

"Forty Years of Teacher Certification – the de facto Social Studies Curriculum: Colorado County Tests, 1880-1920"

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Abstract: Becoming a teacher in Colorado in the late 1800 was not a simple matter. This paper reports on the exams and performance of teachers on the county certification exams and how the content of those exams became the content of the social studies program for Colorado school children.

The popular view many hold of teachers during the last part of the 19th and early part of the 20th centuries has been reinforced by the teachers shown in television shows such as "Little House on the Prairie" where young women, graduates of the 8th grade, became teachers of children. The idea that to become a teacher required little education beyond what was taught in the public school remains a viable model in peoples' minds. The idea that an 8th grade education was sufficient to teach feeds into the accepted belief that teaching requires little specific knowledge, either in content or pedagogy.

On March 16, 1906, Anna Cavanah, an 18 year old young lady, born in Kansas, took the county teacher certification test in Las Animas County, Colorado. She received an average score of 75 and was awarded a Third Grade Teaching Certificate, effective until December 16, 1906, a period of 9 months. On December 21, 1906, she again took a county certification test, received an average of 77 but since she had attended a normal institute in the summer of 1906, an additional 4 points were added to her average, making her eligible for a Second Grade Certificate, good until June 21, 1908. Over the next 3 years, Anna Cavanah took two more certification exams, eventually receiving a First Grade Certificate which entitled her to teach until August 18, 1914. To become and stay a certified teacher in Colorado in the early part of the 20th century required more than just completing high school.

A favorite diversion today seems to be the assertion of how much more rigorous either public school education graduation requirements or teacher exams were in days past or how much more enlightened we are today.

Whether yesterday's teachers were better prepared to teach than today's teachers is an exercise in sophistry. The times are different and the knowledge expected of teachers reflects the times. This paper examines published county teacher tests from the state of Colorado as a way of beginning to understand what expectations parents, county and the state superintendent had of elementary teachers who would teach Colorado's youngest citizens.

This paper consists of three parts: an introduction to teacher certification in Colorado, a

report on the types of tests taken by teachers and finally the examination of the questions for two of the areas of social studies, namely, history and civil government.

Routes to Certification

To teach in the state of Colorado from the 1880s on, one had to have one of three types of certificates: a normal school certificate, a state certificate or a county certificate. The normal school certificate, awarded after completing a course of study at one of the state normal/teachers colleges, was a life-time certificate and qualified a person to teach at any school in the state. The state certificate, also a life-time certificate awarded once a person passed the "state" teachers exam, qualified a person to teach at any school in Colorado, either elementary or secondary. The third type of certificate was the county certificate that certified a teacher as qualified to teach elementary school (grades 1 to 8) for a specified, limited number of years.

The county certificate was issued by the county superintendent of schools after a person took the state prepared test on one of the designated dates.¹ During the 1880s, the county test was given quarterly, usually at the county seat although provisions were made for testing in another one of the larger cities in the county. By 1892, tests were being administered only three times a year (March, August, and December) on dates designated by the State Superintendent of Public Instruction. For many years, both the county and the state certification tests were published in the Biennial or Annual Superintendent's report. County certificates were for a specific period of time, ranging from 6 months to 3 years. Three classes or grades of certificates were awarded: First, Second and Third. The grade here does not refer to school grades but quality of certificates.

First grade certificates entitled the holder to teach for three years in any school in Colorado. In addition to achieving a high score on the test, first grade teachers had to have demonstrated success in teaching before taking the test which qualified them for the first grade certificate. Initially the measure of success was subjective; in the 1878 Report, the superintendent wrote

I earnestly recommend that certificates of the *first* grade be given only to teachers who have earned it by success in the school room as well as at examination. I also recommend the addition of ten to the grade earned on Theory and Practice, for the regular reading of some

good educational periodical, or of one or more reliable books on the subject.” (emphasis in original)²

In 1878, a person’s moral character could prevent them from receiving a teaching certificate, “Refuse certificates to applicants of whose moral character you have a reasonable doubt.”³ This regulation could still be found in the directions to county superintendents in the *Thirteenth Biennial Report* (1901-1902), “A written certificate or a statement with references of good character shall be required of the applicant, if the county superintendent deem it necessary; also one of past success in teaching.”⁴

