

Forty Acres and a School:

The Freedmen's Bureau and Black Literacy Rates

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UCI Graduate Student Seminar 2006

Abstract

The racial gap in educational achievement has been large and mirrored inequality in economic outcomes. While economists such as Robert Margo have done an excellent job in documenting these gaps from 1880 onwards, much of the literature ignores the period immediately following emancipation. The Freedmen's Bureau was a governmental agency set up to assist freed slaves in their transition to their new lives. Perhaps its most important function was in establishing a system of schools in the South. I have obtained data from the US archives on Freedmen Bureau schools. Coupling this information with individual census data, I estimate the effect that these schools had on black literacy and school attendance rates. While previous scholars have minimized the impact of the schools this paper suggests they had a strong effect. Estimates indicate counties with bureau schools had literacy rates nearly 35 percent higher and school attendance rates over 100 percent higher than counties without. These results suggest the Freedmen's Bureau schools had a large impact on the economic and social development of the South.

1. Introduction

In the aftermath of the Civil War, the United States faced a tremendous challenge in rebuilding the nation. The War ravaged the country by taking the lives of thousands of young Americans, and destroying massive amounts of the nation's capital stock. While these ravages posed a big enough challenge on their own, the United States faced additional challenges such as the transition in the South from chattel slavery to free labor contracts. This burden was especially onerous for African-Americans because they had been denied basic human rights for generations. In particular, many states passed laws making it illegal for slaves and free blacks to receive an education. As a result, when given their freedom, many former slaves lacked the skills necessary to earn high wages and protect themselves from discrimination and exploitation. In addition, they were devoid of the educational facilities necessary to obtain these essential skills.

The Bureau of Refugees, Freedmen, and Abandoned Lands, commonly known as the Freedman's Bureau, was established on March 3, 1865. The bureau was at the heart of Congressional Reconstruction and led the effort in trying to bring about some semblance of equality and justice for African-Americans. Much of its early work focused on relief and welfare services including the issuing of rations, and establishing hospitals. However, eventually much of the bureau's activities focused on trying to educate the freedmen. To help achieve this goal the bureau established schools, contributed to teacher salaries, furnished school buildings, paid rent, provided military protection, and coordinated relief organizations. Towards the end of the bureau's existence its educational efforts dwarfed the spending and manpower devoted to its other activities. Working in tandem with charitable organizations, the bureau helped set up and maintain a large part of the educational infrastructure used to educate the freedmen during the post-bellum period.

Study of this period brings to mind many questions. First of all, how effective was the bureau in helping to establish schools throughout the southern and border states? Secondly, were these schools effective in actually educating the freedmen? Did educational efforts lead to substantial increases in literacy and human capital? Surprisingly very little research has been done by economists on these issues. Its omission from the research literature is all the more surprising given the volumes of records that the bureau kept of its activities.

This study attempts to fill in some of the historiography and test some of the basic questions about the effectiveness of the Bureau. Looking at all thirteen Southern and Border States, this paper estimates the effect that having a Freedmen's Bureau school in one's county had on literacy rates. The results of this paper show there is strong evidence suggesting that Freedmen's Bureau schools had a very significant and positive impact on black literacy and school attendance rates.

The paper will be organized in the following way. In section 2, a general history of the Bureau of Refugees, Freedmen, and Abandoned Lands will be outlined. This section is included to give a historical background to the political and organizational context of the bureau's activities. Section 3 discusses some of the economic and historical literature that is relevant to this study. In section 4, the data sources that are used in this study are detailed. Section 5 presents the results and the methods used to estimate whether these schools were effective in increasing the literacy rates and attendance rates of blacks. Finally, section 6 will discuss some futures extensions to this research and conclude the paper.

2. A History of the Freedmen's Bureau

After the American Civil War the Southern landscape had been completely transformed. Years of battle had decimated the population, destroyed massive amounts of capital, and left farmland dilapidated. Complicating matters, nearly half of the population was emancipated from a state of bondage and forced to interact with one another in this war ravaged region. Accounts coming from missionaries, governmental agents, and federal troops helped bring awareness and attention to the treacherous conditions that southern blacks faced. According to Peirce, "the negro question now pressed itself upon the northern mind with greater vividness and urgency than ever before. These creatures must be fed, clothed, and usefully employed; they ought to be educated, intellectually and morally¹".

At the point of emancipation there was a severe shortage of black schools in the South. Pre-emancipation blacks were barred from many basic rights and activities. One of these was the

¹ Peirce, Paul Skeels, *The Freedmen's Bureau: A Chapter in the History of Reconstruction*, pg.2.

right to obtain an education. According to Washington² “it has been the general policy of the slave system in all ages to keep the slaves in ignorance as the safest way to perpetuate itself”. Even if they were free, blacks were not given the same rights and opportunities as whites. It was policy in the sixteen slave states to fine, whip, or imprison those who gave instruction to blacks or mulattos. There were few laws more strictly enforced than those prohibiting the giving or receiving of instruction by slaves or free blacks. In many states the punishments for teaching a person of color was quite severe. In Georgia if anyone were to teach a slave or free black to read or write they were subject to imprisonment and a \$500 fine³.

There are a number of reasons that these laws may have been passed. One reason might be a fear that educated slaves would become lazy, defiant, and more apt to run away. Frederick Douglass was one of the most famous escaped slaves in the pre-Civil War era. In his autobiography, an early experience with education seemed to spark an inner pride and desire to escape from his state of bondage. In his account he actually agreed with comments made by his former owner Mr. Auld who stated a slave “should know nothing but to obey his master. Learning would spoil the best n____r in the world. He would become unmanageable, andmake him discontented and unhappy⁴”.

Many historians feel that to educate African-Americans would be akin to acknowledging their humanity. Because human slavery ran counter to the United States motto of “liberty and justice for all”, slave owners worked hard to dehumanize their chattel. The strict regulations on black education helped to formalize this racial dehumanization.

Another reason for such laws could be economical. White high-skilled and professional workers would be in direct competition with educated blacks. As such they would be more likely to support any such measures to limit freedmen and slave education. Ransom and Sutch feel that the scarcity of slave literacy and education was due to economic factors. They feel it was actually cheaper to hire educated whites than provide schooling for slaves. While this argument makes sense in the context of investment in slaves’ human capital, it does not explain the application of the statutes to the free colored population.

These laws severely restricted the educational opportunity of blacks-especially access to formal schooling. This lack of schooling created a large dilemma when the slaves were

² Washington, Booker T., *Education of the Negro*, 1899, pg. 10.

³ Williams, Heather A., *Self Taught*, Pg. 203.

⁴ Douglass, Frederick, *Narrative of the Life of Frederick Douglass*, Pg.31.

emancipated, as most freedmen were unable to read or write. This created great problems for blacks in a free labor system. Freedmen were repeatedly taken advantage of as they were often unable to read or draft contracts. Also, a general lack of human capital limited the professional opportunities that were available to blacks. Thus when emancipated, there was a great demand for freedmen schools.

