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Celebrating 100 years of the National Park System in the classroom

Kailyn Louise Bettle
University of Northern Iowa

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CELEBRATING 100 YEARS OF THE NATIONAL PARK SYSTEM IN THE CLASSROOM

A Thesis Submitted
in Partial Fulfillment
of the Requirements for the Designation
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Kailyn Louise Bettle
University of Northern Iowa
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(type name), Honors Thesis Advisor

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Dr. Jessica Moon, Director, University Honors Program

Abstract

This research evaluates the effects of a curricular tool on students in a social studies and upper elementary classroom. Consisting of a text set, a compilation of varying primary and secondary resources such as letters and maps at varying reading levels, focused around an interesting central topic. The research employs text sets created for fourth and seventh grade on the topic of US national parks and focuses on the history of national parks, curricular materials already available on national parks, creation of the text sets, and the importance of disciplinary literacy and interdisciplinary connections between geography and literacy. The text sets rooted in this research were then implemented in fourth and seventh grade classrooms respectively and it was found that overall, text sets are an effective tool to increase student abilities in terms of content knowledge, opinions about national parks, and literacy skills. The research has both a conceptual and applied impact, advancing the scholarly literature at the interface of geography education/social science education and literacy, as well as providing a pilot tests, classroom-ready means for using the topic of national parks to pique student interest and enhance student's geography content knowledge and literacy skills.

Celebrating 100 Years of the National Park System in the Classroom

Introduction

In 1916, President Woodrow Wilson signed the Organic Act that created a National Park System centralized in the Department of the Interior. Now, 100 years later, with 58 parks, 72 national monuments, and countless seashores, battlefields, and scenic trails, the national parks are more than just a blip in history, but a part of American culture (National Park Service n.p.). In 2015, the National Parks Service recorded 307 million visitors (National Park Service n.p.). This may seem like a significant number, but this is misleading. With a majority of national park land located in the West, many visitors from the Midwest, the East, and the South have very limited access to public land. With visitation limited by location, what can be done to connect citizens to the parks, specifically students in the K-12 education system? The Organic Act, passed by President Woodrow Wilson, preserved national parks:

To conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

(U.S. Cong. n.p.)

This act not only saved beautiful lands, but also assured that the national parks became a centralized part of American culture that would last for generations to come. The lands were now strictly the enjoyment of the American people, not the economic advancement of oil, logging, or railroad companies. Today, the parks offer opportunities for exploration, learning, and amazement. They also offer opportunities for families and friends to come together to enjoy breath-taking views, hear amazing stories, and to

connect to the land around them. These opportunities, which happen everyday from sites that are truly unique to the United States, embed the national parks into American culture. These are opportunities that need to be brought beyond the parks and into the classroom.

Problem

The US National Park System is seldom specifically addressed through current K-12 education standards even though the topic articulates well with many history, geography, and language arts standards. Due to programs set in place by the government such as The No Child Left Behind and the Common Core that place a strong emphasis on math and literacy through standardized testing, subject areas like social studies and science are being greatly diminished. In their study *A National Perspective on the Effects of High-Stakes Testing and Standardization on Elementary Social Studies Marginalization*, Paul Fitchett and Tina Heafner found that while English/language arts received an average of 11 hours of instruction time a week, social studies only received 2.9 (122). These shocking numbers make the point for interdisciplinary connections to be used in the K-12 setting.

Purpose

The purpose of this project was to explore the role and purpose of national parks and the National Park System in American culture, specifically in a classroom. This was done through evaluation of how new educational materials on national parks can advance students' literacy abilities and geography/history competencies. This project explored the history and impacts of national parks, analyzed educational resources currently available to teachers on national parks, developed new curriculum for teachers on national parks through text sets for fourth and seventh grade, and examined the impact of these text-sets

on improving student understanding of national parks as a part of American culture, student understanding of content knowledge, and student disciplinary literacy skills through classroom implementation.

National parks are such a large part of not only American history and American landscape, but also American culture that it is significant that they be directly incorporated into the classroom setting. The significance of the text set in this research focuses on the ability of this type of curriculum to draw together student knowledge, experience, and skills. This research is also significant for effective geography teaching as it meets the *Road Map for 21st Century Geography Education*'s recommendation for "geography researchers to develop and study exemplary programs, curricula, tasks, measures, and assessments in order to build the body of knowledge of effective geography teaching and learning" (Edelson 15). Text sets with a focus on disciplinary literacy are one example of these exemplary curricula that need to be studied and brought into more classrooms.