As early as 1882, there was recognition that a written exam might not be the best or sole decider on the adequacy of a person’s preparation for teaching. State Superintendent Cornell wrote

A high degree of practical success in teaching should be accepted as a sufficient reason for issuing a certificate of a higher grade than is warranted by the percentage upon examination, and inexperience or want of success should lower the grade of certificate given, while failure as a teacher might be so marked as to make it your duty to refuse a certificate, whatever the percentage obtained.⁵

Later, the experience requirement for teaching became specific in requiring 1 year – meaning 12 months – teaching experience.⁶

In one of several instances, on the December 1904 exam, the average on Blanche Albert’s tests was 95, the scores on the subject tests were above the needed scores and she received an additional 5 points for attending an institute for a score of 100. Evidently, she did not have the required teaching experience as she was only awarded a second grade certificate⁷. In August of 1906, Albert again took the test, achieved a 92 average with 5 points added for the institute, and received a first grade certificate. Teachers who moved to another district would surrender their first class certificate to the superintendent of the county where they moved to who would then issue a new county certificate in lieu of exam.

Second grade certificates qualified a teacher to teach for 12 or 18 months, depending on year of issue, at any school in the county. This certificate could not be transferred to another county. The third grade certificate, again depending on the year issued, was effective for either 6 or 9 months. The third grade certificate was also not transferable to another county. A teacher could only receive a third grade certificate two times; after that a teacher could not be certified to teach without attaining a score high enough to warrant a first or second grade certificate.

Not more than two certificates of the third grade shall be issued to the same person. (See Annotated School Laws, section 24). Consult lists of names of persons to whom third grade certificates have been issued as furnished by the state superintendent of public instruction.⁸

The list was first published during the administration of Superintendent Helen Grenfell who wrote, in her 1900 Biennial Report

In 1895 the law was passed that but two third grade certificates should be issued to the same person. This necessitated the compiling for the use of superintendents a list of those holding third grade certificates. This list, including those so certificated during the two previous administrations, was compiled and issued in the early part of the present administration. Supplementary lists are issued after each of the three examinations of the year, and forwarded to each county superintendent for reference when granting certificates.⁹

Thus, all county certified teachers were continuously studying for and taking exams. The longest a teacher could teach on a county certificate was 3 years at which time he or she would have to retest to become certified for another period of time. In several instances, teachers who had received a second grade certificate took the exam at the next offering in order to obtain a first grade certificate as each higher graded certificate had a higher salary associated with it.¹⁰

In order to improve the knowledge of teachers, counties held summer normal institutes, the topics and attendance which were reported in annual reports submitted by county superintendents to the state superintendent of public instruction.

The Normal Institute for this district was held for a term of four weeks, two in Walsenburg and the remaining two in Trinidad. One hundred and twenty-three teachers enrolled and the work was very satisfactory to all those who attended and took part in the proceedings. The school work for the year just closed has been the most satisfactory since the organization of the county.¹¹

To indicate the importance placed on teachers attending the normal institutes, additional points were awarded on the certification exams. Teachers were eligible for an additional 5% bonus for having attended an institute. However, there must have been some confusion on how to award the 5% as the following ruling appeared in the test directions

20. If, for attending Normal Institute, 5 per cent. is added, IT MUST BE ESTIMATED ON THE AVERAGE ATTAINED, AND NOT ON 100 PER CENT. as a basis.¹²

This direction from the state superintendent lasted until 1910, through the administration of Superintendent Katherine Cook.¹³ The next year though, the new Superintendent, Helen Wixson, issued a new ruling on the 5% rule

14. The 5 per cent allowed an applicant for a teacher's certificate on account of attendance at a normal institute means a straight 5 per cent of 100, and not 5 per cent of the general average; for otherwise one teacher would receive more credit than another for attending such institute, which is not the intent of the law.¹⁴

All candidates for certification took the same test each time it was administered. The questions were prepared by the state superintendent and sent to the county superintendents. Candidates who missed part of the exam were required to wait until the next exam session to retake the test; there were no excused absences. The type of certificate awarded was determined by the average score and the scores achieved on each of the branches of the exam. Finally, beginning with the instructions for the quarterly examinations administered in the biennium ending December 1896, an age requirement was published. "No applicant less than eighteen years of age will receive a certificate."¹⁵ This rule may have been in effect as early as 1878; the 1895 education law increased the control over county superintendents exercised by the state superintendent and codified some previously accepted practice.