Reports from the battlefields display this strong desire of freedmen to become educated. Colored regiments continually requested spelling books and teachers to help them in their academic endeavors⁵. In refugee camps, African-Americans clamored for education and sought to learn how to read. Additionally, literate blacks often aided in teaching others how to read and write, occasionally setting up makeshift schools. Freedmen desired to read for political, economic, and spiritual reasons. Many army reports express an unbelievable enthusiasm for schooling on the part of the freedmen.

Many organizations attempted to aid the newly freed slaves. The American Missionary Association was among the largest of these philanthropic organizations. Formed in 1846 as a protest against the silence of other missionary agencies regarding slavery, the association for years had supported freedmen who had fled to Canada⁶. When liberation reached the American South the association rushed to the aid of the freedmen. The AMA provided food, clothes, and rushed to establish schools to educate blacks.

In addition to private organizations, calls for help reached the floor of the United States legislature. Congress attempted to address some of the many problems that had developed in the American South. The American Freedmen's Inquiry Commission was set up to investigate what would be the best possible way of dealing with the litany of problems at hand. After hearing testimony from blacks and whites they called for the creation of a Bureau of Emancipation to "exercise guardianship over the freedmen" and insisted that it not become a permanent institution⁷. Instead of stoking dependence on the government, they desired the freedmen to be able to provide for themselves by giving them the tools to be self-supporting. One large component of this self-sufficiency was the establishment of an educational system for blacks.

⁵ Williams, Heather A., *Self-Taught: African American Education in Slavery and Freedom*, pp. 45-53.

⁶ Richardson, Joe M., *Christian Reconstruction: The American Missionary Association and Southern Blacks, 1861-1890*, pg.vii.

⁷ Foner, Eric, *Reconstruction: America's Unfinished Revolution*, pp. 68-69.

This inquiry commission examined many issues and came up with some ideas that would eventually become the foundation for the Freedmen's Bureau Law.

On March 3, 1865 with the stroke of a pen, Abraham Lincoln signed into existence the Bureau of Refugees, Freedmen, and Abandoned Lands. The bill placed the bureau into the U.S. Department of War. The President was to appoint a commissioner to head up the new bureau. In addition, each insurgent state was to have an assistant commissioner. Lincoln decided to select General Oliver O. Howard as commissioner of the bureau. However, before he could select Gen. Howard, the president was struck down by John Wilkes Booth. Taking his place in office was Andrew Johnson who gave every indication that he would follow the President's policy on Reconstruction. He promptly honored Lincoln's choice and selected Howard as head of the new entity, as well as, gave speeches where he intimated to Republicans that he would follow the previous administration's policy. According to Nash⁸, the "Radicals were delighted...to have Vice President Andrew Johnson, who they had good reason to suppose was one of their number, elevated to the presidency". While hopes were high that Congress and the new president could work together, soon after taking power Johnson and the "Radical" Republicans would scarcely agree on anything the remainder of his term. Johnson pardoned almost all Confederate soldiers and didn't speak out against the black codes of the South, which tried to bring blacks back to a position of pseudo-slavery. He desired the Confederate states to be accepted back into the Union without the condition of ratifying and adopting the 14th Amendment in their state constitutions. Over the years Congress and Johnson would become ensnared in bitter arguments and battles. Eventually the battles reached a point where Johnson was brought up on charges of impeachment. The Freedmen's Bureau was extremely disliked by Johnson and bills dealing with it were treated with the same spirit of partisanship and extreme rhetoric.

The bill signed by Lincoln established the bureau during and for a period of one year after the Civil War. This language was somewhat ambiguous, and with the surrender of Confederate forces military conflict had ceased. Because of this, people began to talk about when the bureau would be discontinued. Consensus seemed to imply that if another bill wasn't brought forth that the bureau would be discontinued in early 1866. In response Congress got to work on a new Freedmen's Bureau bill.

⁸ Nash, Howard P., *Andrew Johnson: Congress and Reconstruction*, pp. 22-23.

While the first bill established some very important functions it was rather weak in some other areas. The original law didn't make an explicit appropriation for education. Nonetheless, General Howard found imaginative ways to assist the educational efforts of Northern philanthropic societies⁹. The bureau provided transportation to and from the North for teachers, as well as, allowing them to buy government rations. It also served as a great coordinator and facilitator of the work done by the Northern Societies. In addition to direct help, the judicial functions and military presence helped limit violence and helped encourage the establishment of schools. However, the bill didn't have any appropriations for superintendents of the bureau, or for the establishment of schools.

General Howard and many of his officers reported on the great need for the bureau and pushed for its existence indefinitely or at least until the freedmen were in a less vulnerable position. After listening to the reports and the recommendations of General Howard, a new bill was crafted by Mr. Trumbell, a fairly moderate Republican. The new bill proposed the bureau remain in existence until abolished by law. It also provided more explicit aid to education, land to freedmen, and the protection of black's civil rights. The bill passed in both the Senate and house and was sent to Andrew Johnson, who promptly vetoed the measure. This veto came as a shock because Johnson assured General Howard and Senator Trumble that he would support the bill¹⁰. The Senate and House passed a bill that addressed some of the complaints that Johnson had with the bill, including limiting the length of the bill to two more years. However, even after this watering down of the bill, it was once again struck down by a veto. This action officially established a policy of open hostility between the legislative and executive branches. The difference this time was the Senate had enough votes to override the president's veto. Overriding a veto was very rare up until this time. However, after the passage of this bill it became mere commonplace for the remainder of Johnson's term.

The new bill gave fresh legs to the educational efforts of the bureau. Under the original bill the bureau had tried to encourage the schooling of the freedmen. However, the financial resources and the few functions that the bureau was authorized to undertake limited the extent to which it was able to assist. Much of the early work in schooling was done by a number of benevolent and religious Northern societies. However, the bureau provided an essential role in

⁹ Richardson, Joe M., *Christian Reconstruction: The American Missionary Association and Southern Blacks, 1861-1890*, pg. 82-83.

¹⁰ Nash, Howard P., *Andrew Johnson: Congress and Reconstruction*, pg. 72.

organizing and coordinating these organizations in their efforts. While the limits of the original bill hamstrung the efforts of agents, the new bill changed the situation, as it widened the purse strings and functions of the bureau in the area of education. Gen. Howard appointed Rev. John W. Alvord as Inspector of Finances and Schools. He tried to coordinate the various societies in setting up schools that would be convenient to the freedmen. Among the provisions of the new bill were: the appropriation of salaries for State superintendents of education, the repair and rental of school buildings, the ability to use military taxes to pay teachers' salaries, and the establishment of the education division as a separate entity in the bureau. This new separation allowed Rev. Alvord to drop his involvement in finance and focus his efforts on pedagogy as the General Superintendent of Education.

These new resources were used to great success as enrollments at Bureau-financed schools grew quickly, new schools were constructed in a variety of areas, and the quality and curriculum of the schools was improved. While work in the educational division was furious, many of the other activities of the bureau were winding down. On July 25, 1868 a bill was signed into law requiring the withdrawal of most bureau officers from the states, and to stop the functions of the bureau except those that were related to education, and claims. Although the educational activities of the bureau were to continue for an indefinite period of time, most state superintendent of education offices had closed by late 1870. On November 30, 1870 Rev. Alvord resigned his post as General Superintendent of Education¹¹. While some small activities of the bureau continued after his resignation, these activities were scaled back greatly and largely consisted of correspondence and school reports. Finally due to lack of appropriations the activities of the bureau ceased in March 1871.

