

Investigating Less Punitive Grading Practices in the 7th Grade Social Studies Classroom

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Abstract

Homework grading practices vary between school districts, school buildings, and even teachers within the same building. These varying strategies may misinform students, parents, administrators, and even universities and workplaces. This action research examined two different homework grading practices to find which practice helped students achieve higher scores on weekly homework and quizzes. Forty 7th grade students participated in this study. The researcher gathered homework and weekly quiz data for a total of six weeks. The study was split into two phases with different homework grading practices in each phase. Each phase lasted for three weeks. Participants completed homework and weekly quizzes for three weeks with their district's current grading practice including zeros for missing work. The following three weeks consisted of similar homework and weekly quizzes with a less punitive no-zero homework practice. The results of this study indicated that using a less punitive no-zero grading practice decreased homework scores and homework completion, but that decrease did not result in a decrease in weekly quiz scores. Mean homework scores during the zero grading practice were 17.9 decreasing to 17.2 during the no-zero grading practice. Mean weekly quiz scores during the zero grading practice were 16.6 increasing to 17.5 during the no-zero grading practice. Achievement on weekly quizzes remained consistent regardless of the grading practice used during the study. Homework scores and achievement on weekly quizzes were not directly correlated.

Keywords: assessment, grading practice, homework, student achievement

Investigating Less Punitive Grading Practices in the 7th Grade Social Studies Classroom

While homework has been an integral part of the education process for years, it has become quite a controversial topic in education reform (Reeves, 2008). As schools transition from traditional grading practices to standards-based grading, the methods of assessing homework have changed. Homework grading practices vary between school districts, school buildings, and even teachers within the same building. These varying strategies may misinform students, parents, administrators, and even universities and workplaces.

Homework is regularly used in middle schools, but educators, administrators, and parents disagree about whether homework is a necessary part of the learning process (Chang et al., 2014). Turing homework feedback into a grade is a difficult decision for educators. Some educators and school districts are beginning to change their grading practices from giving zeros for missing homework to simply eliminating the zero. While some educators believe a no-zero practice allows all students an opportunity to be successful; other educators think it allows students to pass with minimal homework completion (Minero, 2018). Some teachers hold students accountable for completing homework by giving zeros for missing work. This practice is questionable because zeros make grades drop to where they cannot be brought back up (Caneva, 2013; William, 2020; Yaffe, 2017). On the other hand, districts that implement no-zero grading practices use the information they do receive to figure a grade based on academic achievement. Adopting either practice is a controversial decision for a school district.

Currently, the researcher's district implements a zero grading practice for late or missing work. However, the principal is encouraging the teachers to consider a no-zero grading practice instead. By implementing both a zero and a no-zero grading practice in the researcher's social

studies classroom for three weeks each, the researcher wanted to investigate the effects of each on the students' achievement on weekly homework and quiz scores.

The purpose of this study was to examine how homework grading practices affect homework and quiz scores in the 7th grade social studies classroom. The study sought to understand how a less punitive, no-zero grading practice affected weekly homework and quiz scores. The findings from this study will inform educators of the effects of a less punitive no-zero grading practice on student achievement in 7th grade social studies.

Two research questions guided this study:

1. Does using a less punitive no-zero grading practice decrease students' weekly homework scores?
2. Does using a less punitive no-zero grading practice decrease student's weekly quiz scores?

The research questions led to the following hypotheses. The study hypothesized that a less punitive no-zero grading practice would decrease student's weekly homework scores. The study also hypothesized that a less punitive no-zero grading practice would result in a reduction in weekly quiz scores.

The aim of the following literature review was to identify different types of homework grading practices and to compare the effects of assigning students zeros for incomplete work or using a less punitive, no-zeros grading practice for incomplete work. Then the review explored possible consequences of grade inflation due to the homework grading practices implemented and discussed traditional and standards-based academic reporting. Homework grading practices may affect student grades and academic achievement.

Homework

The Miriam-Webster online dictionary (n.d.) defines homework as “an assignment given to a student to be completed outside the regular class period” (para. 2). Homework is extensively used in middle schools, but educators, administrators, and parents disagree about whether homework is a necessary part of the learning process (Chang et al., 2014). On one hand, students who complete homework regularly tend to earn higher scores on unit tests (Saam & Jeong, 2013). The extra practice helps students apply what is learned in the classroom independently. On the other hand, some parents feel homework interferes with other important activities. They believe that learning happens in all forms, such as extra-curricular, community, and other recreational activities, not just through schoolwork (Saam & Jeong, 2013).

One aspect of homework that causes much disagreement among educators is homework assessment. Educators agree that homework gives teachers the opportunity to give students feedback on their learning (Saam & Jeong, 2013). Where they disagree, though, is how to turn that information into a grade, or if it should be used as a grade at all.

Homework Grading Practices

Turning homework feedback into a grade is a difficult decision for educators. Some educators and school districts are beginning to change from a zero grading practice to a less punitive no-zero grading practice. While some educators believe a no-zero grading practice allows all students an opportunity to be successful, other educators think it allows students to pass with minimal homework completion (Minero, 2018). Adopting either grading practice is a controversial decision for a school district.

Zero Grading Practice

One way that teachers hold students accountable for completing homework is by giving zeros for missing work. This practice is questionable because zeros make grades drop to where

they cannot be brought back up (Caneva, 2013; William, 2020; Yaffe, 2017). Zeros are unfair to students because other grades span by 10% for each grade: 90% A, 80% B, 70% C, and 60% D. It takes multiple grades to bring a zero back up (Caneva, 2013). For instance, if a student has five homework assignments and turns in four of them earning an average of a 73%, a C, on those other four assignments, the overall grade at that point in time would still be a 58%, or an F. Zeros do not measure students' ability or knowledge, but rather compliance (Yaffe, 2017). Because of situations like this one, some teachers believe entering a 50% instead of a zero is a better reflection of a student's work (Caneva, 2013; William, 2020).

No-Zero Grading Practice

Another grading practice making waves in education reform is a no-zero grading practice. Districts that implement this less punitive grading practice do not enter zeros for missing work, but use the information they do receive to figure a grade based on academic achievement. Students receive extended deadlines and opportunities to rework assignments or retake assessments that do not meet expectations (Tallent, 2016). Teachers and administrators alike are concerned about student promotion, but administrator pressure for lower failure rates may lead to grade inflation (Chowdhury, 2018; Kunnath, 2017). Caneva (2013) explains that changing to a no-zero grading practice caused a significant decrease in the number of students failing, however, "the kids who once worked hard to pass by attending tutoring sessions decided to forgo the sessions" (p. 53). In this circumstance, the grades reported to parents increased, but the actual learning did not. Other stakeholders are concerned about students having no practice in deadlines, a necessary life skill, and students expecting the same lax expectations in college and workplace (Tallent, 2016).