Subjects Appearing on the Exam

Since all candidates took the same exam, distinction between certificates was based on how well the teachers did on the exam, overall and on individual parts. From 1878 to 1882, the subjects tested were arranged in two branches and different averages and scores were required on the branches. This was explained as follows:

The school law requires examination in the "Elements of the Natural Sciences." As this is a new departure it was thought best to fix the standard of these requirements in these branches a little lower than in those branches in which applicants had formerly been examined.¹⁶

The following subjects were tested each time (bold items are branch one subjects):

- | | |
|--------------------------------------|--------------------|
| Arithmetic | Reading |
| U.S. History and Constitution | |
| Grammar | Orthography |
| Theory and Practice | Geography |
| Penmanship/Writing | Natural |
| Science/Physiology/Health | School Law |

With the exception of the deletion of botany and the addition of civil government as subjects of testing, changes made in 1895, the subjects tested remained consistent over time. The order in which the subjects appeared in the exam varied according to administration but each was tested during the two day period. During the early years of testing, specific lengths of time were allowed for candidates to complete each tested area. In later years, 3 hours in the morning and 3 hours in the afternoon were allotted for completing the assigned test sections, students being given all of the morning or afternoon questions at one time and the allocation of time being left up to the student.

The required averages and scores on each branch are shown in Table One (see on next page). No explanation is given in the Superintendents' reports as to why the minimum branch average and scores were lowered on the 1879 to 1881 tests or why they were restored to a higher level in 1882. Beginning with the first quarter administration in 1885, differentiation by branch was no longer used and a single scale was used to award certificates. The single scale was used from 1885 into the 1920s with the only major change being that in 1898 the minimum criterion score for the third grade certificate was raised.

The averages and minimum scores required for the various grades of certificates are shown in Table Two (on next page also). The required average and minimum scores had been raised between the first tests in 1878 and 1898 to require a higher level of knowledge of teachers.

Information on how teachers performed on the various exams given can be found in two types of documents. The first, and most general, is the information found in the *Biennial Reports*. These reports contain information on how many teachers received First, Second, and Third grade certificates in each county, how many teachers were teaching on each type of certificate, etc. The second source of information, a richer and more detailed record, can be found in the Colorado State Archives. The scores of teachers on the exams are filed by exam by county.¹⁷

Content of Exams

During the 20 year period that this paper focuses on, the number of questions in each of the areas varied from 5 to 10. This number is misleading as many of the questions had multiple parts or asked for the definition of as many as 6 words. Other questions asked the candidate to describe something and then explain the purpose or activity of the described object or activity. Other questions asked the teacher to provide a number of examples, ranging from 3 to 8.

This paper focuses on two areas of the exams, the areas of the social studies: Civil Government (both Colorado and United States) and U. S. History. For some years, constitutional issues were included in the history questions. The next section of

Table One: Required Averages and Scores for Certificates, 1878 - 1882

Certificate Grade	Subjects of Branch	1878 and 1882 Examinations		1879 to 1881 Examinations	
		Branch Average	Minimum on Any Subject in Branch	Branch Average	Minimum on Any Subject in Branch
First	Branch One	90	75	90	75
	Branch Two	75	60	75	40
Second	Branch One	75	60	75	60
	Branch Two	60	40	50	40
Third	Branch One	60	50	60	50
	Branch Two	50	40	50	40

Table Two: Required Averages and Scores for Certificates, 1885 and 1898 revisions

Certificate Grade	1885		1898	
	Average	Minimum	Average	Minimum
First	90	70	90	70
Second	80	60	80	60
Third	70	50	70	60

this paper presents information on the content of each of these areas.

Civil Government

The civil government questions on the exams included much of what a person might expect students in a high school government class to know: the branches of government and their duties and limits; the Constitution and its amendments; provisions for citizenship, voting, jury duty and electing officers, including the President; items related to powers delegated and reserved; and similar topics for the State of Colorado.