Research Question to be Answered

This thesis presents two research questions that contribute to the body of knowledge in this field, addressing shortcomings in the existing research literature.

- How does a Common Core ELA text set advance student knowledge about the role national parks play in American culture and how national parks embody US regional geography?
- How does a Common Core ELA text set improve students' geography content knowledge and advance students' literacy skills and abilities?

Literature Review

History of the Role of National Parks

Though the first national park, Yellowstone National Park, was created in 1872, the idea of the national park was not new. For years, conservationists had been trying to prove that the land that would become Yellowstone, as well as many other lands such as present day Yosemite and Sequoia, needed to be set aside and preserved as government land. The conservationists believed that the natural features found within these areas could not be found anywhere else in the world, and needed to be saved before large companies came in to exploit the land for economic purposes. These fights went on for many years, coming down to determining whether the land proposed as national parks could be beneficial to the government or whether it was worthless land.

When a land was considered worthless, meaning it could not be used for farming or lumber, like the hot springs of Yellowstone, only then would the government consider it worthy of protection. This meant that the first parks, though technically protected by the government, were still privy to exploitation whenever it meant money for the government. For example, Mount Rainier National Park's land was continually reduced in size as lumber companies persuaded the government to see them the land (Runte 136). In 1903, President Theodore Roosevelt called upon Americans to reevaluate the role of the national parks:

Keep this great wonder of nature as it now is. You cannot improve upon it. The ages have been at work on it, and man can only mar it. Keep it for your children and your children's children and all who come after you as one of the great sights for Americans to see. (Roosevelt n.p.)

Theodore Roosevelt also worked to make a bigger name for the national parks lands during his time in office through the passing of the Antiquities Act in 1906. This act allowed the President to set aside any portion of land to be preserved by the government as a national monument without the approval of Congress. This made preserving land much easier because there was no need for a case to be built, allowing more land to be saved more quickly.

As more land was set aside for the enjoyment of the people, citizens began to realize that some of the land within the United States rivaled the great cathedrals of Europe. The See America First campaign, initiated by the Great Northern Railroad, encouraged Americans to visit the wonders in their own country before traveling across seas. With this campaign, railroads sprang up bringing visitors right up to the parks, and made access to national parks cheaper and more accessible for more Americans (Burns n.p.). The number of visitors was at an all-time high. The number of visitors to the parks spiked again with the automobile made more accessible to American families, and again with flight.

Today families from across the United States, and across the world, come to see America's wonders but many are still missing out. National Park Service lands are often free or very low cost to visit, but this does not include the cost of getting to the park, especially when considering that some states do not have a national park or have very few national park service lands. The *National Park Service Comprehensive Survey of the American Public* suggests another problem in their 2008/2009 study of who visits national parks: there is a lack of racial and ethnic diversity among the visitors to national parks. The study found that 78% of visitors to national parks were white meaning that

racial and ethnic minorities only make up 22% of visitors (10). In this study, “hotel and foods costs at National Park Systems are too high” was cited as the biggest reason for non-visitation among minorities (11). The mission of the national parks is to preserve these wonders, but also to educate visitors on the importance of conservation and preservation in and beyond the parks (National Park Service n.p.). This mission extends to all. The role of the national parks is changing again. The goal of educating visitors to take the ideas of preservation and conservation seen in the park to their own communities is a goal that can easily be transferred into the classroom setting and can be used to bridge the visitation gap.

National Parks Resources/Curriculum

Current classroom resources regarding parks seem to focus solely on individual parks and their history and general information. Many of the lessons available to teachers on national parks are simply resources such as books, videos, or websites. Sometimes standards are included that the resources address, but very rarely is there information on how to implement these resources into a unit or how to address the national parks as a whole.