Grade Inflation

Practices such as the no-zero grading practice increase concern for grade inflation. “Over the past 20 years, grade point averages have soared while SAT scores and other measures of academic performance have held stable or fallen” (Gershenson, 2020, para. 1). Grade inflation affects students, teachers, universities, and employers (Finefter-Rosenbluh & Levinson, 2015). Students may believe they are more prepared for college or the workplace than they really are. Teachers may employ grade inflation to earn higher evaluation marks from their students (Chowdhury, 2018). One of the main concerns about grade inflation is the lack of differentiation between candidates for jobs or higher education. On the other hand, “competitive grading and ranking have numerous negative effects” including an increase in cheating (Finefter-Rosenbluh & Levinson, 2015, p. 11). Students may decrease their work ethic and not try as hard on their work (Chowdhury, 2018). On the contrary, holding grand expectations for students increases student performance (Caneva, 2013; Gershenson, 2020). However, teachers struggle equivocating academic rigor and student advancement (Kunnath, 2017). Grading can be emotional for teachers leading to disappointment, concern, and frustration (Babb & Corbett, 2016).

Academic Progress Reports

Throughout the school year, teachers are required to report academic progress to families. Academic progress reports may differ between states, school districts, and even teachers within the same school. Both the zero and the no-zero grading practices have different effects depending on the academic progress reporting practices within each school district. Reporting practices vary between traditional and standards-based grading reports.

Traditional Grading Reports

Traditional grading reports have been around for many years. With a traditional grading report, grades identify talented students rather than help grow student knowledge and ability (Guskey, 2011). Additional challenges, such as grading on a curve and comparing students to their classmates, pull further from the actual intention of grading students: to provide parents and students with feedback on students' academic capabilities (Finefter-Rosenbluh & Levinson, 2015; Guskey, 2011; McMillan, 2018).

While letter grades provide an overall score for how a student performs in class, the letter grades may not give the full picture. Grades often include academic and non-academic factors (Chen & Bonner, 2017; Kunnath, 2017; Randall & Engelhard, 2010). Many times, teachers use other factors such as work ethic, participation, and improvement in figuring the overall grade (Hooper & Cowell, 2014; McMillan, 2018). In these circumstances, grades do not reflect academic achievement, but rather, compliance (Kunnath, 2017; Winger, 2005). Whether explicitly or implicitly, teachers tend to reward work ethic and good behavior with better grades (Chen & Bonner, 2017; Knight & Cooper, 2019; Randall & Engelhard, 2010).

Traditional grading reports and grading practices may vary from teacher to teacher (McMillan, 2018; Reeves, 2008). For example, one teacher may take off points for late work, while other teachers may just give a zero. Often parents and students do not actually know what exactly the letter grade means and what teachers choose to report. They know an A is good and an F is failing, but they do not know how much of the content each student knows or what skills are mastered. Sometimes grades focus more on areas other than academic performance, which can give students and parents incorrect information (Winger, 2005). Rewarding work ethic and behavior decreases the meaning of grades (Knight & Cooper, 2019; Randall & Engelhard, 2010).

Standards-Based Grading Reports

One trend making waves in grading reform is the switch to standards-based grading reports. When figuring standards-based grades, teachers compare students to a standard or learning target and omit non-academic factors (Knight & Cooper, 2019; McMillan, 2018). Using this method, students do not focus on earning points but do focus on achieving a predetermined learning target. Standards-based grading completely alters the focus of grading for further learning. With this in mind, students are encouraged to have more of a growth mindset where making mistakes is a part of the learning process (Zimmerman, 2016). Mastering objectives remains the goal so students may try multiple times to show proficiency if necessary (Knight & Cooper, 2019; Zimmerman, 2016).

Standards-based grading reports became more of a popular trend with the adoption of the Common Core State Standards (Townesley & Buckmiller, 2020). Although many experts consider standards-based learning and grading as best practices, the decision to change grading practices is a controversial one. Many principals report great difficulty getting all the necessary parties on board with the transition (Knight & Cooper, 2019; Townesley et al., 2019).

Conclusion

Many facets of homework practices and grading practices influence grading reform. While homework has been considered an integral part of the education system, the way it is utilized in the classroom varies. Some schools favor a zero grading practice to hold students more accountable while other schools favor a no-zero grading practice to help more students pass. Traditional and standards-based grading reports drive grading practices which can lead to possible grade inflation. With so many stakeholders such as students, parents, administrators, and the community at large, it is important to be well-informed about the possible outcomes of such grading practices on student academic achievement.

Methods

This study used a quantitative approach utilizing comparative design to compare participants' weekly homework and quiz scores based on zero and no-zero grading practices. The researcher gathered homework and weekly quiz data for a total of six weeks. Participants completed homework and weekly quizzes for three weeks with their current traditional grading practice including zeros for missing work. The following three weeks consisted of similar homework and weekly quizzes with a less punitive no-zero grading practice. Participants were introduced to the World Geography: My World Interactive eText, Reading Support Questions homework, and weekly quiz format before the study. The following information details the participants, setting, data source and research materials, and data collection procedures.

Participants and Setting

The participants in this study were 40 in-class 7th grade social studies students from the researcher's 7th grade social studies classes in Casey, Illinois. Of the 40 participants, 20 were boys and 20 were girls. The researcher chose to focus on 7th grade students without IEP, 504, or ELL accommodations due to variances in homework requirements. All 7th grade students with IEP, 504, or ELL accommodations were excluded from this research. In addition, students who were absent for quizzes due to quarantine or illness were excluded from the study. Participants ranged in socioeconomic status and reading ability.

The study was conducted in the 7th grade social studies classes of a jr./sr. high school in Casey, Illinois. The school is a small, rural public school in southeastern Illinois with an attendance of 374 students (Illinois State Board of Education, 2020). According to the 2020 Illinois Report Card, the school is very racially homogeneous, with 94.4% white, 3.2% Hispanic, and 3.4% other. The school has 45.2% of students of Low-Income Status. Of the total student

body, 10% have IEP's. Per the most recent reported state testing, the school has around 57% proficient in ELA and 36% proficient in math on IAR testing (Illinois State Board of Education, 2019).

Data Source and Research Materials

The researcher collected data using two instruments to conduct this six-week study. The first instrument was weekly Reading Support Questions Homework and the second instrument was Weekly Quizzes. The participants used the World Geography: My World Interactive eText as they completed homework and prepared for the weekly quizzes.

The researcher assigned Reading Support Questions Homework each week (see Appendix A). Questions on the homework assignment were open-ended and aligned with the quiz each week. Homework was distributed on Tuesdays and due on Thursdays each week during the study. The raw scores recorded from the Reading Support Questions Homework were used to answer the research question: Does using a less punitive no-zero grading practice decrease students' homework scores?