In addition, there were questions on the legal system: courts (types and functions), court officers, and qualifications for being a court officer. On several exams there were questions related to school law in Colorado: school boards and the legal requirements for school board members, funding at state and local level; state taxation and funding for libraries.

In the late 1800s and early 1900s several topics and words occur repeatedly on the exams. One word which appears with some regularity is eminent domain, both for the state of Colorado and the national government, as in

Define the terms: Eminent domain, patent, copyright, warrant(1903),¹⁸ or
Explain the importance of the right of eminent domain to a national government (1906)¹⁹.

Another topic which appears with regularity is slavery, primarily in relation to Amendments to the Constitution as

About what time and for what purpose were the Thirteenth, Fourteenth, and Fifteenth Amendments adopted. How is the Constitution amended? (1888)²⁰, or

How many states held slaves at the adoption of the Constitution? (1897)²¹, or

What are the objects of the 13th, 14th, and 15th amendments? (1902),²² and

To what do the first ten amendments relate? Which amendment prohibits slavery? When was it adopted? (1903)²³.

Awareness of current legislative activity also received high priority on the exams. In 1902, the exam question read

What three measures of national importance were enacted by the last Congress (1902)²⁴,

And in 1904 a question read

What was the nature of the proposed amendment to the state constitution voted on in the last general election?, or

How many amendments were proposed to the Constitution of our state by the last regular

session of the legislature? and Give the substance of any three of the proposed amendments (1902)²⁵, or

Describe how a bill becomes a U. S. law. Name three bills before the last congress (1906),²⁶ and

What amendments were submitted to the electors of Colorado at the last general election? Give main features of the Rush bill (1902).²⁷

Finally, there are other questions that seemed to be testing knowledge of the effect of current events on governmental activity. For example: What is the necessity of a navy? In whom is the power vested to provide and maintain the navy? (1898).²⁸ Who have control over the making and repairing of county roads in you community? What effect do the road conditions have on the life of a farmer? (1912).²⁹

Other social issues, such as that mentioned above of the effect of roads on farmers, were occasionally found. In 1905 this question was asked,

Name some faults in discipline (a) in the school, (b) in the home, that work against good citizenship (1905)³⁰

And in 1912, questions read,

Why should a pupil be personally interested in protecting school property or other public property from injury? And

Describe some method by which pupils may be made to feel that they are citizens, with the rights and duties of citizens. (1912)³¹

Finally, one seems particular pertinent in our current political atmosphere,

What is patriotism? Name some way by which we can show and prove our patriotism. (1902).³²

In summary then of the civil government part of the exams, the questions were very similar to what we would expect students and teachers to know after taking a high school state and national government course with the additional focus on contemporary issues relating to government and legislative activity and their effect on citizen lives.

United States History

A great number of the questions found on the history exams relate to what are considered traditional topics: explorers; politics, elections and qualification for office; military and political leaders; the Constitution, amendments and issues addressed in the constitution; establishment of colonies and states. An occasional question focuses on international issues or

policies, both in relation to the United States and internal to other countries.

Give a brief outline of the Chilian (sic) revolution. (1891)³³

Another rather traditional topic was war and issued relating to the causes and results of wars. On the 1888 exam, 8 of the ten questions focused on war, ranging from the French and Indian War to the Civil War.

Voyages of discovery and explorers appeared in several years. The traditionally identified discoverers of North America, Columbus, Cabot, Hudson all appear. Also, with, what seems to me, amazing regularity do questions about the Vikings or Norsemen.

What can you say of the early voyages of the Northmen to this country?

After the Northmen, (a) Who first certainly discovered North America? (b) In what year? (1879)³⁴

Write concerning the discovery and exploration of America by the Northmen. (Time, persons, places, evidence). (1892),³⁵ and

(a) What is the conclusion of historians in regard to the voyages of the Northmen, (1) to Greenland, (2) to the continent of North America?

(b) Upon what sources are these conclusions based? (1899)³⁶

Colonial history, quite recent to the time of the exams received a lot of attention. In 1878 and 1899, colonial history questions comprised all and all but one, respectively, of the exam items. After 1900, colonial history becomes less a focus of the exams, some having no questions that asked about colonial politics, discovery, or wars.

Just as in the test sections on Civil Government, slavery appears numerous times on the history exam; in Constitutional terms (13th Amendment), military terms (battles of the Civil War) and in sociopolitical terms.