For example, Scholastic.com has a *Tour Our National Parks* article, promoted as a national park lesson, but in actuality, it is simply basic background information on the parks with links provided to the National Parks Service websites. There are amazing photos of the parks to draw in student’s attention, but only short segments on the location and usual sightings in each park follow the photos. Grand Teton national parks, a vast and beautiful park in Montana is given only two sentences:

Seeing an elk, moose, or bison in the 40 miles worth of mountains is common at this park, which is also home to roughly 300 species of birds, including bald eagles! Hiking, walking, fishing, swimming, canoeing, and biking are popular summer activities, where the jagged edges of the Teton mountain range serve as a breath-taking backdrop. (Laskow n.p.)

This article is a great resource for students researching individual parks, or students simply looking for a little background information, but it does not go deep enough to challenge students to see the greater impact of the national parks.

The National Park Service itself also offers an entire section on their website for teachers, many of which provide more details for classroom implementation such as lesson plans and worksheets, but again, the lessons focus only on single parks or park regions instead of the system as a whole. Of the over 200 resources and lessons provided for teachers, only 18 focus on primary sources (National Park Service n.p.). In recent years, there has been a push towards the nonfiction genre and use of primary sources in both Literacy and Social Studies classrooms. The lessons provided by the National Park Service are great, but many teachers can no longer use them in their classroom due to curriculum constraints.

Other current resources include lesson plans created by PBS based around their six-part video series *The National Parks: America's Best Idea*, small individual activities created by Kids.gov that could be connected to national parks such as creating terrariums or creating cave art, or electronic field trips presented by the National Park Foundation. Smaller less known companies also offer resources or lessons on National Parks but at a cost such as Hands of a Child's *Project Pack National Parks* which outlines a curriculum

for parents homeschooling their children to include a hands-on unit on national parks in their classroom. Even further, a large number of resources available to teachers require students to actually visit a national park, something that is not feasible for most schools.

In order for national parks to take on a meaningful role in student knowledge, the information presented needs to go beyond the basic facts of the parks and look to the impact the parks have on America. They need resources that will allow them to learn about the history of the parks to create content knowledge and provide opportunities for students to experience the park (even without leaving the classroom), all while improving literacy skills. This can all be accomplished through the use of a Common Core ELA text set.

The Importance of Geography and English Language Arts Integration

Geography is a powerful tool to reach the curiosity of students about the world around them and to connect them to this world. The education system of the United States, however, “has become more and more focused on just basic skills of reading, writing, and mathematics” (National Geographic Education 3). This means that some schools are greatly reducing student times spent in social studies in order for more classroom time to be spent on the essentials. In 2012, The “Nation’s Report Card” showed the devastating effects of this practice, specifically for geography where it was reported that “fewer than 30% of American students were proficient in geography” (National Geographic Education 3). Contrary to this practice of cutting down student time with the subject, research has shown that “instruction in geography increases vocabulary and sparks interest in students to support improved literacy skills” (National Geographic Education 4). With the creation of the Common Core standards for English

and Language Arts, the integration of geography and ELA has become even more important. The focus now placed on informational text can easily be achieved through the discipline of geography. So, instead of reducing time spent on social studies, schools should be using social studies topics such as national parks as the spark to get students reading.

Disciplinary Literacy

The Common Core State Standards calls for reading beyond just the English/language arts setting and into all subject areas through, coined disciplinary literacy. According to the Wisconsin Department of Public Education, disciplinary literacy is defined as:

The confluence of knowledge, experiences, and skills merged with the ability to read, write, listen, speak, think critically, and perform in a way that is meaningful within the context of a given field. (1)

This definition reigns true in all subject areas and is key for preparing students for college or career readiness and the complex informational texts they will experience in these situations. Disciplinary literacy is a shared responsibility within a school, and is driven by standards for “Literacy in History/Social Studies, Science, and Technical Subjects” (Common Core n.p.). Common Core standards have been adopted by 43 of the 50 states. With the new “Literacy in History/Social Studies, Science, and Technical Subject” standards, this means that disciplinary literacy in social studies will happen in these states making it a significant practice in the K-12 setting (Common Core n.p.).