The researcher assigned Weekly Quizzes administered through Google Forms (see Appendix B). Quizzes were given on Fridays each week during the study. Quizzes included information from the weekly homework and other topics discussed throughout the week. Quiz questions consisted of eight multiple-choice and one essay question. The raw quiz scores from the weekly quizzes were used to answer the research question: Does using a less punitive no-zero grading practice decrease students' weekly quiz scores?

Procedures of Data Collection

The period for this study was a total of six weeks. Each week included one multi-day lesson. The researcher assigned the participants homework each Tuesday. Homework was due

before class began each Thursday. To assess academic achievement, participants completed a lesson quiz each Friday.

The study was split into two phases with different homework grading practices in each phase. Each phase lasted for three weeks. In both phase one and phase two, homework and quiz scores were recorded as raw scores.

In phase one, the researcher used the current zero grading practice. During this phase, missing homework was entered as a zero in the grade book. Completed homework was scored for correctness and was recorded using raw scores. Quiz scores were also recorded as raw scores.

In phase two, the researcher used a less punitive, no-zero grading practice. During this phase, missing homework was entered as simply “missing” in the grade book. Completed homework was scored for correctness and recorded using raw scores. Quiz scores were also recorded as raw scores. Table 1 below shows weekly data collection for zero and no-zero grading practices.

Table 1

Weekly Data Collection for Zero and No-Zero Grading Practices

Phase	Week	Data Collected
Phase One Zero Grading Practice	1	Lesson 3 Reading Support Questions Homework Lesson 3 Quiz
	2	Lesson 4 Reading Support Questions Homework Lesson 4 Quiz
	3	Lesson 5 Reading Support Questions Homework Lesson 5 Quiz
Phase Two	4	Lesson 6 Reading Support Questions Homework

No-Zero Grading Practice		Lesson 6 Quiz
	5	Lesson 7 Reading Support Questions Homework Lesson 7 Quiz
	6	Lesson 8 Reading Support Questions Homework Lesson 8 Quiz

Data Analysis and Results

The goal of this study was to analyze four comparative sets of data from two phases of study. The researcher collected homework and quiz scores for 40 7th grade social studies participants utilizing a zero grading practice during phase one. During phase two, the researcher collected homework and quiz scores utilizing a no-zero grading practice. The data was analyzed quantitatively using raw scores on the weekly homework and quizzes to determine if changing the grading practices influenced student achievement on weekly homework and quiz scores.

Data Analysis

The researcher used descriptive analysis to analyze the data quantitatively. Each week the researcher collected data from homework and quizzes. First, all the data collected from the homework was organized and reported as raw scores. Table 2 shows homework and quiz scores for all participants collected during the six-week period.

The next step was organizing the data collected from the weekly homework. The data was organized and reported as raw scores on two different graphs using Microsoft Excel. Figure 1 shows homework scores during phase one. Phase one utilized the researcher's current zero grading practice. Figure 2 shows raw homework scores during phase two which utilized the less punitive no-zero grading practice.

Then the researcher organized the data collected from the weekly quizzes. The data was organized and reported as raw scores on two different bar graphs using Microsoft Excel. Figure 3 shows quiz scores during phase one. Phase one utilized the researcher's current zero grading practice. Figure 4 shows raw quiz scores during phase two which utilized the less punitive no-zero grading practice.

The researcher then created a table to compare mean homework scores from phase one to the mean homework scores from phase two. The researcher also created a similar table to compare mean quiz scores from phase one to mean quiz scores from phase two. During phase one, participants were scored using the current zero grading practice, and during phase two, participants were scored using the less punitive no-zero grading practice. Table 3 shows the weekly mean homework scores for each grading practice. Table 6 shows the weekly mean quiz scores for each grading practice.

Next, the researcher created a table to compare the overall mean homework scores of all the participants from phase one to the overall mean homework scores of phase two. The researcher also created a similar table to compare overall mean quiz scores from phase one to overall mean quiz scores from phase two. Both tables also show the difference between the means. Table 4 shows the collective mean homework scores for each grading practice, and Table 7 shows the overall mean quiz scores for each grading practice.

Finally, the researcher created a table comparing the three highest scoring participants on the homework to the three lowest scoring participants on the homework. Another table was created to compare the three highest scoring participants on the weekly quizzes to the three lowest scoring participants on the quizzes. Table 5 shows the three highest scoring and three lowest scoring participants on the quizzes. Table 8 shows the three highest scoring and three lowest scoring participants on the weekly homework. Table 8 shows the three highest scoring

and lowest scoring participants on the weekly quizzes. The following discussion shows the overall results of the study.

Results

Overall results reported that participants scored higher on homework during phase one when the researcher utilized the current zero grading practice. However, participants scored higher on the weekly quizzes when the researcher utilized the less punitive no-zero grading practice. Table 2 below shows the data collected.

Table 2

Weekly Scores of Homework and Quiz. n=40

Week/ Part	1		2		3		4		5		6	
	H	Q	H	Q	H	Q	H	Q	H	Q	H	Q
1	18	12	16	13	16	12	17	18	17	11	14	14
2	16	3	16	8	12	12	15	15	13	18	0	10
3	20	12	15	7	15	12	20	18	20	18	0	15
4	18	18	15	20	17	18	20	18	20	18	0	16
5	19	16	20	16	19	18	20	18	20	20	20	20
6	19	16	20	16	19	18	20	18	20	20	20	20
7	20	18	20	18	18	18	19	16	18	18	20	18
8	18	12	20	20	17	18	20	18	20	20	16	14
9	19	16	20	18	18	16	20	16	20	20	16	16
10	14	14	16	16	14	12	13	9	15	10	14	8
11	19	18	20	20	20	20	19	20	20	20	20	18
12	19	19	20	20	17	20	19	18	20	19	19	20
13	20	14	20	18	18	18	19	20	20	18	19	18

14	17	18	17	20	14	14	19	20	17	20	19	18
15	20	18	20	16	19	18	20	20	20	18	19	14
16	19	20	18	20	18	18	20	20	20	20	19	20
17	19	20	20	14	19	18	20	18	20	17	20	20
18	16	14	19	16	18	20	19	20	18	20	20	14
19	17	20	16	18	13	14	19	16	18	18	20	20
20	17	20	20	12	17	18	0	20	13	20	19	18
21	16	20	19	18	20	14	18	18	20	20	19	18
22	19	16	20	16	19	18	20	18	20	19	20	16
23	20	20	19	18	18	16	20	20	20	20	14	16
24	20	19	19	20	19	18	20	20	20	20	20	18
25	14	20	14	16	17	18	15	14	18	18	14	14
26	19	18	19	12	17	10	15	18	15	12	19	18
27	18	20	20	16	18	18	20	20	19	20	19	20
28	20	18	19	20	17	20	20	20	14	20	20	18
29	20	12	19	17	20	16	20	20	19	20	19	18
30	18	20	17	19	17	16	19	16	17	20	16	20
31	17	20	16	18	17	14	20	18	20	20	20	20
32	20	18	17	20	16	20	19	18	20	20	20	20
33	19	14	16	8	16	14	20	18	19	18	18	16
34	20	20	20	14	19	18	20	18	0	20	0	16
35	19	16	20	20	18	18	20	20	20	20	20	20
36	19	10	18	20	16	18	20	16	20	18	18	18
37	17	10	17	18	19	18	20	16	19	12	17	14
38	0	4	18	20	16	12	14	10	13	16	0	6