When and where was slavery first introduced? When and how abolished? (1891).³⁷

What has been the effect of the abolition of negro (sic) slavery? (1896)³⁸

What were the effects of slavery on the industrial development of the South? On education? On social life? (1900)³⁹

Name five leading events in the history of slavery. (1900)⁴⁰

State briefly how the slavery question affected:
(a) the formation of the Constitution; (b) the rise
or fall of political parties. (1910)⁴¹

Other exams also had questions about slavery, its
introduction, the reasons for its abolition, etc.

Not all of the exam items addressed what
might be considered traditional topics. In the early
1890s, questions on social history appear as well as
questions on teaching history (although some would
argue the appropriateness of pedagogical questions on
a history test given that there was a section on Theory
and Practice included in the test). Examples of social
history questions are

When and under what circumstances were
women imported and sold for wives? What did
they cost?

Write a story of the recent Mafia trouble in New
Orleans, with results. (1891)⁴²

What action has Colorado taken with reference
to the Columbian Exposition? (1891)⁴³

Distinguish between the Puritans and the
Pilgrims.

Locate in early American history Acadia. For
what event was it noted? In what poem is it
made memorable? (1892)⁴⁴

Name five characteristics of the Quakers. Give
the date, two places and two results of their
persecution. (1892).⁴⁵

What three noted men of letters have died since
the last Quarterly Examination? Name a
memorable literary production of each. (1892)⁴⁶

Who are the Quakers? Where did they make
their permanent settlement? What was their
policy? (1895)⁴⁷

Questions about pedagogical practice also
appeared in the history portion of the exam. In 1901,
for the first time, teachers were to answer

How do you teach history in the primary
grades? What text book do you prefer in the
eighth grade? Why?

Name five selections of good literature to be
used in teaching history. Name five famous
pictures which should be of interest to the
history class.(1901)⁴⁸

Later, in 1904, teachers again saw a series of
questions on teaching pedagogy.

In the study of history, what are the most
important things to impress upon the minds of
the young?

Give in detail your method of teaching
history.⁴⁹

This second directive was counted as two questions
(numbers 9 and 10) on the exam. And again in 1910,

What is the importance of teaching local
history? In what grades should this be done?

What is the relation between teaching of any
event, and the teaching of the meaning of that
event? Which is the more important and why?⁵⁰

Native Americans received two types of
attention in the questions: first, the relationship
between Europeans and Native Americans, particular
colonial wars and colonization was found. Other
questions were also asked, ones which focus on
cultural issues related to Native Americans. For
example

Give some account of the Mound Builders.
Give a general history of the Indian race in the
United States since its occupation by white men.
(1891)⁵¹

Give two characteristics which distinguish the
Indian from the Mound Builder.(1892)⁵²

Some of the questions asked might be considered
good candidate for Trivial Pursuit®. For example, on
the 1881 exam,

When and by whom was the corner-stone of
Bunker Hill monument laid? (1881),⁵³ or

on the 1896 exam where teachers were asked,

Write a short history of Utah.⁵⁴

Other questions might be seen as particularly narrowly
focused but vitally important. On the 1897 exam,
three questions show the broad range of questions
supporting this statement. First a question on an
international issue

In the conflict now in progress between Spain
and Cuba, what is the attitude of the United
States?

Then a question on an event which had both national
and state importance:

Give the origin of the Leadville strike. How
does the strike affect Colorado?

The final question, one which could very well have
been a difficult question for teachers in rural
Colorado, asks teachers to know something about
local politics and governance as well as issue affecting
other cities in the state:

Outline the government of a city. What arguments are advanced in favor of home rule for the city of Denver.⁵⁵

From these sample questions, not drawn solely for their shock value, one can see that to pass the history portion of the exam, teachers not only needed to know names, dates, and people but also had to have broad knowledge in a variety of areas, including pedagogy.