These standards encourage reading, writing, speaking, listening, and language to be included in all classrooms, but leave it open-ended enough for teachers to decide how they will address these standards and how they will assess these standards. In the social

studies setting, where primary sources are a must, disciplinary literacy is key. When social studies teachers implement literacy resources into their classroom effectively, resources that encourage discussion, listening, analyzing of language, and writing, social studies becomes the first step towards incorporation literacy in all subject areas. Text sets, a type of curriculum beginning to spark in the social studies field, is one effective way a teacher can begin to incorporate disciplinary literacy into their social studies classroom.

Text Sets

A text set is a compilation of content materials from a wide variety of mediums such as photos, newspaper articles, videos, narratives, or poems that serves as a bridge between language arts and social studies. This variety within text sets works to expand the definition of text and to help students understand the world they live in. Research has shown that “visual representations allow for easier and more rapid processing of texts” and the academic discipline of geography is teeming with visual representations from maps to images that can be used in the creation of a quality text set (National Geographic Education 5). To use the text set, students work their way through the texts in the set, learning about a theme or central topic in social studies as they progress. Texts sets are designed based on an Inquiry Arc from *The College, Career, and Civic Life (C3) Framework: Exploring Inquiry Based Instruction in Social Studies*, which suggests how a teacher can best implement primary sources in the classroom “to bring social studies to life for young learners” (Lee and Swan 11).

The first dimension of the Inquiry Arc, “Developing Questions and Planning Inquiries,” takes the form of a compelling question in a text set (Lee and Swan 12). This

compelling question is rooted in the major theme of the text set and is a question that is open ended, draws students interest to the topic they are going to be learning about, and helps students understand why they are learning about the particular topic. An example of a high quality compelling question could be, “What is a symbol?” or “What does liberty look like (Lee and Swan 21). A good compelling question will hold together an entire text set and will guide students towards an understanding of the main topic.

While the theme of the text set is based in the discipline of social studies, the English and language arts standards connections come from the primary sources that are being used. This is where the second dimension of the Inquiry Arc, “connections to disciplinary tools and concepts,” begins (Lee and Swan 13). For a text set, this means that the texts selected not only build on and help answer the original compelling question but also serve as the connection to geography and English. Each text should build on one another, but how this exactly can be done follows two schools of thought. Some educators believe that text complexity should build from the beginning to the end of the text set, beginning with the easiest text and working students up to the most challenging text. Other educators believe that a text set should look more like a roller coaster when it comes to arranging texts. Instead of beginning with the easiest and working towards the end, texts will increase and decrease in difficulty multiple times throughout the duration of the set. The varying pace and depth of materials in Common Core ELA text sets also allows for varying “levels of reading difficulty that are designed to be supportive of the learning of readers with a wide range of experiences and interests” (Read Write Think n.p.). Some texts may be above grade level, while others are below, creating a nice

balance that will not overwhelm or bore students. This also addresses the extreme variety in reading levels seen in more classrooms today by creating differentiated materials.

The third dimension of the C3 Framework Inquiry Arc calls for “evaluating sources and using evidence” (Lee and Swan 14). In a text set, this dimension plays out through the questions asked of students after each text referred to as the essential questions. These essential questions often begin by asking students about the big ideas of the previous text, but then move towards evaluation of the text in relation to the original compelling question. By the end of the text set, students will have a wealth of textual evidence to support their answer to the compelling question. This answer is the final step is the Inquiry Arc of a text set, “communication conclusions and taking informed action” (Lee and Swan 16). If the compelling question created in dimension one was done effectively, students will have worked towards a larger understanding of the main topic and will have the knowledge necessary to make informed conclusions and actions on the topic.

To be successful, a text set needs a definitive theme that draws in student’s attention from the beginning and maintains interest throughout. The structure of a text set works to drive student curiosity in the classroom setting. National parks can do just this. By using the unique history and topography of national park land to draw students in and compiling the countless resources available on national parks into a theme that focuses on their overall role in American culture, a focus on national parks can be a powerful classroom tool.

