Chapter 6 Lack of Technology in Urban Schools

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EXECUTIVE SUMMARY

Many times in urban schools, computers and learning software are either at a shortage or simply do not exist. In schools like that, the ratio of students to computers can be as high as 20 to one. This case study compares the learning technology resources and opportunities accessible to William and Terrance, two cousins who attended 4th grade in two different school districts.

BACKGROUND INFORMATION

For those urban schools that cannot provide simple necessities such as textbooks and heat or air conditioning, educational technology is defiantly at the bottom of the agenda. Such basics as computers and learning software are either at a shortage or simply do not exist. Many times in the urban schools the ratio of students to computers is as high as 20 to one. Without these resources, school graduates are not prepared for the world's demand of information literacy and technical skills. Research shows that although there are dramatic increases in the use of computers in the school system, children in public urban schools have less access to computers than those in the suburban and private school systems. As a result, many of the urban students are not prepared for the level of technology expected in colleges or among the work force.

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Because of the importance of computer access in everyday life, there is little wonder that such a large "digital divide" across school districts exists. While some students have unlimited access to computers and the Internet at any given time between school and home, others have minimal to no access at either location. Another discouraging fact is that this separation is ever growing. One source states that the technology gap between whites and minority groups has increased by five percent since 1997. Middle and upper class students, given access to technology resources are more likely to continue their education after high school and with a greater degree of success.

Research conducted in 1994 by Software Publishers Association showed that "educational technology has a significant positive impact on achievement in all subject areas, has positive effects on student attitudes, and makes instruction more student-centered". Studies also revealed a better success rate on standardized tests when the students were exposed to educational technology. With the results of many studies showing that students with more exposure to educational technology are excelling in present and future educational tasks as well as in future careers, it is critical that students in urban schools get the same opportunities in order to reach their full potential. Students, who are products of schools with limited access to technology, go out into the real world with major disadvantages.

THE CASE

William and Terrance were both in the 4th grade and are cousins. While William attended a school located in the middle-class suburb, Terrance attended Reagan Elementary, an inner-city public school in the same metropolitan area. William's school had a large amount of available computers and students were taken to computer lab four times a week. On the other hand, Terrance's school only had a handful of working computers that were shared between 1st, 2nd, 3rd, and 4th graders and only had computer lab time once a week. During William's lab time the students were exposed to many different computer applications, computer vocabulary, and different computer software programs to enhance their learning experience. During Terrance's computer class, the students were rushed through assignments. Terrance had to take turns with other classmates when doing hands-on assignments and did not get the full effect of putting into action what he had learned. To make matters even more challenging, Terrance did not have a computer at home.

However, his cousin William did have a computer at home. Because William had access to a computer at home, he benefited by being able to become more familiar with computers outside of school. Although Terrance was a bright child, his mother was disappointed to find during visits that William was a lot more comfortable with

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