Conclusion

Before making concluding statements, one observation must be inserted here. While it may not be obvious from the questions selected for presentation here, a pattern does exist in the questions. In looking at the questions, both type and content, over 40 years, one begins to see that during the 5 years that Helen Grenfell was State Superintendent of Public Instruction, the depth and rigor of the questions increased. No longer was there the usual pattern of choosing among multiple questions to answer (e.g., answer 10 of the listed 15). Additionally, more of the questions were multiple part questions where teachers defined something and then explained the significance of the item explained. After Grenfell's tenure, the tenor of the test became somewhat less rigorous although teachers could not become complacent in their knowledge. A final thought about differences in the tests relates not to the items but to the grading. In 1923, the state revised the county exam system so that all exams were sent to Denver to be read by a team of readers. This procedure created many difficulties, few of which were anticipated by the legislators who enacted the changes.

One conclusion which can be drawn from examining these county test questions is that teachers had to know much that would be expected of high school graduates today – which they were in the period examined. Another conclusion is that the state superintendents expected the teachers to have a wide range of knowledge, national and local, and to be familiar with current events, both social and legislative.

Finally, with the provision that teachers certified through the county exam system had certification only a short time, at most 3 years, no county certified teacher could afford to become complacent in his or her knowledge – certainly book knowledge gained before becoming a teacher was important but staying current was equally important. The State Superintendent reinforced this commitment to continuous learning by funding and rewarding teachers who attended summer Normal Institutes with bonus points (albeit in varying amounts) on their county exams.

Teachers teaching in Colorado between 1880 and 1920 were not mere 8th grade graduates – they were dedicated, high-school graduates who continually demonstrated their qualifications to be in

the classroom. Those who were not capable were not allowed to stay beyond two years and even those who demonstrated the most capability on the county exams were not certified to teach for more than three years.

Epilogue

But what of Anna Cavanah? How did she fare on her second try at the exam on that December day in 1906 on the civil government and history portion of the county exam? Her score for the history portion of the test was 81, one point above the average needed to be awarded a Second Grade certificate. Her civil government score was an 82, two points above the needed score.

Her complete scores for the test were

Arithmetic	85
Reading	72
U.S. History and Constitution	81
Physiology/Health	88
Orthography	79
School Law	96
Natural Science	78
Grammar	81
Theory and Practice	83
Geography	82
Penmanship/Writing	80
Civil Government	82 ⁵⁶

making her overall average 81, below the group average but, because she had attended, as she had in previous years, the normal institute, she was given a 5% bonus of 4 points making her average 85. She received the Second Grade Certificate entitling her to teach for the next 18 months.

¹ Although the *First Biennial Report* (1878) indicates that tests were given quarterly (p. 13), the exact dates do not appear until the *Third Biennial Report* (1883) where the dates are listed as the “last Friday of February, May, August and November (p. 30). This was a departure from the earlier practice of giving the exam on Saturdays. L. S. Cornell, State Superintendent of Public Instruction suggested to county superintendents that they consider administering the test over two days, 6 subjects each day, in a five to six hour session (p. 31).

² *First Biennial Report of the Superintendent of Public Instruction of the State of Colorado for the two years ending August 31, 1878*. Denver: Tribune Steam Printing House, 1878: 20.

³ *First Biennial Report of the Superintendent of Public Instruction of the State of Colorado for the two years ending August 31, 1878*. Denver: Tribune Steam Printing House, 1878: 20.

⁴ Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of*

Colorado to the Governor. Denver: Smith-Brooks Printing, 1902: 272.

⁵ Cornell, L. S. *Third Biennial Report of the Superintendent of Public Instruction of the State of Colorado for the years ending August 31, 1881 and August 31, 1882*. Denver: Times: Public Printer, 1883: 32.

⁶ Craig, Katherine L. *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1907-1908*. Denver: Smith-Brooks Printing Co., 1908: 74.

⁷ No record of Blanche Albert taking the certification exam before 1904 was found in the Las Animas county records.

⁸ Craig, Katherine L. *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1907-1908*. Denver: Smith-Brooks Printing Co., 1908: 74. The listing of the third grade certificates issued was found in *Third Grade Certificates issued* various dates. Instructions on the publication indicated the report was to be filed in the county superintendent's office. The third grade certificate reports from 1901 to 1926 can be found in the Colorado State Archives, Box 13095.

⁹ Grenfell, Helen L. *Twelfth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1900: 12.

¹⁰ One example is that on March 20, 1908, Sadie Cavanah, Anna's older sister, took the certification exam and received a second grade certificate which was valid until September 20, 1909. Five months later, she again took the exam (probably in an attempt to receive a first grade certificate) and received a second grade certificate valid until February 21, 1910.