Methodology

The first step in this research project was the creation of text sets, based on the C3 Framework presented above and following the structure and competencies set up by the Common Core ELA's "Grades 6-12 Literacy in History/Social Studies, Science, and Technical Subjects" (Common Core n.p.). Creating text sets for seventh grade students and fourth grade students, the researcher began by building background knowledge on national parks and the National Parks Service itself. This research built towards the creation of compelling questions and later selection of texts themselves. The seventh grade compelling question, "what is the overall role of national parks in American culture" is based around the National Geography standard 4.1, "Personal, community, and national identities are rooted in and attached to places" and is supported by other National Geography Standards and Common Core ELA Standards (n.p). The compelling question for seventh grade was also created in a way that could easily be adapted for American History courses typically taught at the middle school level, not just geography, making the text set available for use by more teachers. The fourth grade text set was built around the topic of US regions, curriculum typically taught in fourth grade classrooms around the United States, and was based on National Geography Standard five, "People create regions to interpret Earth's complexity" and is supported by other National Geography and Common Core ELA standards (n.p). The seventh grade text set follows the "rollercoaster" method regards text complexity that outlined in the literature review on text sets and is comprised of a wide variety of texts from info-graphics and maps to letters and press releases. The fourth grade text set is heavily driven by images due to the reading level, but also includes region characteristic lists and region descriptions.

This research on the ability of a text set to advance student knowledge about the role national parks play in American culture, advance content knowledge, and promote disciplinary literacy in social studies was evaluated at two different grade levels, seventh and fourth. The seventh-grade research took place in Mr. Jake Wager's enrichment social studies course at McCombs Middle School in Des Moines, Iowa with 18 students. The fourth-grade research occurred at Roosevelt Elementary School in Mason City, Iowa in Kiersten Bettle's classroom with 26 students. Both research sets was conducted upon approval from the Institutional Review Board for research with human subjects. The overall research goal was the same for each grade level, but different methods for collecting data were done at each grade level.

Seventh Grade

The seventh grade project focused mainly on collecting quantitative data on three aspects. The first set of quantitative data that was collected in the seventh-grade classroom focused on knowledge specific to national parks. Before the text set, students were given a multiple choice-assessment that tested what they already knew about national parks. This multiple choice assessment was focused on the bigger ideas of the text set and asked students specific questions such as how many sites are in National Park Service possession, where these National Park Service lands are located, and how these lands are used by visitors. After completion of the text set, students completed the same multiple-choice test again. The goal of this assessment was to see the ability of a text set to encourage content specific growth among students.

The second quantitative data set looked to measure student growth in regards to literacy and reading comprehension. To measure this, the researcher administered reading comprehension assessments to students before and after the implementation of the text set. The assessments asked students to read a paragraph, rooted in the discipline of social studies, and then use what they learned from their reading to answer four vocabulary based comprehension questions. The pre-assessment and post-assessment were not exactly the same to assure that students were not simply remembering the answer from one assessment to the next, but the style, difficulty, and subject stayed the same to assure accurate data collection. The goal of this assessment was to see if a text set can help improve students' ability to comprehend grade-level texts.

The final qualitative data set looked to show how a particular type of curriculum, an ELA text set, could be used to gauge student understanding of the perceptions of national parks in culture. To collect this data, the researcher created an assessment which uses a likert or opinion scale to see how students' opinions regarding parks changed from before completion of the text set to after. From the pre-assessment to the post-assessment, the questions stayed the same and addressed some of the larger themes that arose in the text set such as who should be responsible for the management of national parks, the role of wildlife in national parks, if students felt they had a connection to a national park, and finally, if students felt national parks were important. The goal of this assessment was to see if students had opinions regarding national parks before the text set and looked to see whether the text set helped to inform or change student opinion regarding national parks.

Fourth Grade

In the fourth-grade classroom, mixed methods research was conducted with one qualitative study and one quantitative study. The first, a qualitative assessment was based on student's written response to the question, "what would a national park in the Midwest region look like"? These writings were scored using a basic three-part rubric. If a student received a one, they did not understand the question and were incorrect or unclear in their response. A score of a two was given to students who were correct but weakly answered the question, only doing the minimum amount. A three was given to student writing that answered the question correctly and went beyond the minimum expectation. This writing assessment and scoring was again done at the end of the text set. The goal of this assessment was to see if students understanding of national park content, and more specifically region based national park content, grew from the use of the text set in the classroom.

The second set of data collected in the fourth-grade classroom was quantitative data and was rooted in assessing student understanding on the role of national parks in American culture specifically related to their ability to address the region they are located within. This was done through a multiple-choice assessment that evaluated student understanding of the characteristics of the five regions of the United States. This assessment was given both before and after the use of the text set in the classroom to evaluate the role of text sets in increasing students' understanding of the Midwest region.