The expiration of the bureau was somewhat anti-climatic. A number of congressmen wanted to establish a permanent bureau or organization for blacks so that they could regulate their relations with the national and state governments¹². However, this concept did not receive enough support to pass a bill. Over time the appropriations began to get smaller and smaller, and the urgency to work out a proposal for transfer expired in a manner similar the bureau itself. Thankfully the infrastructure built up by work of the bureau wasn't allowed to merely wither away. Instead the bureau in 1869-70 began to deed school property it owned to educational

¹¹ National Archives, "Records of the Education Division of the Bureau of Refugees, Freedmen, and Abandoned Lands 1865-1871", Microcopy No. 803, Washington: National Archives Microfilm Publications, 1969, pg. iv.

¹² Hyman, Harold M., *The Radical Republicans and Reconstruction 1861-1870*, pg. 226.

societies and the states. “Property so deeded was to be devoted forever to educational purposes¹³.” While this may sound promising many of the aid organizations relied heavily upon the bureau for its funding. The elimination of this essential funding brought with it dire consequences for societies such as the AMA. The year funding was eliminated, the number of teachers employed by the AMA dropped by over a third. Many other school facilities were turned over to state and local school boards. However, this transfer left the fate of black education in a precarious position. No longer was the Federal government overseeing black education. Instead responsibility was largely turned over to the state and county governments of the South. These states were to provide an adequate, at least close to equal, education for blacks. This prospect seems highly unlikely considering that blacks in these states were traded as chattel less than ten years prior.

3. Literature Review

Economists have long pointed out the link between educational achievement and labor market outcomes. Many scholars have tried to estimate what effect educational trends have had on income inequality between racial groups in the United States. James Smith¹⁴ has done some work trying to explain the factors that have influenced the racial wage gap over time. He found that over the last 100 years, racial differences in schooling have had a large effect on the racial wage gap and can explain over a third of its magnitude. However, his work found that education was only part of the answer and could not account for the persistent income differentials of today. Robert Margo improved Smith’s estimates showing that other researchers have made errors in measuring past educational gaps¹⁵. More specifically he found that the majority of black schools were devoid of grades, attendance was much more sporadic, and that the length of the school term was much shorter¹⁶. He argues that researchers such as Smith have not adequately accounted for quality in education. This omission minimized the gap in educational attainment

¹³ Richardson, Joe M., *Christian Reconstruction: The American Missionary Association and Southern Blacks, 1861-1890*, pg. 83.

¹⁴ Smith, James P., “Race and Human Capital,” *American Economic Review*, September 1984.

¹⁵ Margo, Robert A., “Race and Educational Attainment,” *American Economic Review*, September 1986.

¹⁶ Margo, Robert A., “Educational Achievement In Segregated School Systems: The Effects of “Separate-but-Equal”,” *American Economic Review*, December 1986.

between whites and blacks in the late 19th Century to early 20th Century. After making his corrections Margo finds that much more of the racial wage gap can be explained by the black and white education levels over the past 100 years. His work points out the strong explanatory power of education and differences in human capital in economic outcomes.

A number of economists have studied in depth the educational system of the South. In particular, scholars have looked at discrepancies educational funding. Robert Margo¹⁷ constructed estimates of per pupil school expenditures by race in a number of Southern states. His estimates show that in many states per pupil spending was fairly equitable in the decade following the bureau's activity. However, over time expenditures diverged greatly, as expenditures for whites increased sharply and those for blacks remained stagnant. Jonathon Pritchett¹⁸ has written about the educational system of the South in the decades following the Civil War. His work explained how schools set up in the South were segregated, and remained that way even after being incorporated into the states' school systems. Facilitated by political disenfranchisement, it was used by whites in the South to misallocate local and state school funds.

Although a number of economists have examined black education in the Jim Crow South from 1880 onwards, very little work has been done on the time period of 1865-1880. In particular, economists have largely ignored detailed study of the educational efforts of the Freedmen's Bureau. In the book, *One Kind of Freedom*, Ransom and Sutch study the condition of southern blacks in the post-bellum period. The conclusion of the authors is the actions of racist individuals helped limit the opportunity of blacks through institutions. Mentioned specifically is coercion applied by white supremacists to deny blacks the right to ownership of property. In addition, they mention inadequate educational funds and facilities inhibiting black economic progress. The authors mention the relative effectiveness of the bureau in establishing schools. "Unlike the southerners' experience with the privately established school, informal social pressure had no effect on the Freedmen's Bureau agent or the Yankee schoolteacher¹⁹." The authors credit the bureau for helping to set up schools. Most significantly, they feel that the

¹⁷Margo, Robert A., *Disenfranchisement, School Finance, and the Economics of Segregated Schools in the U.S. South, 1890-1910*, 1985.

¹⁸ Pritchett, Jonathon B., "The Racial Division of Educational Expenditures in the South, 1910," *The Journal of Economic History*, June 1987.

¹⁹ Ransom, Roger L. and Richard Sutch, *One Kind of Freedom: The Economic Consequences of Emancipation*, Cambridge: Cambridge University Press, 2001.

true legacy of the bureau was instilling a belief in universal education for whites and blacks in the South. While they applaud the bureau for establishing this belief they also minimize the bureau's actual impact, pointing to the low rate of adult black literacy in 1870.

Historians have given the educational efforts of the Freedmen's Bureau a good deal of attention. Paul Peirce²⁰ wrote an account of the bureau's activities only approximately twenty years after its elimination. Peirce cites the creation and encouragement of "larger and higher institutions" as the bureau's most substantial accomplishment. However, he minimizes the impact that the bureau had in creating a primary educational system. This mixed review of the bureau's educational achievements was not shared by Booker T. Washington²¹, who felt "no money was ever more wisely or beneficently expended". Disagreeing with Peirce he felt the system set up under the Freedmen's bureau "became the basis if not the inspiration of the public school system" of the South. Washington presents a number of facts and figures of the bureau. He states the total expenditures of the bureau, and a few select statistics on the attendance and enrollment of black pupils. While he constructed tables on black schools in the mid-late 1870s, he doesn't give any substantial statistics or tables examining the impact of the Freedmen's Bureau schools.

In recent years a number of works have debated the relative roles of the actors in constructing freedmen schools. Jacqueline Jones²² has stressed the importance of Northern white and black teachers that voluntarily traveled great distances to teach in the South. These teachers risked life and limb to aid in the educational pursuits of the freedmen, and according to Jones had a large impact on the achievements of southern blacks. While acknowledging a large role for the effort of "yankee school marms", she also cites the essential role that the army and Freedmen's Bureau played in establishing schools. Heather Williams²³ stresses the role that southern blacks played in their own education. Repeatedly, army reports comment on the desire for freedmen to become educated, and their dedication to actively pursue it. This pursuit included both mental and physical dedication. Williams repeatedly gives accounts of soldiers demanding more learning materials and their dedication to learning how to read. In addition, freedmen dedicated themselves physically by helping to construct makeshift schools. While stressing the importance

²⁰ Peirce, Paul Skeels, *The Freedmen's Bureau: A Chapter in the History of Reconstruction*, 1904.