39	20	16	19	20	18	16	0	16	13	15	17	16
40	20	20	20	20	19	16	20	20	19	20	19	18
Mean	18.0	16.3	18.4	16.9	17.3	16.6	17.9	17.8	17.8	18.2	15.9	16.7
SD	3.3	4.3	1.7	3.6	1.9	2.7	4.6	2.6	3.7	2.8	6.4	3.3

Note: Part=Participant, H=Homework, Q=Quiz, n=number of participant, SD=Standard Deviation

The following sections report the details of results based on the research questions. The study was guided by two research questions: Does using a less punitive no-zero grading practice decrease weekly homework scores? and does using a less punitive no-zero grading practice decrease weekly quiz scores?

Research Question One: Does Using a Less Punitive No-zero Grading Practice Decrease Weekly Homework Scores?

The overall results revealed that participants achieved higher homework scores while the researcher was implementing the current zero grading practice. Therefore, the less punitive no-zero grading practice decreased weekly homework scores. Figure 1 shows participant homework scores during phase one, when the researcher implemented the current zero grading practice. Figure 2 shows participant homework scores during phase two, when the researcher implemented the less punitive no-zero grading practice.

Figure 1

Participant Homework Scores During Phase One-Zero Grading Practice. n=40

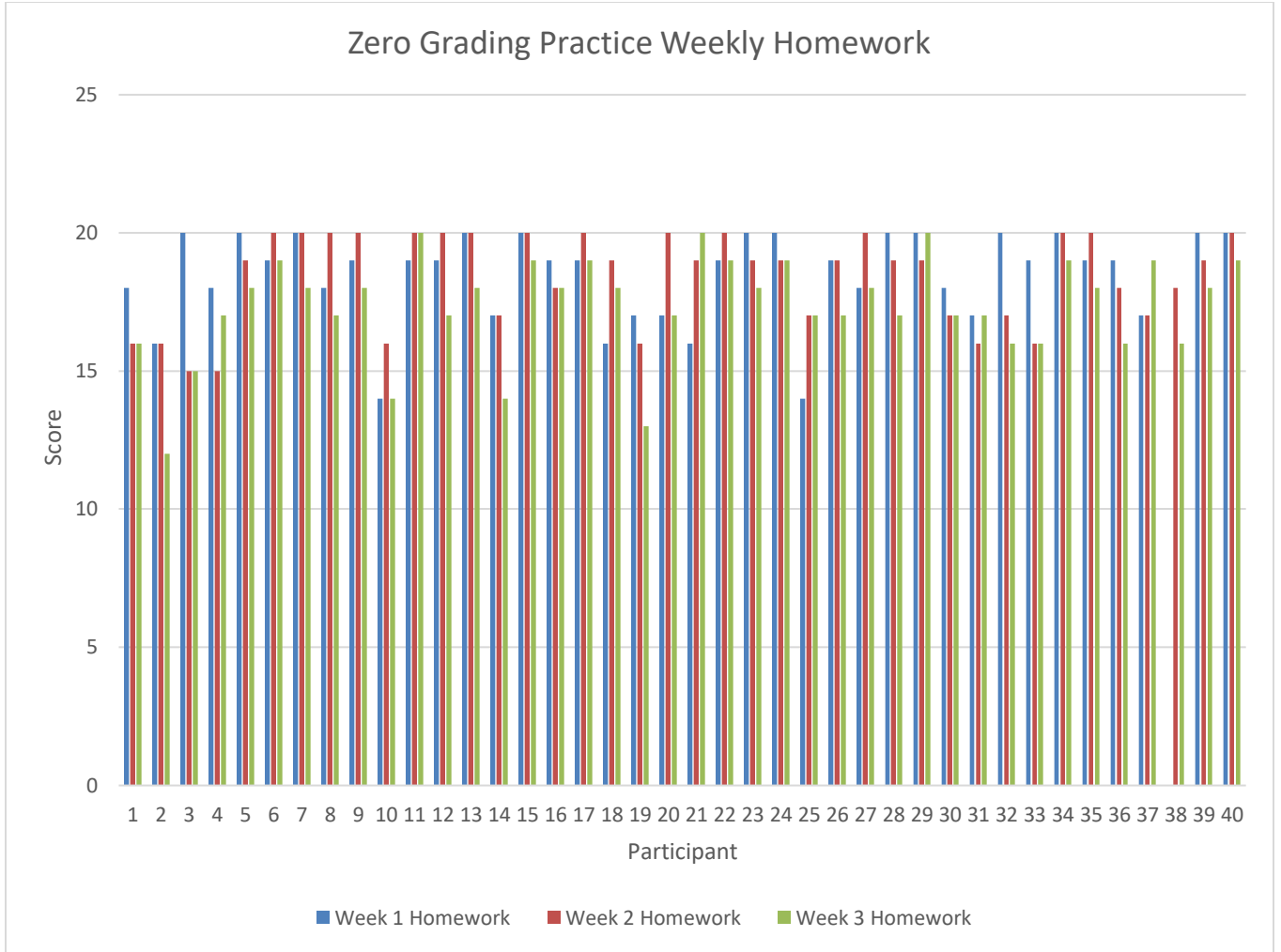
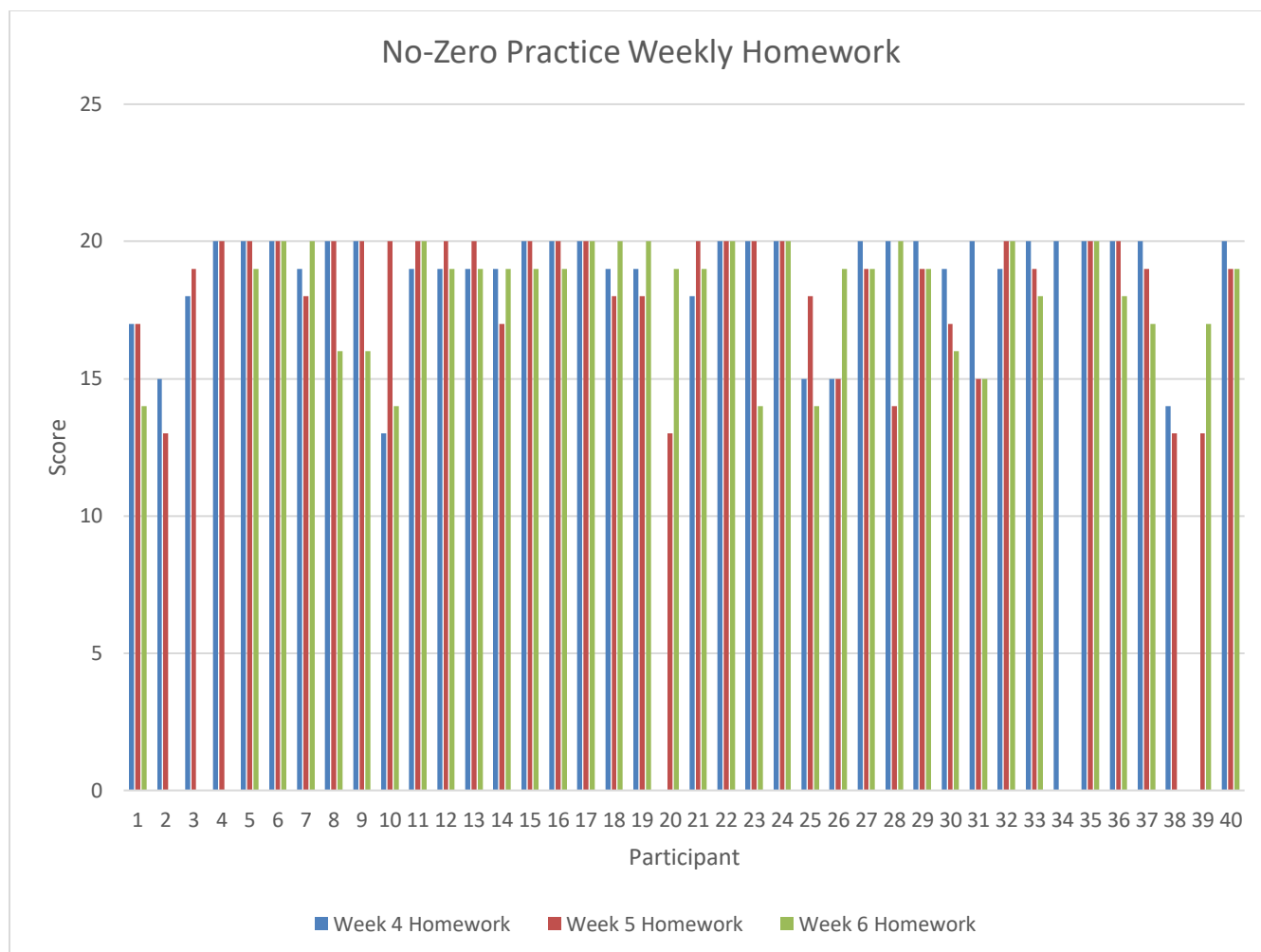