Results

Seventh Grade

On the ten-question national park content multiple-choice pre-test, no student received a score lower than 20% or higher than 60%. Most students scored between 40% and 60%. When taken again after completion of the text set, all students scored between 30% and 100% with 13 students scoring above a 70%. From the pre-test to the posttest, all but two students increased their score or kept their score the same. The class growth from pre-test to post-test is depicted in table1.

Table 1

Change in Student Knowledge about National Parks (Seventh Grade)

	Decrease in Score from Pre to Post Test	No Change in Score from Pre to Post Test	Modest Increase in Score (2 or less) from Pre to Post Test	Substantial Increase in Score (3 or more) from Pre to Post Test
% Of Students in this Category	11%	0%	28%	61%

On the second pre-assessment of four questions, eight students received perfect scores, five students only missed one question, one student answered two correctly, three answered only one correctly, and one student received a score of a zero. From the pre-assessment to the post-assessment, the results show that not a single student's score decreased, only increased or stayed consistent. All but four of the 18 students in the class received a perfect on the post-assessment. Two of the four students scored a two out of four, one student a two out of four, and one

student a one out of four. The class growth from pre test to post test can be seen in table 2.

Table 2

Change in Student Literacy Skills

	Decrease in Score from Pre to Post Test	No Change in Score from Pre to Post Test	Modest Increase in Score (2 or fewer) from Pre to Post Test	Substantial Increase in Score (3 or more) from Pre to Post Test
% Of Students in this Category	0%	55%	34%	11%

The final pre-assessment evaluated student opinions regarding national parks. The assessment included ten questions, but the researcher will focus on the results of three different questions from the assessment that reflect the questions most closely aligned with the text set compelling question and the thesis research question. The results for these questions can be seen in table 3.

Table 3

Results of National Park Opinions Pre-assessment

	Number of Students who Strongly Agree	Number of Students who Agree	Number of Students who Disagree	Number of Students who Strongly Disagree
1. National Park Service lands are important.	5	11	2	0
4. National Park Service lands play a significant	3	10	5	0

role in American Culture.				
6. I have a connection with a national park or a National Park Service Land.	4	6	4	4

Other results worth note from the pre-assessment include the fact that all students either agreed or strongly agreed that seashore, battlefields, and historic areas should be protected by the national park service. All but three students agreed or strongly agreed that the US government should fund National Park Service lands. On the final question, asking whether all the land that should be protected has been, all but three students disagreed or strongly disagreed.

Evaluation of the final assessment regarding student opinions about national parks demonstrated a notable shift in perspectives about the importance of national parks. The most growth was seen from the three questions linked closest to the text set compelling question. The results of students' opinions are shown in table 4.

Table 4

Results of National Park Opinions Post-assessment

	Number of Students who Strongly Agree	Number of Students who Agree	Number of Students who Disagree	Number of Students who Strongly Disagree
1. National Park Service lands are important.	13	5	0	0
4. National Park Service	11	7	0	0

lands play a significant role in American Culture.				
6. I have a connection with a national park or a National Park Service Land.	6	8	2	2

From the results of the pre-assessment seen in Table 3, there is a clear shift from disagreement to an agreement with a substantial number of students shifting their opinion all the way to strong agreement. This pattern shift was consistent for all questions on the assessment except for the question on the assessment asking students whether all the land in the United States that should be protected has been. For this question, a majority of students kept their answers of disagree or strongly disagree consistent.

Fourth Grade

When given the pre-assessment on the characteristics of the Midwest region, most students scored at 60% or below. Of the 26 students, three scored a zero, four scored a one, eight scored a two, eight scored a three, three scored a four, and zero students received a perfect score of five out of five. The questions most commonly missed on the pre-assessment were the questions regarding the features of the Midwest such as the Great Lakes and the Great Plains with 16 students and 17 students missing each respectively. 17 students also answered the question asking which national park was located in the Midwest incorrectly. Only 11 students

missed the question asking which state is located in the Midwest and the question asking whether the Midwest is a framing region.

