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The Effect of Summer Vacation on Reading Level

Stacey Klinkhammer
klinkhamst@mnstate.edu

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The Effect of Summer Vacation on Reading Level

A Project Presented to
the Graduate Faculty of
Minnesota State University Moorhead

By

Stacey Klinkhammer

In Partial Fulfillment of the
Requirements for the Degree of
Masters of Science in
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Abstract

The purpose of this study was to determine whether a lengthy break from school, with no formal academic activity, caused a decrease in a student's academic achievement. Specifically, if reading scores decreased. The study aimed to compare two groups of high school students, primarily in grades 9-11. The study compared those who enrolled in summer school courses for remedial purposes and those who did not enroll in summer school. The study focused on students' reading skills before and after their school's summer vacation, which is approximately 12 weeks long. District assessments of student's ability were the metrics used for data collection in this study. Results showed that the students who enrolled in summer school courses had higher gains than those who did not take summer school courses. As far as skill loss, both groups showed some skill loss. Of the members of the group who enrolled in summer school courses, 25% showed skill losses over the summer, compared to 33% of the student group who did not enroll in summer school courses. Of the students that showed losses, the students who were not enrolled in summer school showed over twice as much loss as those who were enrolled in summer school. Data were collected among students who had been MAP and/or RI tested, were taking summer school for remedial purposes, in a district located in a metropolitan area with population 238,124. The school the study took place in was one of three high schools in the district. The student body in this building was a diverse population, composed of 66% Caucasian, 16% African-American, 9% Asian-American, 4% Hispanic American, 3% Native American, and 2% "Other"/Unclassified. Thirty-six percent of the students in this building qualified for free and reduced lunch, 13% were classified as EL, and 14% were on an IEP.

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Chapter One

General Problem/Issue

It is no secret that many people feel students lose much of what they were taught in school during the school year over their lengthy summer vacation. This has been a topic of discussion and research since at least 1906, when a mathematics professor, William White, commented on it (Leefatt, 2015). It gained much more recognition in 1978 when Barbara Heyns researched the issue and addressed it, and continues to be a topic for debate to this day. Heyns suggested that the summer learning loss was due to income; students from lower income homes lose more than better-off students. Over the years, much research has been done on the “achievement gap”, the gap in academic success levels of students from low versus socio-economic status (SES). But, when taking a closer look, it has been shown that a large portion of the achievement gap originates over the summer, when children are not in school (Alexander, Entwisle, & Olson, 2007b). Studies by Kerry and Davies, Klibanoff and Haggart, Cooper, Nye, Charleton, Lindsay, and Greathouse, just to name a few, confirm this same finding. In the U.S., our average school year is 180 days, with an average of eleven weeks back-to-back of summer vacation. Low-income children make gains at the same rate as their peers during the school year, when they are in school, but that doesn't mean they are performing at the same levels at the end of the year. Most likely, they started off behind in first grade, and every summer the achievement gap has been exacerbated by lack of academic opportunities. Over the course of a child's school career, those losses are devastating (Alexander et al, 2007b).

One study I came across, by Simon Leefatt (2015), mentioned that any academic activity at all helps increase reading level, even if that activity is math or some other subject. Even field trips to zoos or museums, or being involved on a coordinated sports team helps increase, or at the

very least maintain, a student's academic level (Alexander et al, 2007b). More research could be done separating students who are involved in academic activity over the summer, such as summer school, versus students who are not.

Many teachers spend two to three weeks reviewing material taught the previous school year before actually teaching any new material when coming off a lengthy summer vacation. Similar to any new lesson, students come into our classrooms at varying skill levels, and our job as teachers is to determine what they already know and what they need to be taught. One wonders: Are these varying skill levels that students are coming into the classroom with actually a product of higher or lower understanding of material? Could it be a product of some students losing information while not using it over summer vacation, whilst others used this knowledge in educational settings over the summer months, thus actively retaining it in their brain?

