%$ | $18.5 \%$ | $36 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ |

Chi-square $=6.37$
Significance $=.041$

Running the same crosstabulation with the 1999 data shows a positive relationship between newspaper readership and Internet access, but the association is not significant.

Table 6. 1999 Internet Access According to Newspaper Readership

| Internet Access | HOW OFTEN READ NEWSPAPER |  |  |
| :--- | :---: | :---: | :---: |
|  | Never - Couple <br> Per Month | 1-Couple Per <br> Week | 1-Couple Per <br> Day |
| Yes | $76.9 \%$ | $78.8 \%$ | $80.5 \%$ |
| No | $23.1 \%$ | $21.2 \%$ | $19.5 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ |

Chi-square $=.25$
Significance $=.88$

## Gender and Internet Access

Running a crosstabulation with independent variable "gender" (sex) and dependent variable "access to Internet" (internet) shows with moderate significance that more men had access to the Internet than women in 1996.

Table 7. 1996 Internet Access According to Gender

| Internet Access | Gender |  |
| :--- | :---: | :---: |
|  | Male | Female |
| Yes | $77.3 \%$ | $58.5 \%$ |
| No | $22.7 \%$ | $41.5 \%$ |
| Total | $100 \%$ | $100 \%$ |

Chi-square $=6.22$
Significance $=.013$

Results from running the same crosstabulation for 1999 indicate that the "gender digital divide" decreased over time, and that women are actually tied with men for Internet access. However, these findings are not significant.

Table 8. 1999 Internet Access According to Gender

| Internet Access | Gender |  |
| :--- | :---: | :---: |
|  | Male | Female |
| Yes | $80 \%$ | $80.5 \%$ |
| No | $20 \%$ | $19.5 \%$ |
| Total | $100 \%$ | $100 \%$ |

Chi-square $=.015$
Significance $=.90$