After completing the text set, the multiple-choice assessment on the characteristics of the Midwest region was presented to students again. Overall, from the pre-test to the post-test, all but two of the 26 students improved their score and the two who did not receive the same score both times. No student scores decreased from before the text set to after. When broken down, 18 students scored a perfect five out of five, six students scored a four out of five, one student scored a three out of five, and one student scored a two out of five (but this was an improvement from the zero out of five on the pre-assessment). On the post-assessment, the most commonly missed question was the question regarding which state is located in the Midwest region. The class growth can be seen in table 5.

Table 5

Change in Student Knowledge about National Parks (Fourth Grade)

	Decrease in Score from Pre to Post Test	No Change in Score from Pre to Post Test	Modest Increase in Score (2 or fewer) from Pre to Post Test	Substantial Increase in Score (3 or more) from Pre to Post Test
% of Students in this Category	0%	4%	42%	54%

When asked the question, “what might a national park in the Midwest look like” at the beginning of the class, 21 students received a score of a one and four students received a score of a two when using the writing rubric outlined in the

methodology section. In most cases, students received a score of a one due to incorrect information regarding national parks. If a student referenced swings, monkey bars, or any other playground equipment in their written pre-assessment, they received a score of a one because the researcher felt that these students were confusing national parks with playgrounds like outside their school. The four students who received a score of a two on the pre-assessment included characteristics or features of the Midwest that appeared in the text set such as prairies, rivers, and flat lands.

When students again responded to the question, “what might a national park in the Midwest look like?” almost all students incorporated features of the Midwest that were discussed in the text set. Five students received a five out of five when scored on the writing rubric outlined in the methodology section, 15 students received a score of a two, and five students scored a one, with one student choosing to not complete the second written response. The students who received a score of a three included features that were discussed within the text set such as plains, flat land, and fertile soil, but went into further detail by describing what this meant for the land. For example, one student responded, “it looks like fertile soil with flowers”. The students who received a score of a two included one or more of the features that were addressed in the text set but simply listed them instead of using complete sentences or elaborating. The five students who again received a score of a one did not include any of the key features of the Midwest region in their second description. The class growth from pre-assessment to post-assessment is shown in table 6.

Table 6

Change in Student Knowledge about Geography

	Decrease in Score from Pre to Post Test	No Change in Score from Pre to Post Test	Modest Increase in Score (1 point) from Pre to Post Test	Substantial Increase in Score (2 points) from Pre to Post Test
% Of Students in this Category	0%	31%	58%	11%

Limitations*Seventh Grade*

The class where the text set was implemented was an enrichment class for students who chose not to participate in band, art, or advance content classes. These students were placed depending on available teachers and classrooms and not based on content interest. The students were also aware that the class did not count as a grade and therefore, many put far less effort into the class than a regular class. Many of the students in this course, were also not reading at grade level. This meant that some of the texts within the text set, which were leveled based on the Lexile reading range of typical seventh-grade readers, were more difficult than intended. The difficulty of these readings for some students meant that they may not have gotten everything out of the texts as was hoped, simply because of the language and organization. The teacher who implemented the text set said that he adjusted for this limitation by reading things aloud to students and focusing responses to each

text on a classroom-wide scale through discussion instead of individualized responses.

In addition to academic ability limitations, the class where the text set was implemented also had a few student specific limitations. Of the 18 students in the class where the text sets were implemented, three students were English Language Learners (ELL). Other students in the class helped serve as translators for the pre-assessments and post-assessments as well as during the instruction portion of the text set, but language still may have been a barrier. In the results above, it was noted that only two students saw a decrease in scores from the multiple choice pre-test to the post-test. Both of these students were ELL students. While a limitation, it is important to evaluate educational material and strategies in schools and classroom contexts where there is a diversity of students as this represents a particularly authentic school population, now so common across the United States.

Going forward, the next step for this research based on these limitations would be to test the text set again in a traditional classroom where all students at the school are expected to take the course and will receive grades. Another step would be to conduct research in a classroom setting where all students or most students are at grade level for reading to see the true strength of the text set in terms of ability growth for students.