²¹ Washington, Booker T., *Education of the Negro*, New York: Department of Education, 1900.

²² Jones, Jacqueline, *Soldiers of Light and Love: Northern Teachers and Georgia Blacks, 1865-1873*.

²³ Williams, Heather A., *Self-Taught: African American Education in Slavery and Freedom*

of the freedmen herself, the Freedmen's Bureau shows up repeatedly in her work. She credits the bureau for organizing and demanding aid from Northern societies, providing books and other materials, transporting teachers, and procuring teachers and school sites.

Although a number of historians and economists have commented on the impact of the Freedmen's Bureau schools, none have quantitatively estimated the impact that they had. This paper attempts to fill in this gap in the literature. More specifically, this paper will estimate the impact having a Freedmen's Bureau school in one's county had on the probability that an African-American child was literate.

4. Data Sources

The schooling data used in this study was obtained at the National Archives in Washington D.C. from the State Superintendents' reports of the Freedmen's Bureau. Each State Superintendent of Education was required to send monthly reports to J.W Alvord, General Superintendent of Schools, detailing the conditions of freedmen schools. Originally these reports were narrative and completely handwritten and gave a qualitative analysis of educational conditions. These reports included a lot of information on how the bureau was received by blacks and whites, how schools were running, where they were located, and general suggestions and remarks. Additionally, some reports contained more detailed information such as the number of teachers, students, and schools in operation. However, these early quantitative reports are fairly sporadic and not consistent month to month in the statistics they reported.

In response to this problem of inconsistency, beginning in 1866 the bureau required State Superintendents to fill out a form on schooling conditions. This form was standard for all states and regions. It was sent out to individual schools and districts and was to be filled out by teachers and administrators and returned to the state superintendent's office. Afterward the State Superintendent was required to add up all the information for schools in the state and send the reports to J.W. Alvord. In addition to being standard, these forms were extremely detailed and contain a wealth of information. In many states every individual bureau school in operation is listed along with its county and/or city. From these records we are able to identify nearly all of

the bureau schools and the counties that they operated in for the sixteen states that received educational aid from the Freedmen's Bureau.

To measure literacy we turn to the Census of 1870. The Census of 1870 seems to be appropriate for this particular project for a number of reasons. One would expect that increased educational opportunities would take some time to translate itself into increases in literacy. For one there is quite a steep learning curve for students who have been previously unexposed to formal schooling. Besides the mental challenges, there would be a large amount of adjustment in the behavior of new students. The vast majority of bureau schools were set up from 1865-1868. As such, the activities of the Freedmen's Bureau had time to take hold and we would expect the effects to have shown up in the literacy data by 1870. Another reason why this data is appropriate is that it closely correlates with the end of this policy regime, as bureau activities started to wind down at approximately at this time. Thus, the Census of 1870 seems to have been a well timed snapshot of the effects of bureau policy.

Census data was obtained from the IPUMS extract using the black over-sample. This is individual data and includes three key literacy and educational variables- whether the individual is attending school, can read, and can write. In addition, the data includes a litany of other personal and familial characteristics such as age, sex, race, wealth, working status, whether their parent was literate, state of residence, metro status, as well as, many others. Besides individual data, we supplement our analysis with county level census data from 1860 and 1870. This county level data is used to control for a number of factors that may have an effect of literacy.

The measure of literacy that is used in regressions is whether someone is able to read. This includes those who can read and write, as well as, those who can just read. This measure of literacy was chosen as it was deemed most relevant to the personal, political, and economic well-being of an African-American in 1870. The ability to read provided many protections and checks from the rampant discrimination faced by blacks. The ability to read allowed one to interpret contracts, agreements, and trade and instruction manuals. Additionally, the ability to read allowed Southern blacks access to philosophy and politics, spiritual scriptures, and the news of the day. In essence, the ability to read opened up a whole new world to the freedmen.

The individuals that we focus on in our analysis are 10-15 year old blacks and mullattos. This age group was chosen as it would seem to be most affected by the presence of the bureau schools. There are two main variables of interest in this study. First, we examine a dummy

variable that equals 1 if a county reported having a Freedmen's Bureau aided school in March 1868. Second, we examine the concentration of bureau schools, measured as the number of schools in operation in March 1868 divided by the black population in that county in 1870. The month of March was chosen by the researcher as it was the month that had the most schools reporting from year to year- meaning we are most likely to capture all of the schools in existence at this time. In addition, the year 1868 was chosen because education does not immediately lead to literacy. Teaching students devoid of previous educational opportunities takes a good deal of time and patience on the part of instructors. Two years was seen by the researcher as an adequate time to see the effects of this new educational infrastructure on black literacy rates.

Table one presents the summary statistics for African-Americans 10-15 years old in the sample. From this table, there are a couple of statistics that jump out. First of all, the literacy rate of our sample is 25.3 percent. Considering that it was illegal to teach, even free, African-Americans in the South to read prior to the Civil War, this seems like a very high rate of literacy. Secondly, 64 percent of our sample lived in a county that had a freedmen's bureau school. This indicates that the bureau was at least marginally within reach of a large portion of the black population. While the percentage of counties with bureau schools is quite high, the concentration of schools is quite low. In counties with bureau schools there was approximately one school per two thousand African-Americans.

5. Results

While a number of researchers have credited the Bureau for instilling a belief in universal education, many have minimized the impact the schools had directly on literacy rates. While this claim has been made repeatedly, little, if any, empirical work has been done on the subject. This analysis attempts to address this gap in the literature by estimating whether the Freedmen's Bureau assisted schools increased black literacy rates. More specifically, if an individual had a Bureau-aided school in their county, did it increase their probability of being literate?

The Freedmen's Bureau provided a large amount of funding to establish a system of education for African-Americans. While blacks were vigilant in their efforts to start their own schools, it is doubtful that they would have been able to educate themselves to a similar extent in

its absence. First of all, it is doubtful that funding would have come from the state or local governments. The Southern states would have been very hesitant to expend any money on black education- as it was illegal to educate blacks just a few years prior. Secondly, there were very few trained southern black teachers to handle the task of educating the freedmen. The Bureau aided in the procurement, transport, and feeding of “Yankee School Marms” that formed a majority of teachers until more southern blacks became educated. Thirdly, the funds provided by the bureau allowed educators to escape the burden of tuition sustainability. While most bureau schools asked for tuition, schools were allowed to teach those students financially unable to pay it. If a family could not afford full tuition, the rate was lowered or dropped, and their children were still allowed to attend. This financial freedom was made possible by bureau funds, paying the rent and a large portion of school costs. The decreased financial burden allowed educational opportunities to be taken advantage of by a wider swath of the black population. In its absence, blacks would have likely been educated in inferior facilities, by teachers with less education and experience, and forced to pay much higher tuitions crowding out a large number children interested in obtaining an education.

Our most simple test of whether the bureau schools had an impact is to compare literacy rates in counties with bureau schools to those without. Figure 1 shows the literacy rates for African-Americans 10-40 years old in counties with bureau schools and those without. The graph shows that individuals in counties with a Freedmen’s Bureau school had much higher rate of literacy than those in counties without such schools. This difference is most pronounced for those under 21 years old. Among those twenty five years and older the difference between counties appears to disappear completely.