Subjects and Settings

Description of subjects. Participants were selected from two populations, those who took summer school and those who did not take summer school. For purposes of this study, summer school was defined as being enrolled in a summer school course offered at the subject's school. Students' age levels varied from 14 to 19 years old. Scores were collected for the student's prior three to four academic years. The sample was diverse, mimicking the diverse student body population of the school. There were nine participants total, of which 8 enrolled in summer school at least one summer, two who did not enroll in summer school at all in the last three years. Of these participants, seven were males and two were females. There were four Caucasian, three African-American, one Asian-American, and one Hispanic American. Of the nine participants in the study, two were on an Individual Language Plan (ILP), and five were on Individual Education Plans (IEP).

Selection criteria. Participants were chosen based on whether they were enrolled in summer school courses, and if they had data for both spring and fall. Of the 978 students in the school, 70 fit this description. Of the 70 permission slips that were sent out to obtain permission to conduct this study, nine were returned. This study used the data for the nine students, using not only the most recent scores, but the last three to four years' worth of information.

Description of setting. This study took place in a 9-12 high school building, in a city with population 120,762. The city was part of a metropolitan area that had population 238,124. The 9-12 high school building was part of a school district that housed 3 high schools. The population in this building was 978. The student body in this building was a diverse population, composed of 66% Caucasian, 16% African-American, 9% Asian-American, 4% Hispanic American, 3% Native American, and 2% "Other"/Unclassified. Thirty-six percent of the students in this building qualified for free and reduced lunch, 13% were classified as EL, and 14% were on an IEP.

Informed consent. Permission was obtained from the Institutional Review Board (IRB) at Minnesota State University Moorhead and from the school district to conduct this study. The school district's IRB procedure was followed to obtain permission to conduct research. This involved receiving permission from the building principal at the school where the research was conducted, as well as the assistant superintendent of the district.

Protection of human subjects participating in research was assured. Participants were informed of the purpose of the research and any procedures required by the participant, including disclosure of risks or benefits. Confidentiality was protected throughout the study, without the use of identifying information. The choice to participate or withdraw at any time was outlined both verbally and in writing. Although some of the invited students involved were eighteen or

nineteen, it seemed more appropriate to have parents/guardians aware of the nature of the study and provide their permission for their child to participate. Parents of students involved in the study provided written consent.

Review of Literature

There is much controversy over the discussion about what happens with a student's academic skills over the lengthy summer vacation. Many studies show that student's academic skills regress over summer vacation; and then there are other studies that find summer vacation does not affect a student's skill set. Some studies even claim students' skills *improve* over the summer vacation (Wintre,1986). And yet still, some studies claim the loss or improvement is negligible, thus claiming there is no such thing as "summer learning loss".

Definition of Terms. For the purposes of this study, the following term is defined:

Summer learning loss: the phenomenon in which students lose academic knowledge gained in the school year during the summer months as a result of limited educational engagement.

Achievement gap: the gap in academic success levels of students from low socio-economic status versus high socio-economic status (SES).

Review of summer learning loss. Summer learning loss was first commented on in 1906 by William White, a mathematics professor (Leefatt, 2015). Since then it has been gaining popularity, with many studies being conducted to determine if summer vacation does indeed lead to a drop in student academic achievement loss, such as those previously mentioned by Cooper et al., Kerry and Davies, Heyns. A study by Kuntz and Lyczak (1983) claimed that there was no significant loss over the summer months, and even claimed that a few students *gained* in skill level. That study goes against the majority of the other studies, which generally conclude summer learning loss is a reality teachers today are facing. Alexander et al. (2007b) found that

all students, no matter what their SES, made similar gains during the school year. Leefatt (2015) had similar findings. He went on to state that the inequities between our poor students and our more privileged students are rooted outside of our school doors, not something that is happening in our classrooms.

Some schools have opted to change their schedule to a year-round model to see if this helps raise their academic scores. One such school is in Seaford, DE. Instead of following a traditional calendar, they are re-dispersing their school days in such a way that they get shorter, but more frequent, breaks from school. Guy (2003) writes "...school officials said they will need to wait at least 3 years before results show whether the schedule has helped improve performance" (p. A1). "...You can't do it in just one year" states Principal Bonnie Johnson (Guy, 2003). This is true with many educational reforms. But getting the parents to sign on, the teachers to buy in, as well as getting the students on board, that can be very difficult. Her statement is correct, it does indeed take time to determine if a new method is working. Educational reform does not happen overnight.