Figure 2

Participant Homework Scores During Phase Two-Less Punitive Grading Practice. n=40



Although participants weekly homework scores decreased from a mean of 17.9 during phase one when the current zero grading practice was implemented to 17.2 during phase two when the less punitive no-zero grading practice was implemented, the overall difference between the participants' achievement with each grading practice was insignificant. The difference between the two grading practices was a total of 0.7. Table 3 below shows the mean scores from phase one and phase two. The mean homework scores were highest in weeks one, two, and four with means of 18.0, 18.4 and 17.9 respectively. Weeks one and two were both during phase one when the researcher was implementing the current zero grading practice. Table 4 below shows

the average mean scores from each phase. The overall difference between the average scores in phase one and the average scores in phase two was 0.69 indicating very little change.

Table 3

Weekly Mean Homework Scores for Zero and No-Zero Grading Practices. n=40

Phase	Week	Mean
Phase One- Zero Grading Practice	1	18.0
	2	18.4
	3	17.3
Phase Two- No-Zero Grading Practice	4	17.9
	5	17.8
	6	15.9

Table 4

Phase One and Phase Two Homework Mean and Difference. n= 40

Phase	Mean
Phase One-Zero Grading Practice	17.9
Phase Two-No-Zero Grading Practice	17.2
Overall Difference	0.7

Table 5 reports the three participants achieving the highest scores and the three participants achieving the lowest scores on weekly homework. Participants 15, 17, and 24 scored the highest on weekly homework assignments earning 20 out of 20 points on four out of the six total assignments. Participants 2, 38, and 34 scored the lowest on the weekly homework

assignments. Participant 2 averaged 12 on the weekly homework assignments. Participant 38 averaged 10.2 on the weekly homework assignments, and participant 34 averaged 13.2 on the weekly homework assignments. Participants 38 and 34 both had two missing assignments.

Participant 2 did not turn in one of the assignments during phase two when the less punitive no-zero grading practice was implemented, but completed all homework assignments during phase one when the current zero grading practice was implemented. Participant 38 had one missing assignment during each grading practice. Since one was in each phase, this could be a common occurrence for this student and may not have been a change due to the grading practice.

However, participant 34 did not turn in two homework assignments during the less punitive no-zero grading practice. The participant's scores during phase one of the current zero grading practice were some of the highest in the sample. This is a significant change for this particular student and appeared to be driven by the change to the less punitive no-zero grading practice.

Table 5 shows weekly homework scores for the three highest achieving students and the three lowest achieving participants.

Table 5

Weekly Homework Scores for Three Highest and Three Lowest Participants. n=6

Week/Part	1	2	3	4	5	6
15	20	20	19	20	20	19
17	19	20	19	20	20	20
24	20	19	19	20	20	20
2	16	16	12	15	13	Missing
38	Missing 0	18	16	14	13	Missing
34	20	20	19	20	Missing	Missing

Mean	15.8	18.8	17.3	18.2	14.3	9.8
SD	7.9	1.6	2.9	2.9	7.8	10.8

Research Question Two: Does Using a Less Punitive No-Zero Grading Practice Decrease Weekly Quiz Scores?

The overall results reported that participants achieved higher quiz scores while the researcher was implementing the less punitive no-zero grading practice. This was different than what the researcher hypothesized. Figure 3 shows the participants' weekly quiz scores during phase one, when the researcher implemented the current zero grading practice. Figure 4 shows the participants' quiz scores during phase two, when the researcher implemented the less punitive no-zero grading practice.