While this figure points to the existence of an effect we are concerned about the possibility of a treatment bias in the results. To help control for this possibility it is useful to turn to regression analysis. It is quite plausible that the bureau only aided and founded schools in states with higher literacy rates. To address this concern we use dummy variables for each state. In addition to state differences, there are a number of personal and county characteristics which could be driving the results. Specifically, it is possible that the Freedmen’s Bureau only established and aided schools in counties where conditions were most conducive to freedmen’s education. This would include establishing schools in urban areas, areas of greater wealth, higher rates of literacy, and areas where there were a higher proportion of free colored individuals.

These characteristics could be tampering our estimates. To control for this we estimate a probit model outlined in equation one, where X_i is a vector of individual and family characteristics, Ψ_C is a vector of county characteristics, and $State_s$ controls for state differences in literacy rates.

$$(1) \quad \text{Prob}(\text{Can Read} = 1) = f(\alpha + B_1 \text{FBSchool} + B_2 X_i + B_3 \Psi_C + B_5 \text{State}_s + E_i)$$

A variety of variables are used in the regressions, including personal and real estate wealth, whether someone resided in a farm area, working status, parental literacy, and number of siblings.

The coefficients of this equation are estimated using a probit model. The results of this regression are shown in table 2. Coefficient estimates are marginal effects calculated at the sample mean for continuous variables, and the marginal effects of a discrete change for dummy variables. The standard errors are clustered by county. The main subject of interest is the Freedmen's Bureau School variable in each of the regressions. This coefficient is the estimated effect from having a bureau school in one's county. In each specification the coefficient on this variable is positive, large in magnitude, and statistically significant. The coefficient estimates predict that the existence of a bureau school in a county increased literacy rates between 7.5 and 8.3 percentage points. Given that the mean literacy rate for blacks in this age group was 25.5 percent, these coefficient estimates are extremely large in magnitude. In fact they indicate that literacy rates in counties with bureau schools were 37-42% higher than those in counties without such schools. In columns 2 and 3, we add the variables `dad_read` and `mom_read`, which indicate whether an individual had a mother or father living in the household that was literate. The coefficients for these variables are very large in magnitude and statistically significant. These results illustrate that a parent's literacy is a strong predictor of whether a child is literate or not.

Although these regressions point to an existence of an effect there is the problem of individual exposure to schooling. While the county dummy variable is very intuitive and easy to compare to general levels of literacy, it may be a poor measure of school exposure. Some counties had ten schools, while others had only one. Counties varied greatly in size- with some being twenty square miles, while other counties were two hundred square miles in area. Some counties had schools and populations spread out, while others had concentrated schools and populations. Because of this heterogeneity there is no perfect measure of school concentration.

Ideally the exact location of a school, and the concentration of the population surrounding it would be known. However, most bureau forms only detail the county in which the bureau school operated making study at the local level impossible. Thus, we must rely on county level measures. There are two county level measures that would be useful for our study. One possibility would be to calculate the number of schools operating in a county per square mile. While this measure is enticing, rapidly changing county lines and limited data on county size during this time period limits its use. The second county level measure, and the one that is used in this study, is the number of schools operating in a county divided by the population. This measure gives an idea about the potential number of children that could be educated in a county. While it is by no means a perfect measure, it is a good proxy for school concentration and capacity.

Table 3 estimates the probit models previously estimated in Table 2, but instead of using the dummy variable for whether a county had a bureau school, estimates the effect of school concentration. In each specification there is a strong positive statistically significant effect from having a greater concentration of bureau schools in one's county. The marginal effect for the bureau schools/population variable ranges from 0.1337 to 0.1081. Multiplying this by the average school concentration in counties with bureau schools (0.463), we estimate an average effect of 5.0 to 6.2 percentage points- remarkably similar to the estimates shown in Table 2. The results point to a strong effect from the Freedmen's Bureau and these estimates reaffirm the large magnitude of this effect.

While these regressions have controlled for a variety of factors, such as parental literacy, state and age fixed effects, and a variety of county and family characteristics, the specter of endogeneity still persists. It is possible that bureau officials set up schools in areas of less hostility towards African-Americans. These areas may offer increased learning and economic opportunities. If true then this factor would likely raise literacy rates for all blacks in these counties. To increase the certainty that the coefficient estimates are accurate, this study uses a control group of older African-Americans.

The purpose of this control group is to test whether the presence of freedmen's schools is a proxy for some unobservable factor that is affecting black literacy rates in general, apart from the schools themselves. If this is true then we will see large positive coefficient estimates on the Freedmen's Bureau School variable for all age groups. In contrast, if the schools actually

increased literacy rates then we will expect the magnitude of the coefficients to be the largest for those who are the youngest and smallest for those who are the oldest. This study has focused on 10-15 year olds because the effects of educational access should be felt most by this segment of the population. The gains from educational access should be greatest for this group because they are expected to have fewer commitments and feel less of an obligation to work full time. The 16-21 year old cohort would be expected to get some return from the Freedmen's Bureau schools, although the returns for this group are expected to be lower as some would have already been integrated into the labor force or functioning of the family farm. Finally, the last cohort (those over 21 years of age) would be expected to gain little from the bureau schools. All in this cohort would have been more than 18 years old in 1868. Because of this, it is expected that the gains from bureau schools will be very small for this group.

A way of testing whether some unobservable county factor is driving the results is to estimate the effect after controlling for county fixed effects. Instead of the small age groups used in previous models a cross section of all blacks 10 years and older is used. Because there is no within county variation in the bureau school variable, the bureau variable is interacted with age dummy variables to calculate the effect bureau schools had on literacy rates for the younger age groups in comparison to older blacks in these counties. The results from this regression are presented in Table 4. The coefficient on the bureau school variable is very similar in magnitude to earlier estimates. For 10-15 year olds the effect is estimated to be 6.53 percentage points. For African-Americans 16-21 years old the effect of bureau schools is estimated to be 4.84 percentage points. This shows that teenage blacks took advantage of bureau schools but not to the extent that younger blacks did. Looking at the coefficient on the school concentration * age interaction variable the effect is once again positive and statistically significant, although slightly smaller in magnitude. Multiplying the marginal effect by the average school concentration the effect is estimated to be 2.84 percentage points for 10-15 year olds, and 2.24 for 16-21 year olds. There are reasons to believe that these estimates are underestimating the effect of the bureau. While the schools were largely taken advantage of by younger blacks there were also some night schools set up by the bureau, and some older blacks likely took advantage of these schools.

Another check to make sure it was the bureau schools that raised literacy rates is to confirm whether African-Americans actually attended school at a higher rate in those counties with bureau schools. If the Freedmen's Bureau schools did increase literacy rates then it would

have been through an increase in school attendance due to the increased exposure and reduced cost of education. Thus, looking at the attendance rates will provide another robustness check of the main result. Figure 2 shows the school attendance rates for African-Americans in counties with and without bureau schools. The figure shows that school attendance in counties with bureau schools was much higher than it was in those counties without such schools. This figure shows that counties with bureau schools had school attendance rates that were approximately double the rate in counties without them.