As mentioned earlier, many studies have been conducted to investigate what effects a lengthy summer vacation has on student achievement levels. According to Leefatt (2015) "Studies have shown that all primary school children regress in reading and mathematics during summer vacation" (p. 556). The research Leefatt conducted provided evidence showing all students lost an average of 2.6 months of grade-level equivalency. This makes sense if you take time to consider what children do in their free time these days: watching television; playing games on cell phones, computers or gaming systems. These activities do not incorporate academia. Some argue that daily activities such as reading the newspaper, watching educational television, even just watching the evening news can help retain or even improve vocabulary

skills. Students who live in homes where English is not the primary language spoken would show a decrease in English language and vocabulary skills over the summer vacation (Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996). Reading and spelling skills tend to decrease among students from households of low socioeconomic status (SES), whereas students who live in high SES households tend to increase (Leefatt, 2015). Cooper et al. (1996) found similar results. This is mostly due to the fact that students from poorer homes have less access to books, or public libraries. According to the work of Alexander et al.(2007b), Heyns found reading to be the single activity that matters to summer learning, as reading is the foundation for everything. Heyns (1981) states that "...middle class children will learn more, as a matter of course, whether they are in school or not." (p.840). It's the achievement gap between the high SES households and the low SES households we can, and should, do something about.

Cooper et al. (1996) state that between grades 1 and 6, the potential cumulative impact of this achievement gap could compound to 1.5 years' worth of reading development. 1.5 years! Just in losses due to summer vacation! Leefatt (2015) states "...summer losses that accrue in the elementary years persist through high school, and may ultimately reduce the likelihood that a student will graduate in high school in four years" (p.558). Kerry & Davies (1998) agree with that, writing "summer learning loss seemed to worsen as students got older" (p.119). This could go on to affect their success in college, which could potentially impact the likelihood of graduating. This could also affect the whole rest of their life, given how important literacy and reading skills are. All of this, due to having 3 months of every year without formal schooling.

"Learning is a continuous process, and interruptions to it can hinder students' progress." (Kerry & Davies, 1998, p.119). Teachers work hard during the school year to teach as much as they can in the allotted 180 days or so they have with students. Then students go on summer

vacation, approximately 3 months, and teachers get to begin the following school year *reviewing* skills from the previous year that the students have forgotten. In a business model, this would not fare well. Paying your employees to go over the same tasks multiple times does not seem like the most efficient way of accomplishing a goal. One expert estimates that over the duration of one child's full education, the total cost of re-teaching each fall accumulates to \$18,000. "...the ideal approach to remedying education inequities requires school districts to consider summer programs as an integral part of their core educational strategy" (Leefatt, 2015, p. 560). Studies show that year-round education increases scores in all areas (Kerry & Davies, 1998). This meets heated arguments about budgets of school systems, teacher and student burnout, salary and contract negotiations, among other things. In 2009 and again in 2011, a bill was introduced in the US House of Representatives and in the Senate. This bill would have authorized funding to be allocated to summer enrichment programs. The bill died, and has not been introduced since.

One possible solution to the budget problem would be not to extend the school year, but re-disperse the days of education. More frequent, but shorter, breaks from school would keep students and teachers refreshed, but at the same time would not be long enough to start forgetting vital information that has been learned. Schaffner and Schiefele (2016) find that average levels of word and sentence comprehension *do not* change over a summer vacation of only 6 weeks in length (p. 917).

Currently, schools utilize the typical 9-month schooling schedule with 3-months off, generally during the summer months, hence the term "summer vacation". Schools offer additional courses over this summer vacation time, where students can opt to take courses to either recover a credit they may have lost during the school year or to further their education. The student gets to decide whether he/she would like to take summer school; it is not required.

