ABSTRACT
        This study examined utilization of digital resources at two
different Native American tribal schools, one located in the Southwest and
another in the Northwest. Ethnographic methods were employed in the study to
explore the cultural issues involved in the use of computers in the tribal
schools. Site visits were conducted of the two schools. Observations on the
reservations and in the schools provided a picture of reservation life and
current computer usage. Extensive interviews with administrators and teachers
in the schools revealed information about the deeper cultural issues
underlying the reasons for tribal choices relating to computer use. Findings
indicated that the most important issue affecting technology use in these two
tribal schools involved the tribes' attitudes toward education. The biggest
difference between the two tribes was observed to be the commitment from the
administrators and each tribe's value of education. Administrators in the
tribal high school at the Southwest reservation were committed to improving
and bringing more resources to the school. With the exception of the one
technology instructor, the same observation was not made at the Northwest
reservation. The author concludes that the digital divide is not so much
caused by lack of funds and materials as it is by difference in cultural
values. (AEF)

The Digital Divide in Native American Tribal Schools

Two Case Studies

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Much has recently been written about the "digital divide" that exists among certain groups in this society. Recently, the National Center for Education Statistics reported that 63 percent of classrooms in our country are now wired for the Internet, but the number of wired high-poverty classrooms is only 39 percent (Revenaugh, 2000). Many researchers have focused on the lack of computer technology available to minorities in inner city urban schools (Roblyer, 2000). However, little research has been reported on the inequalities of Native Americans and their schools. This research study described utilization of digital resources at two different Native American tribal schools, one located in the Southwest and another in the Northwest.

Under the Bureau of Indian Affairs, a system of tribal schools is operated on Native American reservations in this country. Tribal sovereignty ensures that these schools are largely controlled by the local tribes, including decisions regarding curriculum and instruction (Deyhle & Swisher, 1997). An interesting phenomenon is how or whether the tribal leaders choose to incorporate technologies foreign to their culture, such as computers (Twist, 2000). The value placed on computers in education is much more dependent on culture and identity issues than on research evidence of successes of Native American children in computer contexts (e.g. Sower,

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1990). Access to the necessary infrastructure for technology is also a critical issue, and many reservations share this problem. The 1990 census reported that one in every three Native Americans live in poverty, compared to one in eight in the general population (Anderson, 1999). Whether the computer and the Internet become an integral part of the education system of tribal schools is largely a function of financial resources and the culture, and these decisions are made by local leaders (Anderson, 1999).

Methodology

Ethnographic methods were employed in this study to explore the cultural issues involved in the use of computers in the tribal schools. The researcher conducted site visits of two schools. Observations on the reservations and in the schools provided a picture of reservation life and current computer usage. Extensive interviews with administrators and teachers in the schools revealed information about the deeper cultural issues underlying the reasons for tribal choices relating to computer use. Each of these schools was described in a case study manner, and then the two were compared.

The two reservations included in this study were selected based on the recommendations of two "contacts" that had spent time on each reservation. This selection method was deemed necessary because of the potential difficulties in gaining access to Native American schools and educators. Using the contacts' connections as a starting place, each reservation was observed for approximately one week. While no attempt is made to represent these two cases as models of other tribal schools, they do enable us to better understand the two contexts in considerable detail.

Results and Conclusions

As I gradually approached the reservation land of the "southwest school" my surroundings looked more and more unappealing. I saw the utter desolation of this community for the first time. Isolation was an understatement. There appeared to be absolutely no resources. It looked like the most invaluable piece of land in this region. Just judging by how remote and barren the land was, my impression was that this land was chosen to deliberately ostracize these people.

The following day I went to the high school and was expecting to find a school that resembled the description of the East St. Louis Senior High School that Jonathan Kozol vividly spoke of in his book _Savage Inequalities_. As I drove up to the school I thought something was drastically wrong. The vision before me was out of place. Driving up the long driveway to the school I saw in the distance a beautifully painted new looking building. Walking into the school I was utterly dumbfounded. This school looked entirely new. I'd never seen a more beautiful facility. I visited two computer labs (three including the library) and I couldn't believe it when the librarian told me that they also have 50 I-books (laptops) for students to check out and take home. Needless to say the entire community took pride in this school and my interviews showed that the teachers and administrators felt the same. The tribe and the administrators' value of education and resourcefulness were outstanding; their work led to a simply marvelous school.

After seeing what I saw at the first reservation I was not only ready for the worst at the Northwest reservation, but also expecting it. This was a completely different change in scenery. There were natural borders around the reservation; mountains almost completely surrounded the reservation and the main entrance to the reservation was through a "gap" or break in the mountain. Driving to the school I noticed some distinct differences. The first was the fertile

land. One of this tribe's major industries was farming, besides their mill and lumber industry. I was surprised to find that this tribe was rich.

The contrast in the reservations was practically night and day. This Northwest tribe had fully assimilated and adapted the "American way" so much that they were suffering from what Robert Putnam calls the bowling alone theory. He feels that this loss in "social capital," satisfaction for communal bonds, will lead to dysfunction in society (Putnam, 1998). The main symptom of this dysfunction could be seen in the second Tribal School. The school was very telling for two reasons. First, the enrollment of the school was low. Approximately 70 students attended the Tribal School. The great majority of the reservation children went to the public school located on the reservation or another that was just on the fringes of Indian land. Second, in this land of plenty, the Tribal School more resembled one of the schools Kozol spoke of in _Savage Inequalities_. The high school was located in what looked like an old day care or kindergarten. The school was grotesquely under-funded; resources were scarce and they even had to use the stage in the gym for a classroom.

The computer lab had about 30 computers. 25 of them were obsolete in the late 80's, and half of those worked. Only five of them were from this past decade. I spoke with the instructor for some time. He explained how the leaders in the tribe placed no value on education. He explained that he had written many letters asking for funds to buy computers for the school, but he would always get an unfavorable response. I found this amazing because the tribe was so wealthy. This tribe did not have to wait for technology funds to come from the BIA. If they chose to, they could easily place a computer in every household in the tribe. This neglect of their own education further displayed their disconnectedness with their community and the future. The instructor brilliantly stated that information and technology were the future and their not moving

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towards it now would ultimately disadvantage them and the tribe in the future. However, he was unable to convince the tribal leaders.

Summary

In summary I found that the most important issue affecting technology use in these two tribal schools involved the tribe's attitudes toward education. The biggest difference I saw in the two tribes was the commitment from the administrators and the tribe's value of education. The administrators in the tribal high school at the Southwest reservation were committed to improving and bringing more resources to that school. Except for the one technology instructor, I did not get the same feeling at the Northwest reservation. The first tribe placed a strong value in education; it was truly a community affair in which everyone, not just the students, benefited. This reflected their strong "social capital." Despite their extreme poverty and social problems the community bond was very strong. This simply did not exist in the second tribe, which fully adopted American capitalist culture including a small version of our inadequate educational system. There was evidence of a certain complacency. There was wealth and good living for today, and this seemed to make the tribe less interested in progressing for tomorrow. In contrast, the Southwest tribe was enmeshed in poverty and was investing in education as a means of improving their lives. The Northwestern tribe did not seem to understand that without education and technology for the future, their good life could only diminish. Thus, these two schools illustrate very different approaches to the use of technology. In these cases, the digital divide is not so much caused by the lack of funds and materials as it is by the difference in cultural values.

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