Figure 3

Participant Quiz Scores During Phase One: Zero Grading Practice. n=40

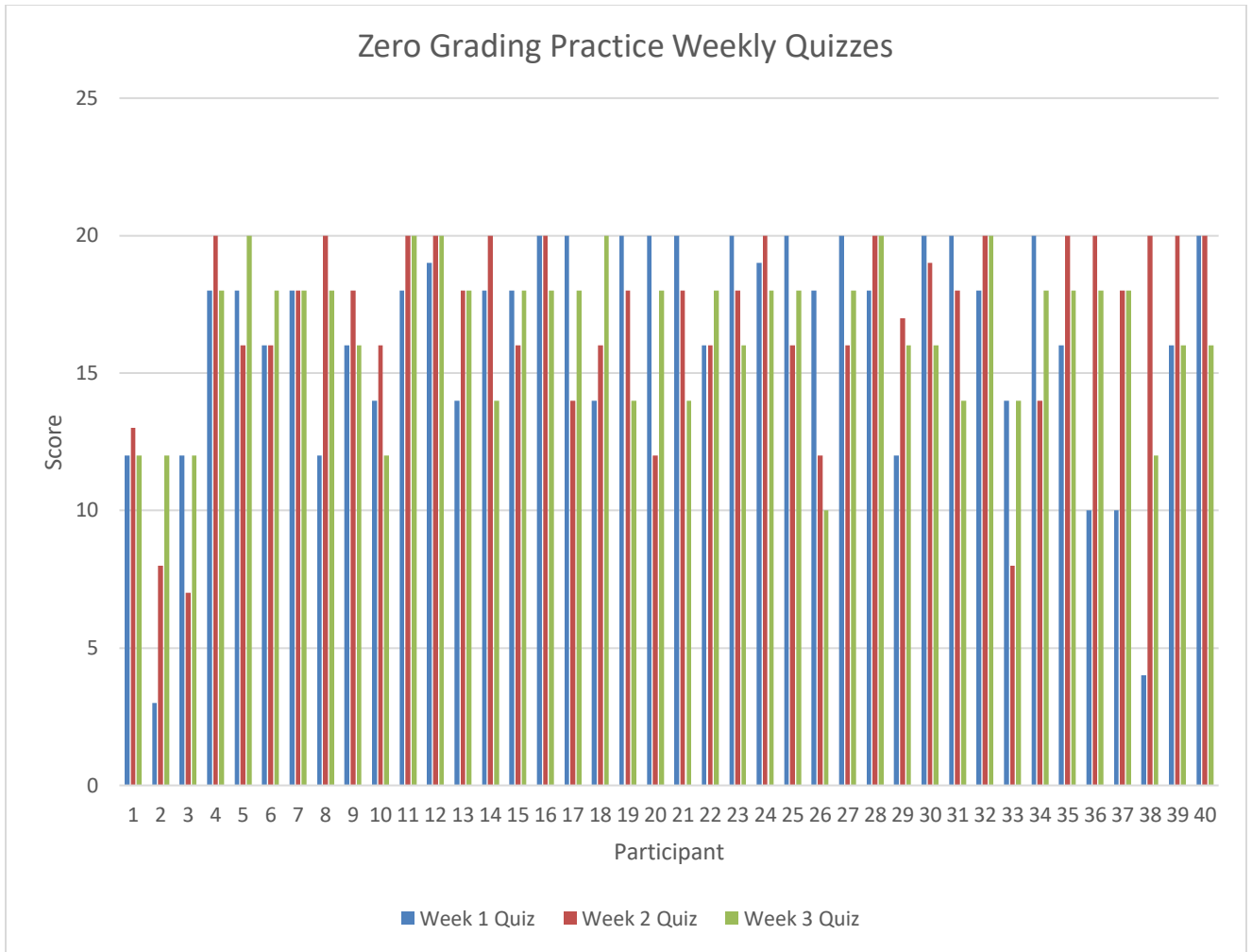
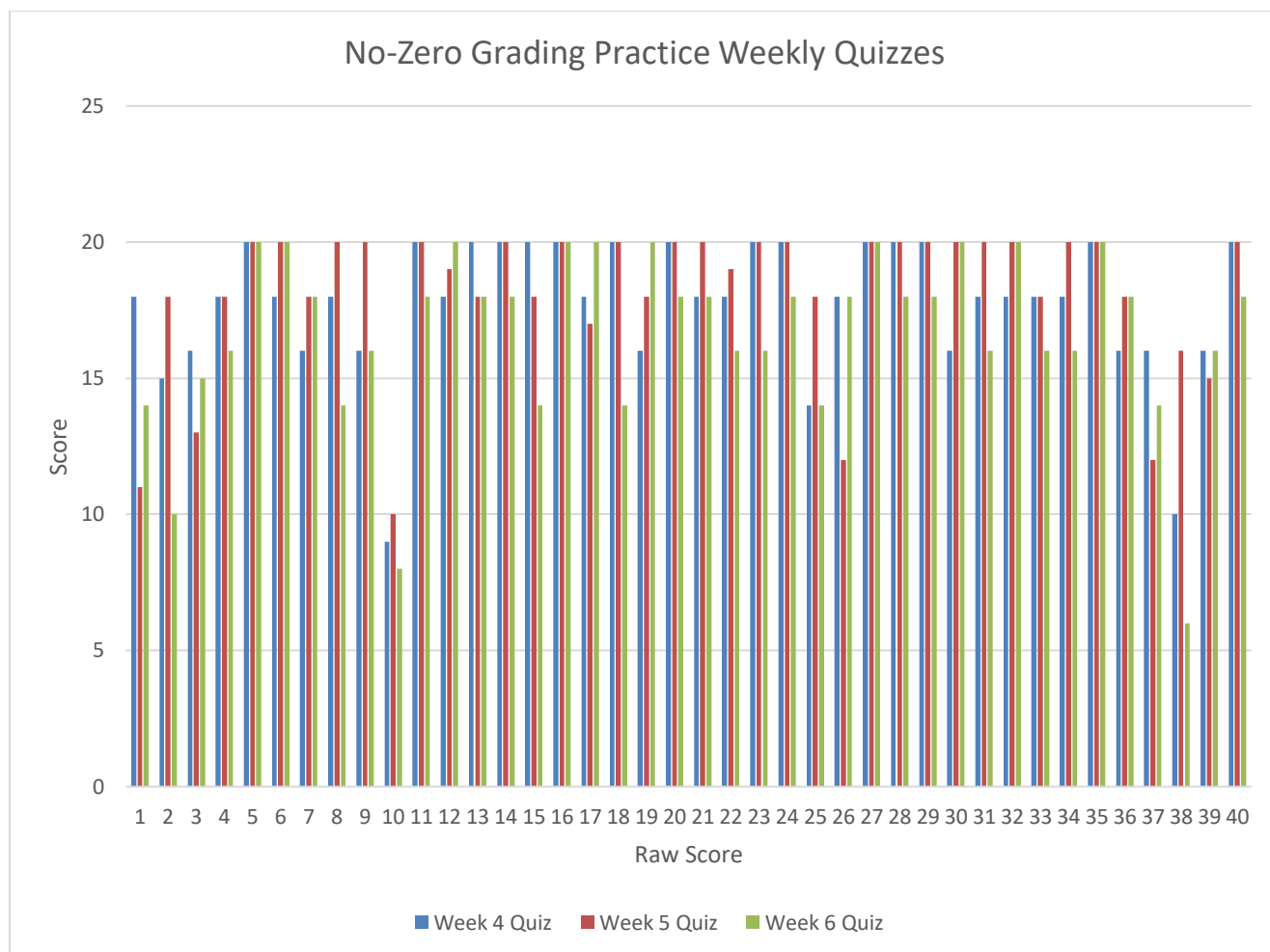