One interesting question that Bruene (1928) asks is “Would it be advisable to send the children who are a little below norm or just on the borderline in June, to summer school?” (p. 309). The research shows summer school is beneficial to everyone. Anyone who can get involved in educational activities will benefit. The summer school itself will provide knowledge and learning opportunities, but it also shortens the length of time when there are no educational activities going on and a student is at risk of losing some academic knowledge.

What the testing tells us. “Although grade equivalents are the most popular scores reported in research, they are often inadequate” (Kuntz & Lyczak, p. 148, 1983). Countless hours have been put in, researching the effects summer vacation has on student achievement levels. Many studies have been conducted, all searching for an answer. How do we know which results to believe?

Baker & Good write:

Most studies examined summer learning loss with global achievement scores from published, standardized tests administered in the spring and the fall (e.g., Alexander, Entwisle, & Olson, 2007a; Borman, et al., 2005). These tests are not designed to provide information about individual change over a short amount of time, thereby leading to inaccurate conclusions when used to analyze individual summer change in achievement (Baker & Good, 1995). (as cited in Sandberg Patton & Reschly).

Sandberg et al. also state “Yearly measures of achievement are not sufficient; achievement should be measured both in the fall and in the spring to account for differential change during the summer” (p.738). There is much debate over what the perfect test is. It is important to use a curriculum-based testing system; it would be optimal if there was a curriculum-based testing

system the students were familiar with. Also, one where teachers and administrators could get the results in a timely fashion, without having to wait months to see the results. We are really in need of a test that will detect the slightest of changes, not just the annual gains that a standardized test detects. According to Leefatt (2015), all students make similar gains during the 9-month school year; it's the summer months that have the greatest impact on achievement levels. Sandberg et al. (2013) recommend the CBM (curriculum based measurement) as the best current model.

Statement of Hypothesis

Students who enrolled in summer education courses will show less reading skill loss than their peers who did not attend summer school.

Chapter Two

Research Questions

As a high school math teacher, the first week or two, as well as the first unit I “taught,” was mainly focused on reviewing concepts the students should have mastered in order to pass the prior class. The key words in that sentence: should have. Either these students had not truly mastered those concepts, or the nearly three months they had off in the summer took a toll on their memory. Many of my students were enrolled in Read 180 or a Level 6 “Strive” course to help them read and help them comprehend what they were reading. Could summer have possibly impacted all of the progress they had made in reading during the past school year? These students were already behind the state-mandated level of progress, they could not afford to lose progress. This issue led me to research how summer vacation affects student reading levels. Thus, I formulated the following research question: Do students who take a summer school course (or courses) have the same amount of reading skill loss as those students who do not take summer school courses?

Research Plan

Methods and rationale. Measure of Academic Progress (MAP) reading scores for the current school year and past years were used as the measuring instrument. MAP testing is research-based, used nationwide, and has been used over the majority of the academic lifetime of the student (used in grades 2-10). MAP testing was computerized, and completed with adult supervision. The computer scored the results, providing a RIT score and a Lexile score. RIT scores, short for Rasch Unit Scale, measure student achievement independent of grade level. RIT scores help measure academic growth over time. This is the preferred data to use to observe any patterns in MAP scores, due to the fact that the data was already there, and was taken over a

lengthy time span for each student. The MAP scores showed growth over the educational career of the student. I looked for any patterns in scores from the end of one school year to the beginning of the next, over the academic history of the student.

MAP is research-based and used nationwide. MAP compares student's scores to scores of other students around the country. Since MAP is individualized for each student, it is very precise measurement of that student's skill level, since it is an adaptive test. If this were a paper and pencil test, it would take a very long time to get the result, and it would not be so customized to the individual learner. Many teachers preferred the MAP, not only for its reliability, but also for its speed. At the time the students took these tests, they did not know their scores were going to be part of a research project. The scores are reliable since there are so many data points in the set. Even if one MAP score came out skewed, we still used the rest of the data points for that student. Having such a large data-collection period was helpful to this study.

Schedule. MAP testing was done 3 times per year, every year from grade 2-7, and for all students enrolled in Read 180 and Strive classes. Strive classes are classes that taught grade level content to students who performed below grade level in reading. The first test was done at the beginning of the school year, generally 2 weeks from the start. The next was in the winter months, typically January. And the last was near the end of the school year, typically mid-May.