To ensure these raw figures are not being driven by other factors regression analysis is used to estimate the effect the Freedmen's Bureau had on attendance rates. Table 5 presents the results of these probit regressions. The coefficient on the Freedmen's Bureau variable indicates that the existence of a bureau school in one's county increased school attendance rates by 6.6 percentage points. The marginal effect is extremely large in magnitude, especially considering the low rate of school attendance among blacks at this time. Given the particular specification, this model finds that bureau schools doubled or tripled the school attendance rates of blacks. Additionally, the magnitude of the coefficients in the attendance regressions is nearly identical to the coefficients in the literacy regressions. Using the school concentration variable we find a positive and statistically significant effect from bureau schools. Using the average treatment effect we find that the bureau's presence increased attendance rates by 3.33 percentage points.

The coefficients on other variables in these regressions are very similar to the literacy regressions with one key exception. While earlier regressions estimated that a mother's literacy had a large positive effect on the probability that their child was literate, the estimates find that a mother's literacy had a negative effect on the probability that their child attended school. This lends support to the theory that formal schooling and home schooling from a mother were substitutes for one another during this time period.

The final robustness check used in the paper is to compare the attendance records of the Freedmen's Bureau with the estimated increase in attendance rates. The Freedmen's Bureau schools would likely have two effects on school attendance. First, the schools would have boosted school attendance by increasing the number and proximity of schools. In addition, these schools were often free or offered enrollment at a reduced price. This reduced cost and increasing accessibility would be expected to boost attendance. Secondly, bureau schools likely crowded-out private school enrollment. When poor freedmen were faced with a decision to

attend a bureau school or a more expensive private school, it seems like they would often choose to attend the cheaper bureau school. Table 6 displays the number of students enrolled in bureau schools, and the estimated increase in attendance derived using two techniques. The first estimate was obtained by multiplying the age-specific bureau coefficient estimates by the population at each age, and adding these products up. The second estimation is just the raw difference in attendance rates between counties with and without bureau schools, unadjusted for any observable characteristics. The results in this table support the existence of both effects from bureau schools- the drawing in new students and substitution effects, as attendance increased but not quite as much as bureau enrollment figures would suggest. The exercise implies that 25% of the students at bureau schools would have attended school at private institutions, while 75% of bureau school students would not have attended school in their absence.

6. Conclusion & Future Extensions

Looking at all sixteen Southern and Border states there is very strong evidence that Freedmen's Bureau schools were effective in raising the literacy of school-age blacks. This result seems quite robust when subjected to a number of specifications and measures. In each and every model specification the coefficient on Freedmen's Bureau schools is large in magnitude, positive, and statistically significant. The results are further emboldened by estimates showing that school attendance rates increased by a remarkably similar amount in those counties with bureau schools.

These results conflict sharply with scholarship which has minimized the impact of the Freedmen's Bureau and the system of freedmen's education that was established in the post-bellum period. Some scholars, while acknowledging the moral importance of the work the Freedmen's Bureau did, downplay its ultimate effect. Ransom and Sutch estimate that only 2 to 5 percent of adolescent and adult slaves could read or write on the eve of the Civil War, while in 1870, still only 10 percent of blacks over the age of twenty could read and write in the Five Cotton States. Looking at younger blacks this paper finds evidence of a very large impact from the Freedmen's Bureau schools. In fact, using some specifications we find that counties with Freedmen's Bureau schools had literacy rates 40 percent higher and school attendance rates over 100 percent higher than in those counties without such schools.

Besides the immediate results, there are many larger issues that are opened up for study. Given that these schools increased literacy rates from emancipation to 1870, one may be interested in the longer run effects. Was this a one time increase in literacy rates? Did literacy rates converge across counties over time? Did the Bureau's efforts have a legacy effect on literacy rates, and help to develop an intellectual culture that proceeded in the bureau's absence? Alternatively, it is possible that blacks faced greater resistance from whites after the departure of the Freedmen's Bureau. Did this resistance deteriorate the gains achieved during the period? In addition to the effects of the bureau on literacy rates, these educational gains may have transformed themselves into increased incomes and productivity in the following years. Furthermore, increased educational opportunities in these counties may have led to differential migration patterns. A future avenue of research will be to explore the possibility of such economic and demographic externalities.

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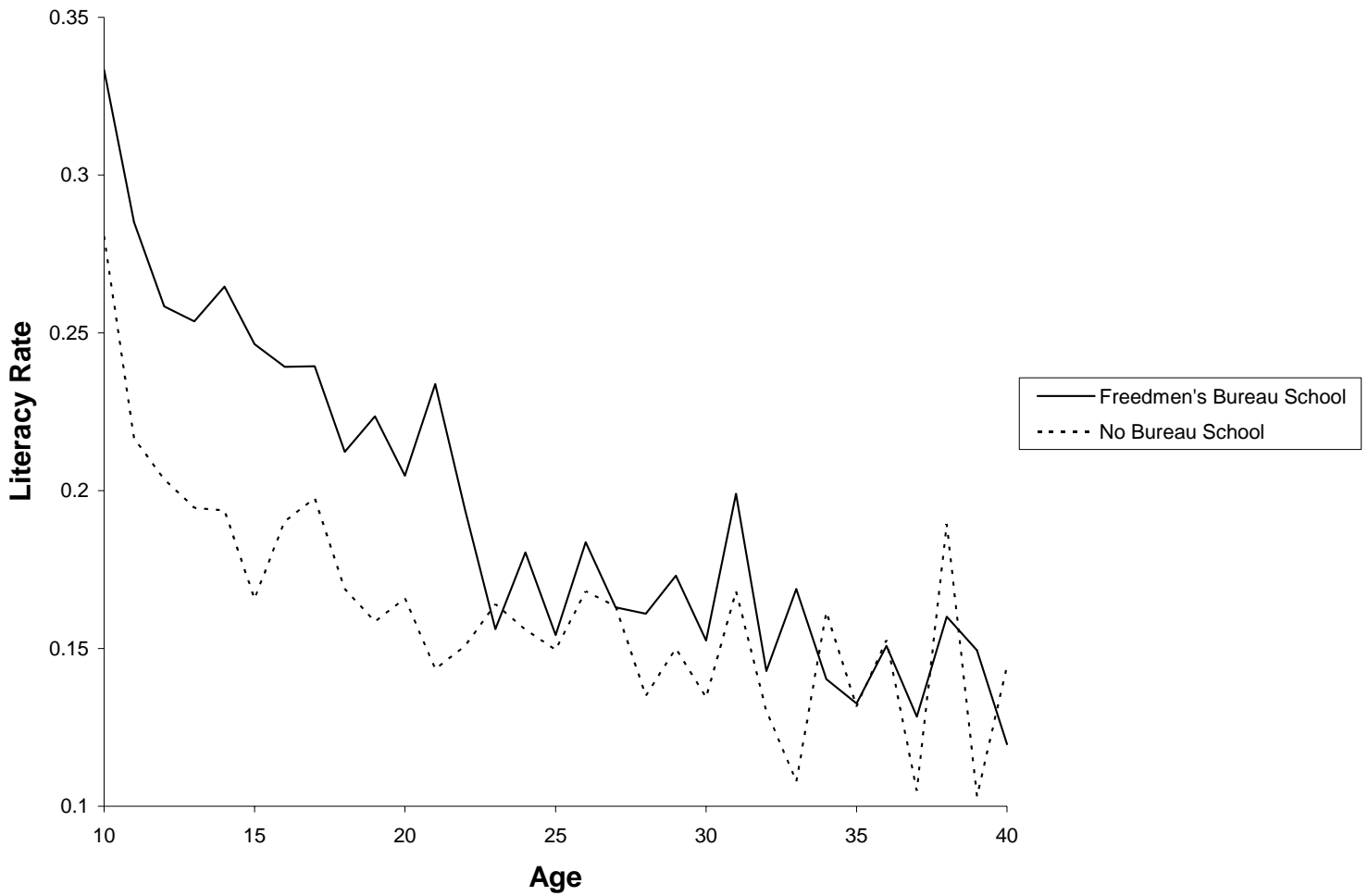
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Figure 1