¹¹ Craig, Katherine L. *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1907-1908*. Denver: Smith-Brooks Printing Co., 1908: 65.

¹² Grenfell, Helen L. *Twelfth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1900: 188.

¹³ Cook, Katherine M. *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1909-1910*. Denver: Smith-Brooks Printing, 1910: 106.

¹⁴ Wixson, Helen M. *Eighteenth Biennial Report of the Superintendent of Public Instruction of the Two School Years Ending 1912*. Denver: Smith-Brooks Printing, 1912: 42

¹⁵ Peavey, A. J. *Tenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1896: 279.

¹⁶ *First Biennial Report of the Superintendent of Public Instruction of the State of Colorado for the two years ending August 31, 1878*. Denver: Tribune Steam Printing House, 1878: 20.

¹⁷ See Burlbaw, Lynn. "Teacher Testing – Could You Pass the Test?" Paper presented at Mid-America Conference on History, September 19-21, 2002, The University of Arkansas, Fayetteville, Arkansas for details on performance of teachers in Las Animas County, Colorado on the exams.

¹⁸ Grenfell, Helen L. *Fourteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1904: 114.

¹⁹ Grenfell, Helen L. *Fifteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1906: 78.

²⁰ *Sixth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. 1888: 41.

²¹ *Eleventh Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. 1898: 164.

²² Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1902: 304.

²³ Grenfell, Helen L. *Fourteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1904: 103.

²⁴ Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1902: 304.

²⁵ Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1902: 304.

²⁶ Grenfell, Helen L. *Fifteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1906: 82.

²⁷ Grenfell, Helen L. *Fourteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1904: 96.

²⁸ *Eleventh Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. 1898: 176.

²⁹ *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1910-1912*. Denver: Smith-Brooks Printing Co., 1912: 43.

³⁰ Grenfell, Helen L. *Fifteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1906: 69.

³¹ *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1910-1912*. Denver: Smith-Brooks Printing Co., 1912: 43.

³² Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1902: 288.

³³ *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 366.

³⁴ *Second Biennial Report of the Superintendent of Public Instruction of the State of Colorado for the years ending August 31, 1879 and August 31, 1880*. Denver: Times: Public Printer, 1883: 25.

³⁵ *Eighth Biennial Report*, page 372.

³⁶ Grenfell, Helen L. *Twelfth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1900: 197.

³⁷ *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 355.

³⁸ Peavey, A. J. *Tenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1896: 309.

³⁹ Grenfell, Helen L. *Twelfth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1900: 219.

⁴⁰ Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1902: 276.

⁴¹ Cook, Katherine M. *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1909-1910*. Denver: Smith-Brooks Printing, 1910: 110.

⁴² *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 355.

⁴³ *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 360.

⁴⁴ *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 378.

⁴⁵ Peavey, A. J. *Tenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1896: 383.

⁴⁶ *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 388.

⁴⁷ Peavey, A. J. *Tenth Biennial Report of the Superintendent of Public Instruction of the State of*

Colorado to the Governor. Denver: Smith-Brooks Printing, 1896: 284.

⁴⁸ Grenfell, Helen L. *Thirteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1902: 292.

⁴⁹ Grenfell, Helen L. *Fourteenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1904: 119.

⁵⁰ Cook, Katherine M. *Report of the State Superintendent of Public Instruction of the State of Colorado for the years 1909-1910*. Denver: Smith-Brooks Printing, 1910: 110.

⁵¹ *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 360.

⁵² *Eighth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1892: 383.

⁵³ Cornell, L. S. *Third Biennial Report of the Superintendent of Public Instruction of the State of Colorado for the years ending August 31, 1881 and August 31, 1882*. Denver: Times: Public Printer, 1883: 34.

⁵⁴ Peavey, A. J. *Tenth Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. Denver: Smith-Brooks Printing, 1896: 309.

⁵⁵ *Eleventh Biennial Report of the Superintendent of Public Instruction of the State of Colorado to the Governor*. 1898: 151-152.

⁵⁶ All of the data relating to teacher scores comes from the Colorado State Archives, Denver, CO. Box 13095, Superintendent Records for Las Animas County.