Summer courses were available for no charge to any student who wished to either regain credit for a course already taken, or to get ahead in their educational path. Summer school ran from 8 am to noon, Monday through Friday, for 8 weeks. This left students with a much shorter window to be removed from the academic setting, in relation to their peers who did not enroll in summer school.

Two groups were formed: students who took summer school and those who did not. Among the group of those who did not, we looked at if they were involved in any type of organized activity over the summer. Our group for “non” summer school participants required them to not be involved in anything, to get true results of this study. Among the group who enrolled in summer school, all enrolled for remedial credit.

Ethical issues. The MAP test got administered three times a year every year. Students may have felt a bit of anxiety the first few times they took the MAP test, or if they were trying to achieve a certain goal score. Since these scores were all collected for purposes other than this study, the anxiety that may or may not have been felt is a result of the testing process itself, not this study. This study utilized scores that were already available. Therefore, there were no ethical issues affecting this study.

Chapter 3

Data Analysis and Interpretation

Description of Data

The purpose of this study was to determine if there was correlation between time spent out of school and decline in reading skill levels. Student MAP scores were examined, namely the spring score prior to the end of a school year, and the following fall score, to determine if there was a pattern of decline in student scores over the summer months when they were out of school on summer vacation.

Method of Analysis

Participant Data

For this study, nine students were identified. Seven students were enrolled in at least one summer school course at their school at least one summer throughout the course of their schooling, to gain credit for a class previously taken. Two students were not ever enrolled in a summer school course, nor were they enrolled in any formalized group activity over their summer vacation. Two groups of data were formed: one with scores from years where the student was not enrolled in summer school; the other for years when summer school was taken. The data was collected for these students for the most recent three to four years of their academic career. At the conclusion of the data collection process, the two sets of data were compared. The MAP scores were taken over the course of the student's last 3-4 years of school. Table 1 on the next page shows the results of these scores.

Table 1

Student Participation Data

	Grade at time of test	Fall	Winter	Spring
Student A	11	881	986	
	10	808	783	884
	9	252	484	700
Student B	11	665	630	
	10	464	500	635
	9	251	302	451
Student C	11	866	856	
	10	544	615	765
	9	415	487	501
Student D	11	705	766	
	10	771	788	758
	9	768	817	670
Student E	11	298	364	
	10	189	283	319
	9	282	405	197
Student F	9	989	963	
	8	880	968	924
	7	614	786	889
	6	354	392	478
Student G	11	767	811	
	10	656	665	761
	9	428	508	540
Student H	11	588	686	
	10	242	439	504
	9	558	545	354
Student I	11	923	866	
	10	774	899	880
	9	611	781	657
	8	303	488	540

Research Question

Do students who take a summer school course (or courses) have the same amount of reading skill loss as those students who do not take summer school courses?

When comparing the scores of students who attended summer school to those who did not, you can see that the majority of students who took summer school made gains. The surprising thing is that the summers where summer school was not taken, many students still made academic gains. These gains were not nearly as much as those who attended summer school, but gains nonetheless.

Table 2

Non-Summer School Participation

	Grades Between	Spring	Fall	Change in Score
Student A	10-11	884	881	-3
Student B	9-10	451	464	+13
	10-11	635	665	+30
Student C	9-10	501	544	+43
Student D	10-11	758	705	-53
Student F	6-7	478	614	+136
	7-8	889	880	-9
	8-9	924	989	+65
Student G	10-11	761	767	+6
Student H	9-10	354	242	-112
Student I	8-9	540	611	+71
	10-11	880	923	+43
Mean Score		671	690	+19

Table 3

Summer School Participation

	Grades Between	Spring	Fall	Change in Score
Student A	9-10	700	808	+108
Student C	10-11	765	866	+111
Student D	9-10	670	771	+101
Student E	9-10	197	189	-8
	10-11	319	288	-31
Student G	9-10	540	656	+116
Student H	10-11	504	588	+84
Student I	9-10	657	774	+117
Mean Score		544	618	+75

Looking at both sets of data, it is evident that the group who attended summer school had greater gains in achievement than those who took the summer off. The students who did not attend summer school, nor attend any other type of formal group activity over the summer months, had an average gain of 19.16 points. The group of students who did attend summer school increased, on average, 74.75 points. Of the participants who did not attend summer school, 1/3 of the scores showed a loss, whereas only 1/4 of the scores showed loss when attending summer school. Comparing the gains, 3/4 of scores including summer school attendance showed gains, whereas only 2/3 of the non-summer school attendee scores showed gains.