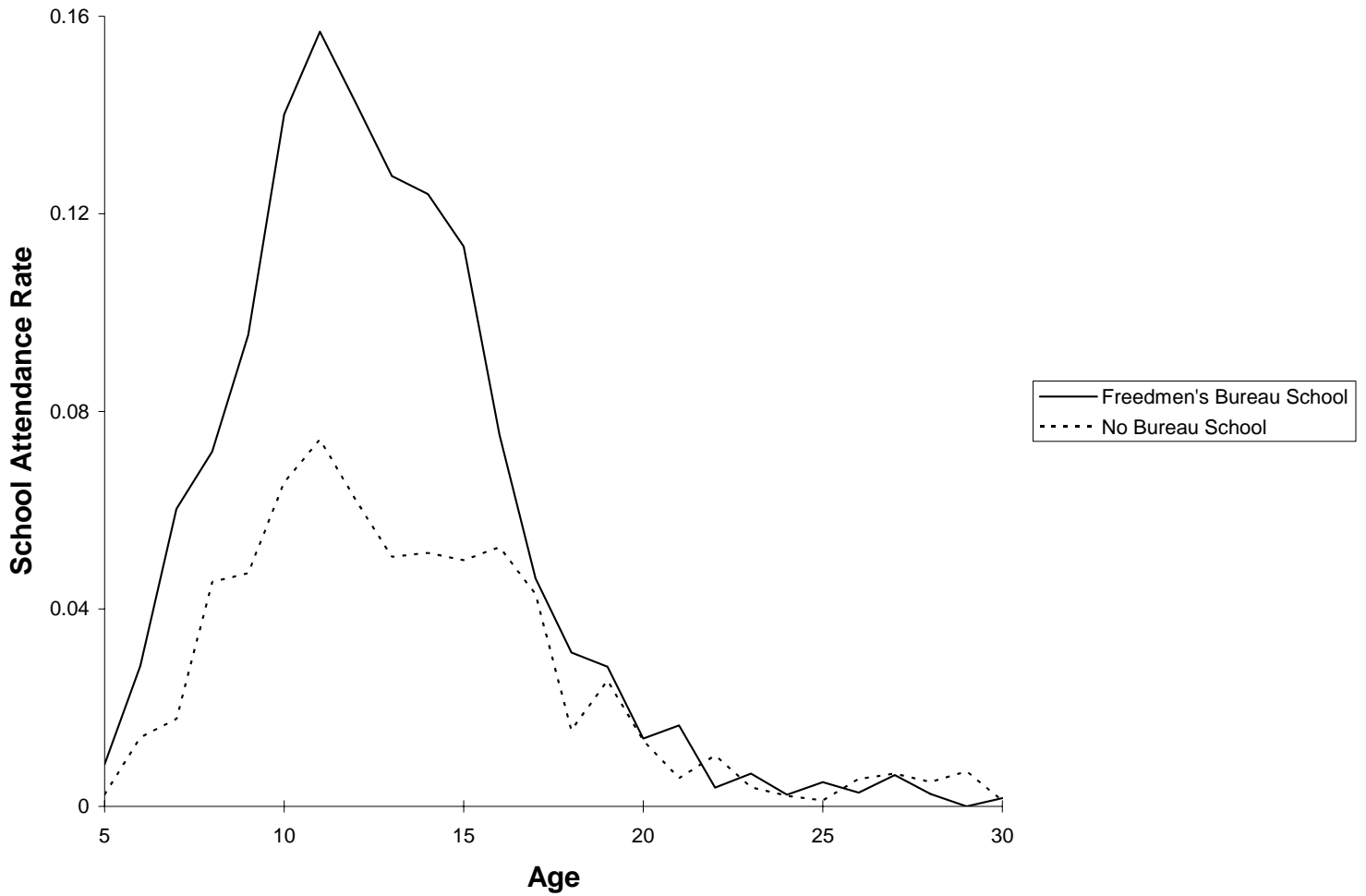
African-American Literacy Rates in 1870 (Southern States)



Note: Sample is all African-Americans 10-40 years old in the 1870 IPUMS sample from the Southern states of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Figure 2

African-American School Attendance Rates in 1870 (Southern States)



Note: Sample is all African-Americans 10-30 years old in the 1870 IPUMS sample from the Southern states of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Table 1**Summary Statistics (African-Americans 10-15 years of age)**

Variable	<u>All Counties</u>			<u>With Bureau Schools</u>			<u>Without Bureau Schools</u>		
	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs
Can Read	0.2547	0.4357	11723	0.2771	0.4476	7455	0.2156	0.4113	4268
Attend School	0.1042	0.3056	11723	0.1317	0.3382	7455	0.0562	0.2304	4268
Freedmen's Bureau School	0.6359	0.4812	11723	1.0000	0.0000	7455	0.0000	0.0000	4268
Schools per 1,000 Blacks	0.2944	0.4129	11723	0.4630	0.4360	7455	0.0000	0.0000	4268
Dad Read	0.1790	0.3833	11723	0.1767	0.3814	7455	0.1830	0.3867	4268
Mom Read	0.1676	0.3735	11723	0.1588	0.3655	7455	0.1830	0.3867	4268
White Literacy Rate	0.8130	0.1650	11687	0.8235	0.1601	7421	0.7949	0.1718	4266
Farm Area	0.2806	0.4493	11723	0.2561	0.4365	7455	0.3233	0.4678	4268
Female	0.4803	0.4996	11723	0.4856	0.4998	7455	0.4709	0.4992	4268
Mullatto	0.1202	0.3252	11723	0.1282	0.3344	7455	0.1061	0.3081	4268
Number of Siblings	2.9744	2.3031	11723	2.8818	2.2682	7455	3.1361	2.3543	4268
Has Real Estate Property	0.1142	0.3181	11723	0.1081	0.3105	7455	0.1249	0.3306	4268
Ln (Real Estate Property + 1)	0.7811	2.2324	11723	0.7451	2.1989	7455	0.8440	2.2886	4268
Colored Population 1870	10982	10105	11723	13202	11301	7455	7104	5811	4268
Percent Free 1860	0.0381	0.0723	11723	0.0501	0.0814	7455	0.0170	0.0457	4268
Percent Black 1870	0.5201	0.1809	11723	0.5462	0.1620	7455	0.4743	0.2018	4268