Fourth Grade

One of the biggest limitations during the fourth-grade portion of the research study was that due to time constraints, students only worked with a portion of the text set instead of the entire set. For this research, students only learned about the

Midwest region and national parks in the Midwest region instead of national parks across the entire country. While the assessments will still show the benefits of using a text set, the results would likely have been more substantial if the entire text set had been used. Because only one region was addressed, students will miss the opportunity to compare different parks and different regions and may therefore not see how national parks represent the region they are located within on a larger scale than just the Midwest.

Discussion

Seventh Grade

The results from the seventh grade classroom show clear evidence of the power of text sets. From the pre-assessments to the post-assessments there was noticeable growth across national park content knowledge, literacy skills, and national park opinions. The growth in national park content knowledge, with 89% of students improving, shows a growth in understanding on the most basic level of what national parks and National Park Service lands are and what they do. When evaluating the literacy assessment, it is key to note that not a single student decreased from before the text set to after and while 55% of students kept their scores consistent, this percent is mainly comprised of students who maintained perfect scores. This maintenance, as well as the growth of 45% of the students in the class, shows the ability of a text set over just a few short weeks to encourage vocabulary growth and application, a key element of disciplinary literacy skills. The results of the opinion assessment show another dimension of the power of text sets. It shows that students not only learn content from text sets, but also learn how to

take the content and apply it to their own lives through critical thinking. The pattern of growth from the assessment before the text set to after showed a shift towards strong agreement shows students taking a strong more confident stance in their thoughts and opinions. They became more informed from the texts and discussion of texts in the text set which informed their responses. While opinions would not transfer to a grade in the classroom setting, it is still key in showing the full range of benefits seen from using text sets.

Fourth Grade

Again, the fourth grade results, even when just one section of the text set was used, show that it is a powerful classroom tool. The growth in content knowledge regarding national parks shows a similar growth in understanding to that of the seventh grade research where a majority of students learned from this research what a national park was for the first time. This fact reiterates that national parks are not addressed in current social studies classes or curriculum and shows how one interaction with effective curriculum can significantly change the idea of what a national park is and what appears in national parks in the minds of students. The results of the geography content knowledge assessments show the power of text sets to effectively teach content when considering that 96% of students saw either an modest increase or a dramatic increase in their understanding of the content, characteristics of the Midwest region when using national parks as the driving force.

Conclusion

According to Jake Wager, the teacher who implemented the text set in his seventh-grade classroom, "text sets are the only tool, in my view that a social studies

teacher should be using” (Wager). This belief stems from an understanding of the compelling use of texts sets as a tool for teaching subject content as well as teaching disciplinary literacy skills, an understanding that was clearly demonstrated in this study. The growth seen from implementation of text sets in both a fourth grade setting and a seventh grade setting in content knowledge, content opinions, and literacy skills show the extensive reach of what text sets can do. In this study, students learned about the geography and history surrounding national parks but went further in learning to think critically about what they are reading in a topic in order to apply the new knowledge to their own lives and express this through clear writing and speaking, a key element of disciplinary literacy. This critical thinking is the goal of most social studies classrooms, and texts set “guide [a] class with documents and texts that are guided to what [teachers] want them to learn, where learning can occur around the texts” (Wager). This is exactly what a text set does, through the compelling question and carefully selected texts, students will work their way towards an understanding, putting them at the center of reaching a conclusion, instead of reading it out of a textbook. Further, the interest aspect of text set encourages student passion regarding what they are learning. Not only are they now informed about the topic, but now they care as well. Students in both the seventh and fourth grade classrooms were shocked to learn that no national park resides within their home state Iowa and wanted to know what they could do about this. They learned that national parks and national park service lands are a part American and therefore wanted to be a part of this culture as well. They were excited by the topic and about learning about national heritage and natural history

text sets encourage students to go further with their learning. Without a textbook, there is still authentic reading going on in the classroom, reading beyond just the English/ language arts classroom alone. A text set is a bridge between the two subject areas and an excellent tool for breaking the practice of diminishing the time and attention to social studies in school. The text sets in this study showed a smooth integration of history, geography, and literacy adding a greater depth to the content as well as a deeper understanding through the connections. The national parks are an important topic for discussion in the social studies classroom that is often forgotten, but it is not the only one. So many other topics that are just skimmed over in the textbook can be explored through the power of texts sets, drawing in student interest, and creating better readers.

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