Conclusions

It is evident through looking at the results of this study that attending summer school does have a positive impact on student reading ability scores. The goal of this study was to research if a lengthy summer vacation was a possible cause of student decline in reading skills,

which is not the case for these particular students. Of the students in this study, many of them showed an increase in reading level scores, even though they had not been involved in any formalized group activity over their summer vacation. Although this was a very small group, it aligns with what the research claims about being involved in educational activities.

Chapter Four

Action Plan

Most, if not all, teachers know that students leave their classrooms in May and when they return in late August or early September, there will be a certain amount of reviewing they will have to do to refresh the students' memories. Most teachers dream about student's wanting to read and learn over summer break, but how often does that actually happen? My plan is to make reading material accessible to my students, so they at least have *the option* to read, if they wish. The research on summer learning loss was based on students who did not have access to reading materials, or the means to get to a library, or go to museums, be involved in activities, etc. The students these studies are based on are very much like my students. My goal is to have an ample amount of books and magazines available, so I can send some of these resources with the students as they leave on summer vacation. I would also like to try to get my student involved in a few activities over the summer, I'm going to try to put together a calendar of events that are free in our area, and disperse it to my students prior to the end of the school year. I'm going to talk about these events, try to get the students interested in them, and then attend these events in the summer so the students that attend see me, and hopefully some of their classmates, and feel comfortable. Many of my students do not drive, either due to not having a license or no car to drive, so I would look for events that are near our school, which is close for most of them. The city this study was done in plans many free events all over the city, so one event might be close to one neighborhood, and the next week be close to a different neighborhood.

This study was done in a high school, so most of the students would be allowed to walk somewhere or be allowed out on their own. Another idea I would like to try is to have a summer book club. I would tell not only my students about it, but have them spread the word to students

they know, and have announcements made at school. I could let the students offer suggestions what we should read, but I would like to get them to read books they haven't already read, not just the popular books. We could meet at a coffee shop or café or at a park once a week to either discuss what we read, or to read the books together. I would have to see if there was enough interest in this to keep it going; if it wasn't successful the first summer I might not continue it. There are many other teachers in my school who would be interested in doing this too, so between advertising it to all of our students, and having several of us adults there, I think it could work!

My last plan is something I've already been doing for the year's I've been teaching. I tell students to read the newspaper to keep up on current events, whether it be the actual newspaper or the online version. I suggest to them they should read magazines on something they're interested in, whether that be hunting, fishing, fashion, whatever. This helps them in the long run too, because they often get assigned projects in school where they have to cut out magazine clippings, so they will already know where to find magazines, and maybe they will already have some ideas on topics.

Chapter Five

Plan for Sharing

My particular study was of interest to me, and my peer teachers, to see if our students fall into the pattern of summer learning loss, like the research suggests, and many teachers feel. My study was small, and maybe skewed due to clientele I used, but it still was very interesting to me. My study suggests that I would be proposing going to a year-round school, which is not very popular here in the mid-west. As an urban school, not many, if any, of my students, or the students in this district are involved in farming or agriculture, which is what our calendar was originally set up for. In some Southern states, and sporadically across the US, districts here and there have the adjusted “year-round” calendar, which actually is the same 170-180 days, just disbursed differently. I find it highly unlikely that we would change our school calendar, but like I said, teachers would be interested in this study. The principal at my building has inquired about how my research has turned out a few times, I think he will be interested in my findings, and he could use that to push for more academic involvement in the summer. He might even have me use my statistics and ideas for summer events to get more teachers thinking about what we could do outside of school to help our students.