Note: Sample is all individual Blacks 10-15 years old in the 1870 IPUMS sample from the Southern states of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Table 2

Probit Regression of Black Literacy on the Presence of a Bureau School

Dependent Variable: Can Read (10-15 Year Old Colored Population)			
Independent Variable	Marginal Effect (standard error)		
	1	2	3
Freedmen's Bureau School	0.0757 0.0217	0.0832 0.0170	0.0748 0.0177
Female		0.0219 0.0088	0.0238 0.0088
Mullatto		0.0551 0.0165	0.0543 0.0164
Dad_Read		0.1700 0.0213	0.1847 0.0215
Mom_Read		0.2905 0.0262	0.3126 0.0262
Farm Area		-0.0334 0.0144	-0.0306 0.0144
White Literacy Rate			0.0154 0.0596
Percent Free (1860)			0.2677 0.1208
Observed Probability	0.2547	0.2547	0.2546
Predicted Probability	0.2494	0.2344	0.2335
Pseudo R-squared	0.0232	0.1227	0.1193
Number of Observations	11723	11723	11687
State Dummies	X	X	X
Age Dummies	X	X	X
Other Personal & County Variables			X

Notes:

- a) Sample is individual Blacks 10-15 years old in the 1870 IPUMS from the states of AL, AR, FL, GA, LA, MS, NC, SC, TN, TX, and VA.
- b) Figures in boldface indicate significance at the 0.05 level.
- c) Coefficient estimates are marginal effects calculated at the sample mean for continuous variables, and the marginal effects of a discrete change for dummy variables. Standard errors are clustered at the county level.
- d) Other county variables include: percent black in 1870 and total black population. Other personal variables include: number of siblings, real estate wealth, personal property, and working status. Full regression results are available by request.

Table 3

Probit Regression of Black Literacy on School Concentration

Dependent Variable: Can Read (10-15 Year Old Colored Population)			
Independent Variable	Marginal Effect (standard error)		
	1	2	3
Bureau Schools/ Black Pop (1000's)	0.1337 0.0245	0.1138 0.0221	0.1081 0.0214
Female		0.0222 0.0088	0.0236 0.0088
Mullatto		0.0533 0.0167	0.0547 0.0166
Dad_Read		0.1657 0.0212	0.1819 0.0215
Mom_Read		0.2862 0.0262	0.3124 0.0262
Farm Area		-0.0324 0.0143	-0.0286 0.0145
White Literacy Rate			0.0224 0.0590
Percent Free (1860)			0.2432 0.1307
Observed Probability	0.2547	0.2547	0.2546
Predicted Probability	0.2482	0.2340	0.2328
Pseudo R-squared	0.0299	0.1249	0.1337
Number of Observations	11723	11723	11687
State Dummies	X	X	X
Age Dummies	X	X	X
Other Personal & County Variables			X

Notes:

- a) Sample is individual Blacks 10-15 years old in the 1870 IPUMS from the states of AL, AR, FL, GA, LA, MS, NC, SC, TN, TX, and VA.
- b) Figures in boldface indicate significance at the 0.05 level.
- c) Coefficient estimates are marginal effects calculated at the sample mean for continuous variables, and the marginal effects of a discrete change for dummy variables. Standard errors are clustered at the county level.
- d) Other county variables include: percent black in 1870 and total black population. Other personal variables include: number of siblings, real estate wealth, personal property, and working status. Full regression results are available by request.

Table 4**County Fixed Effects Regression of Black Literacy**

Dependent Variable: Can Read (Blacks 10 Years and Older)		
Independent Variable	Coefficient (standard error)	Coefficient (standard error)
	1	2
Freedmen's Bureau School*(10-15 years old)	0.0653 0.0078	
Freedmen's Bureau School*(16-21 years old)	0.0484 0.0084	
Schools/ Black Pop (1000's) *(10-15 years old)		0.0614 0.0090
Schools/ Black Pop (1000's) *(16-21 years old)		0.0534 0.0094
Female	0.0057 0.0048	0.0055 0.0047
Female*Over 21 years old	-0.0663 0.0065	-0.0659 0.0064
Overall R-squared	0.0692	0.1003
Number of Observations	51996	52197
Age Dummies	X	X
County Dummies	X	X
Other Personal Variables	X	X

Notes:

- Sample is individual Blacks 10 years & older in the 1870 IPUMS from the states of AL, AR, FL, GA, LA, MS, NC, SC, TN, TX, and VA.
- Figures in boldface indicate significance at the 0.05 level.
- Coefficient estimates are marginal effects calculated at the sample mean for continuous variables, and the marginal effects of a discrete change for dummy variables. Standard errors are clustered at the county level.
- Other county variables include: percent black in 1870 and total black population. Other personal variables include: number of siblings, real estate wealth, personal property, and working status. Full regression results are available by request.

Table 5

Probit Regression of School Attendance

Dependent Variable: Attend School (10-15 Year Old Blacks)

Independent Variable	Marginal Effect (standard error)	
	1	2
Freedmen's Bureau School	0.0661 0.0095	
Bureau Schools/ Black Pop (1000's)		0.0720 0.0146
Female	0.0078 0.0053	0.0076 0.0053
Mullatto	0.0668 0.0123	0.0677 0.0125
Dad_Read	0.0436 0.0136	0.0419 0.0133
Mom_Read	-0.0234 0.0110	-0.0244 0.0109
Observed Probability	0.1037	0.1037
Predicted Probability	0.0829	0.0830
Pseudo R-squared	0.1075	0.1076
Number of Observations	11687	11687
State Dummies	X	X
Age Dummies	X	X
Other Personal & County Variables	X	X

Notes:

- a) Sample is Blacks 10-15 years old in the 1870 IPUMS from states of AL, AR, FL, GA, LA, MS, NC, SC, TN, TX, and VA.
- b) Figures in boldface indicate significance at the 0.05 level.
- c) Coefficient estimates are marginal effects calculated at the sample mean for continuous variables, and the marginal effects of a discrete change for dummy variables. Standard errors are clustered at the county level.
- d) Other county variables include: percent black in 1870, percent free in 1860, white literacy rate, and total black population. Other personal variables include: number of siblings, real estate wealth, personal property, farm area, and working status. Full regression results are available by request.

Table 6

Estimated Increase in Attendance vs. Freedmen's Bureau Records

<u>Data Source</u>	<u>Number of Students</u>
Total Freedmen's Bureau School Students	95,685
Total Bureau Students (16 years and younger)	81,766
Total Estimated Students (coefficients)	63,901
Estimated Students (16 years & Younger)	60,514
Total Raw Graphical Difference	46,946
Raw Graphical Difference (16 years and younger)	45,487

Notes:

- a) Total Freedmen's Bureau school students were obtained from Superintendents Report of the Bureau of Refugees, Freedmen, and Abandoned Lands.
- b) Total estimated students was calculated by multiplying the age-specific regression coefficients of Freedmen's Bureau school variable by the population in each age-group that was living in counties with Freedmen's Bureau schools.
- c) Age-specific coefficients were obtained by running a probit regression estimating school attendance on the age-bureau interactions.

- d) The total graphical difference was constructed by multiplying the difference in school attendance rates by the population living in counties with bureau schools.