Figure 4

Participant Quiz Scores During Phase Two: No-Zero Grading Practice



Although the overall results show that participants achieved higher quiz scores while the researcher was implementing less punitive no-zero grading practice, the difference between the mean scores with both grading practices was also insignificant. Table 6 below shows the mean quiz scores from phase one and phase two. The mean quiz scores were highest in weeks two, four, and five with scores of 16.9, 17.8, and 18.2 respectively. Weeks four and five were both during phase two when the researcher was implementing the less punitive no-zero grading practice. Table 7 below shows the average mean quiz scores from each phase. The overall difference between the average scores in phase one and the average scores in phase two was -0.9.

Table 6

Weekly Mean Quiz Scores for Zero and No-Zero Grading Practices. n=40

Phase	Week	Mean
Phase One- Zero Grading Practice	1	16.3
	2	16.9
	3	16.6
Phase Two No-Zero Grading Practice	4	17.8
	5	18.2
	6	16.7

Table 7

Phase One and Phase Two Quiz Scores Mean and Difference. n= 40

Phase	Mean
Phase One-Zero Grading Practice	16.6
Phase Two-No-Zero Grading Practice	17.5
Overall Difference	-0.9

While some of the highest achieving students scored higher during phase two, when the less punitive no-zero grading practice was implemented, some of the lowest achieving student scored lower. Participants 16, 28, and 35 scored the highest on weekly homework assignments earning 20 out of 20 points on most of the six total quizzes. Participant 16 scored 20 out of 20 points on five out of the six weekly quizzes, while participants 28 and 35 scored 20 out of 20 points on four out of the six weekly quizzes.

Three of the four perfect scores occurred during phase two in which the researcher implemented the less punitive no-zero grading practice. Participants 2, 10, and 38 scored the

lowest on the weekly quizzes. Participant 2 scored the lowest of all on the first quiz with a score of 3 out of 20 total points. The participant's scores were significantly higher during phase two when the researcher implemented the less punitive no-zero grading practice. Participant 10 and participant 38 showed inconsistent quiz scores. Participant 10 started with higher quiz scores in phase one, but then the participant's quiz scores decreased in phase two. The participant's lowest scores occurred during phase two. Participant 38 scored fewer than 12 out of 20 total points on four of the weekly quizzes, but then scored a perfect 20 out of 20 on a quiz during week two. Table 8 below shows weekly quiz scores for the three highest achieving students and the three lowest achieving participants.

Table 8

Weekly Quiz Scores for Three Highest and Three Lowest Participants. n=6

Week/Part	1	2	3	4	5	6
16	20	20	18	20	20	20
28	18	20	20	20	20	18
35	16	20	18	20	20	20
2	3	8	12	15	18	10
10	14	16	12	9	10	8
38	4	20	12	10	16	8
Mean	12.5	17.3	15.3	15.7	17.3	13.7
SD	7.3	4.8	3.7	5.2	3.9	6.4

The overall results reported that participants scored higher on homework during phase one when the researcher utilized the current zero grading practice. However, participants scored

higher on the weekly quizzes when the researcher utilized the less punitive no-zero grading practice. The first research question was: Does using a less punitive no-zero grading practice decrease weekly homework scores? The overall results revealed that participants achieved higher homework scores while the researcher implemented the current zero grading practice rather than the less-punitive no-zero grading practice. Therefore, the less punitive no-zero grading practice decreased weekly homework scores as the researcher hypothesized. The second research question was: Does using a less punitive no-zero grading practice decrease weekly quiz scores? The overall results reported that weekly quiz scores did not decrease while the researcher implemented the less punitive no-zero grading practice. Participants achieved higher quiz scores while the researcher was implementing the less punitive no-zero grading practice. This was different than what the researcher hypothesized.

Findings, Implications, Limitations

Findings

The findings of this study indicated that using a less punitive no-zero grading practice decreased homework scores and homework completion, but that decrease did not result in a decrease in weekly quiz scores. In the past, it has been shown that a zero grading practice increases homework completion, and there has been a concern that a no-zero grading practice decreases student achievement. The findings from this study inform educators and administrators of the possible effects of a zero and a no-zero grading practice on weekly homework and quiz achievement for seventh grade social studies students. The data collected during this study indicates that a no-zero grading practice may decrease homework scores, but that decrease in homework completion does not affect weekly quiz scores. Also, based on the data collected during this study, a zero grading practice may increase homework scores, but that increase in

homework scores does not affect weekly quiz scores. The purpose of this study was to examine how homework grading practices affect weekly homework and quiz scores in the 7th grade social studies classroom. The study concluded that participants completed more homework and scored higher on homework assignments when the researcher utilized at the current zero grading practice. Overall, achievement on weekly quizzes remained consistent regardless of the grading practice used during the study.

Implications

Teachers have many varying opinions on homework grading practices. While many teachers agree that homework is a vital part of the learning process, many disagree about the effectiveness of homework assignments as an indicator of student achievement. The study results indicate that utilizing a less punitive no-zero grading practice decreases homework completion and homework scores, but that increase does not result in lower weekly quiz scores. The students earned higher quiz scores when the researcher utilized a no-zero grading practice. Changing the grading practice did not result in a notable change in weekly quiz scores. Students in 7th grade social studies can be successful on weekly quizzes when they do not complete all homework assignments.

Limitations

One limitation to this study was that only 40 students participated. The researcher dropped students who were quarantined or absent for quizzes during the study. Students with IEPs or 504 plans were also excluded from the study due to varying homework and quiz modifications. A larger sample of students, such as all the 7th and 8th graders, would provide a wider variety of data to analyze.

Another limitation of this study was that it only took place over a six-week time period. Extending the study to six weeks per grading practice would provide more opportunities for data analysis. Three weeks was not a lot of time for students to adjust to the different grading practices or see how the grading practices affected their overall grades.

One other limitation of this study was that the researcher was quarantined during two weeks of the study. Students were instructed with a substitute teacher during the second and third weeks of phase one of the study. It is possible that a change in teacher may have caused students to focus less or not try as hard during the weeks the researcher was quarantined.