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Appendix A

Consent Form



SOUTH HIGH SCHOOL
1840 15th Avenue South
Fargo, ND 58103
701.446.2000 • FAX: 701.446.2399
www.fargo.k12.nd.us/south

Dr. Todd Bertsch, *Principal*
Ms. Dode Bentson, *Administrative Assistant*
Mr. Cory Lehman, *Assistant Principal*
Mrs. Greta Evenson, *Assistant Principal*
Mr. Mike Beaton, *Assistant Principal/Activities Coordinator*



Consent Form

Participation in Research

Title: The Effect of Summer Vacation on Reading Level

Purpose: The purpose of this research is to determine if a long summer break away from school affects reading levels in a negative way. The researcher wants to compare scores and determine if students who took summer school courses had less negative impact than their peers who had the whole summer away from school.

Study Information: The study will compare MAP scores from students who took summer school courses and from students who did not take any summer school courses. The co-investigator will collect district MAP data from the prior two years for each participant in the study.

Time: The study will take place spring 2018.

Risks: The study uses data already collected by the district, so there are no risks to the participants, as they are not actually doing anything for this study in particular.

Benefits: The participants will have no benefits from this study. Their information could benefit future students.

Confidentiality: Participant's identity will not be shared with anyone beyond the principal investigator, Ximena Suarez-Sousa, and the co-investigator, Stacey Klinkhammer. All individual information will be recorded and tracked under an identification number and not the participant's name.

Participation and withdrawal: Participation in this study is optional. Students can choose not to participate or choose to withdraw at any time without any negative effects on grades, relationship with the instructor, or relationship with any South High School staff.

Appendix A, Continued

Contact: If you have any questions about the study, you may contact any of these people:

Stacey Klinkhammer Co-Investigator ph. 701.793.7529 Email: klinkhamst@mnstate.edu	Ximena P. Suarez-Sousa, Ph. D. Principal Investigator Assistant Professor, School of Teaching and Learning, Lommen 211C College of Education and Human Services Minnesota State University Moorhead ph. 218.477.2007 Email: suarez@mnstate.edu
or klinkhs@fargo.k12.nd.us	

Any questions about your rights may be directed to Lisa Karch, Ph. D., Chair of the MSUM Institutional Review Board, at 218-477-2699 or by lisa.karch@mnstate.edu. You will be given a copy of this form to keep.

"I have been informed of the study details and understand what participating in the study means. I understand that my child's identity will be protected and that he/she can choose to stop participating in the study at any time. By signing this form, I am agreeing to allow my child to participate in the study. I am at least 18 years of age or older."

Name of Child (Print)

Signature of Parent/Guardian

Date



Signature of Investigator

Date

Appendix B

Research Approval Form

Fargo Public Schools AP 4800

AF 4800

RESEARCH STUDY REQUEST

I hereby request permission to conduct a research study in the Fargo Public School District during the period from January 2018 to May 2018.

TOPIC: The Effect of Summer Vacation on Reading Level

If this request is granted, I agree to abide by Administrative Policy 4800: refer to the FPS web site at www.fargo.k12.nd.us

Signature of Researcher [Signature]

Institution of Higher Education MSUM

Signature of Graduate Advisor _____

Date 1/26/18

In addition to completing the Research Study Request Form, a copy of the following items are attached for review:

1. Abstract of the project
2. Questionnaire(s) to be used - none
3. Consent letter to be sent to parents

Endorsement: This request is approved disapproved

Building Principal: T. Bateh Date: 1-30-2018

Associate Superintendent: [Signature] Date: 1/30/18

Both signatures above are required prior to conducting a survey at a Fargo Public School.

Please **print** your name and the mailing address where you want this form returned:

Name: Stacey Klinkhammer

Street Address: Fargo South High School

City, State & Zip: _____

AP 4800 | Page 3

Appendix C

Method of Assent

I will explain to the students “Your parents have given consent for me to use your records for a research project I am conducting. You do not have to participate if you do not wish. This research will not require you to do anything. It will not affect your grade in any class, current or in the future.”