Solving the Digital Divide

Juanita J Stone

Northcentral University

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## Introduction

The digital divide is the division or difference of access to technology for various reasons. One of the biggest "divides" is the lack of internet service and computer training based on location and income. The rural areas and the poor have less access to these technologies. This paper will explore five differences or "divides" by explaining what they are. It will also look at how the "divide" affects students and how to overcome this "divide".

## **Divide One**

## **Definition and explanation**

Divide one is the lack of internet service in poor families and the rural areas of the country. Third world countries are also affected in this manner. One of the biggest issues in the rural areas is it is not cost effective for companies to provide internet services for a small number of households in a remote location. Many poor families cannot afford the service. Epstein, Nisbet, and Gillespie call this the "haves verses the have nots" (Epstien, Nisbet, & Gillespie, 2011, p. 95).

### Effect on students

The effect on students is noticed when the students do not have the same advantages as students in larger cities. Many only have access to the internet at school and some areas do not have reliable internet service at school. They fall behind in using technology and being able to have the online resources for education.

#### **Strategies for overcoming**

One of the strategies is having companies offer service to these rural areas. This is beginning to happen now with more and more cable TV companies offering broadband internet

service with the TV service. They can offer this service at a lower price since it uses the same wiring that is in place for the TV service.

Some factions want the government to provide, pay for and manage this service. Others feel that private businesses should provide and manage the service. There is a middle road that could benefit these areas. The government could give tax breaks for companies that provide services for rural areas. These same incentives could be offered to companies that provide low cost services to the poor and low income families.

#### **Divide Two**

## **Definition and explanation**

Divide two is the lack of computer access to students. This can be caused by the cost of the equipment, or the age of the parents. Many parents do not want their children using a computer at home for various reasons. Some fear their students will play games and not use the computer for school work. This falls on the parents to supervise the students.

#### **Effect on students**

Students who do not have access to a computer will fall behind in the skills needed to use the technology. This will hinder the students when it is time to apply to college and completing college work. Cole states that "unequal access to resources further reduces poor and minority students' chances of receiving equal opportunities to learn" (Cole, 2008, p. 6).

## **Strategies for overcoming**

Educating the parents on how valuable a computer can be for their students in preparing school work and for college will help in this area. Low cost equipment made available for lower income families can assist in this area as well. Teachers also need to teach these skills to help all students prepare for college.

## **Divide Three**

## **Definition and explanation**

The third divide is the lack of computer skills in using general applications. This is closely related to the lack of equipment. Students who do not have as much time with technology or have not access at all are behind in using general software applications such as Microsoft Word, Excel, PowerPoint and other commonly used software.

## **Effect on students**

These students are not able to get jobs as easily because of the lack of software experience. They are not able to use the software to complete course work in college. They do not know how to research the internet for papers and other assignments. Students could be labeled dull instead of bright when they lack the skills to use technology. According to Askew and Carnell, "studies have also shown how much a labeling of a student as 'bright' or 'dull' will affect performance" (Askew & Carnell, 1998, p. 41).

#### **Strategies for overcoming**

Students who have access to computers develop the skills needed to use the technology. Teachers need to teach these skills in the classroom thinking ahead for college and not just high school. Programs to educate parents in using this software so they can assist their students at home can help. The more a student is able to use the technology the better they will be at using it. "Repetition and practice is a key principle of learning, and one that open learning courses facilitate" (Malone, 2003, p. 28).

### **Divide Four**

## **Definition and explanation**

The fourth divide is the lack of computer skills in using specialized applications. Some examples of this software would be video and audio editing; graphic design, financial, and web design are a few examples. Graves states that "it's nice to have options, but broad ranges in quality and price can be overwhelming." (Graves, 2012) Sometimes, it can be difficult to know which software is the best to purchase.

#### **Effect on students**

Students who wish to go into the field where this software is used will have a harder time getting into a college or trade school if they do not know how to use this software. With the use of online applications for colleges, more students are applying for the same number of spots available. This increases the competition for getting into the college of the student's choice.

## **Strategies for overcoming**

Encouraging software companies to donate software to schools is one way to enable students to learn this software. Special student pricing may allow students to have the software at home to work with. Many specialize software is expensive.

#### **Divide Five**

#### **Definition and explanation**

Divide five is who has the responsibility to provide the services and equipment for low income families and rural areas.

#### **Effect on students**

Students who cannot afford or have access to technology will fall behind in using the equipment and have a harder time getting into college or getting a job.

# **Strategies for overcoming**

While some feel that the government should pay for this others feel that private businesses should provide services. There is much debate. A middle ground would be the best way to go. The government could sponsor programs to give tax breaks to companies who provide services to the poor and rural citizens.

## Conclusion

Guidelines for schools in purchasing software packages and equipment should be put in place. One of the big problems is determining which equipment or software to purchase. "With the added fact that there are no standards for labeling apps as educational, consumers are left with a huge market to wade through" (Graves, 2012).

Schools try to purchase equipment that their students will be using in college and the job market. However with new technologies being developed schools cannot afford to change equipment and software every two or three years. Schools must determine which software and equipment can be used for the longest time. Private companies can solve this problem by donating some equipment and software to schools to enable students to have the best to work with.

#### References

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