Reflection and Action Plan

Reflections

Implementing a less punitive no-zero grading practice decreased homework scores but did not result in decreased achievement on weekly quizzes. This was contrary to what the researcher hypothesized. When conducting the study, the researcher observed that participants spent equal time at school preparing for the weekly quizzes, whether they completed the homework assignments or not. For some, it appeared as though having a more flexible grading practice allowed them to focus more on preparing for their assessments than on completing homework.

Implementing the current zero grading practice increased homework scores but did not result in increased achievement on weekly quizzes. When conducting the study, the researcher observed that parent contacts for missing work were much higher during the zero grading practice of phase one. This may be due to the decreased grades for missing work when the zero was entered into the online grade book. As mentioned previously, participants spent equal time at

school preparing for weekly quizzes, whether they completed their homework assignments or not. Homework scores and achievement on weekly quizzes are not directly correlated.

Action Plan

The researcher plans to share the findings of this study with her junior high colleagues and social studies department colleagues during department meetings. The researcher also plans to share the findings with the school principal, as the principal showed great interest in the findings prior to beginning of the study. The principal of the researcher's school supports a no-zero grading policy and the data from this project supports his point of view that homework completion does not reflect student achievement. The data and findings of this study will also be presented to an Action Research committee at Eastern Illinois University using PowerPoint Slides and a podcast.

The researcher suggests that more research be done on whether homework grading practices affects student achievement on quizzes. The researcher suggests a larger, multiple-grade participant sample, and a longer data collection period. In the meantime, the researcher will use the knowledge gained from this study to provide a flexible learning experience and continue to promote student preparation for achievement on quizzes.

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Appendix A

Lesson 3 Climates and Ecosystems

Reading Support

Answer the questions as you read this lesson.

Climate and Weather

1. What is the difference between weather and climate?
2. Which of these make up weather and climate? Circle or write your answers.

earthquakes temperature precipitation
volcanic eruptions tsunamis

Why Do Temperatures Differ?

3. Why is it warm all year near the Equator?
4. Look at the diagram Latitude Zones. Which latitude zone is the United States in?

How Does Water Affect Climate?

5. What is an ocean current?
6. How do ocean currents affect climates?
7. What is the water cycle?

Air Circulation and Precipitation

- 8. How does hot air tend to move?

- 9. How does cold air tend to move?

Types of Climate

- 10. What are the three types of climate regions? Where is each found?

Biomes and Ecosystems

- 11. Look at the list of ecosystems in the box. Write the name of each one in the chart based on its **location**—tropical, temperate, or polar—and by **type**—forest, grassland, or cold climate.

ECOSYSTEMS

- | | |
|-----------------------|--|
| • Mediterranean brush | • tropical or subtropical grassland or savanna |
| • ice cap | • tropical or subtropical rainforest |
| • tundra | • temperate grassland and brush |
| • temperate forest | |

	Forest ecosystems	Grassland ecosystems	Cold climate ecosystems
Tropical			
Temperate			
Polar			

Appendix B

Lesson 3 Quiz: Climates and Ecosystems

Name _____ Date _____

Multiple Choice: Read each question carefully. Determine the best answer to the question from the four answer choices provided.

- 1 Winds, air pressure, evaporation, and the angle of the sun shape the daily _____ of each place.
 - A climate
 - B temperature
 - C weather
 - D precipitation

- 2 The difference between tropical and temperate climates is mainly the result of
 - A wind patterns each season.
 - B precipitation patterns each season.
 - C Earth's tilt relative to its orbit.
 - D the position of the sun in the sky.

- 3 _____ is greatest near the Equator, where air usually rises.
 - A Heat
 - B Precipitation
 - C Air pressure
 - D Dry air

- 4 An ecosystem is a network of _____ that depend on one another and their environment for survival.
 - A plants and animals
 - B living things
 - C natural features and living things
 - D people

- 5 Which ecosystem usually supports thick forests of deciduous trees?
 - A tropical forest
 - B temperate forest
 - C savanna
 - D subarctic forest

- 6 The movement of water from Earth's surface into the air and then back again is called the
 - A water cycle
 - B rain cycle
 - C precipitation cycle
 - D cloud cycle

- 7 Why is it warm all year near the equator?
 - A The sun is nearly overhead so it receives direct sunlight.
 - B The sun is closer to the earth at the equator.

- 8 Which of the following is NOT an important factor that influences the climate?
 - A temperature
 - B earthquakes
 - C precipitation
 - D wind

Written Response: Answer the following question in complete sentences.

9 What is the difference between weather and climate?

-

Appendix C

September 9, 2021

Stephanie Scott
Sham Yunus
Teaching, Learning, and Foundations

Dear Stephanie,

Thank you for submitting the research protocol titled, "Investigating Less Punitive Grading Practices in the 7th Grade Social Studies Classroom" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 9/8/2021, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 21-138. You are approved to proceed with your study.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiuirb@eiu.edu

Thank you for your cooperation, and the best of success with your research.

John Bickford, Chairperson
Institutional Review Board
Telephone: 217-581-7881
Email: jbickford@eiu.edu

Appendix D

Casey-Westfield High School

Jim Sullivan, Principal
Haley Honselman, Guidance Counselor

306 East Edgar Avenue
Casey, Illinois 62420
217-932-2175
FAX 217-932-2986
Dr. Jon Julius, Superintendent

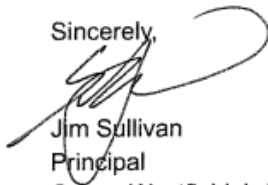
Chris Seaton, Assistant Principal
Dalton McFarland, Athletic Director

August 27, 2021

Dear Institutional Review Board Members,

As principal of Casey-Westfield Jr./Sr. High School, I approve of the appropriateness of Stephanie Scott's project study titled Investigating Less Punitive Grading Practices in the 7th Grade Social Studies Classroom. Mrs. Scott discussed the components of the study as well as the expected outcomes. The project will investigate different grading policies and how they affect student achievement. Conducting the project at Casey-Westfield is very feasible and should be completed before the end of the semester. If you have any questions, please contact me.

Sincerely,



Jim Sullivan
Principal
Casey-Westfield Jr./Sr. High School

Appendix E

Parent Notification

Dear Parents/Guardians:

As a culminating project in my graduate work in Curriculum and Instruction at Eastern Illinois University, I am conducting an Action Research Project in your child's social studies class this semester. This research project is a requirement to complete my master's degree.

I will be conducting a study that will investigate two different homework grading practices and how they affect student achievement on weekly quiz scores. Students will have two homework assignments and one quiz each week for six consecutive weeks. During the first three weeks of the study, students will complete the homework assignments and quizzes using our current homework grading practice. Under this practice, students will earn a zero in Teacherease if their work is not turned in on time. During the final three weeks of the study, students will complete the weekly homework assignments and quizzes using a different, no-zero grading practice. Under this practice, students will only be marked missing if their work is not turned in on time, but no zero will be assigned in Teacherease. I will compare the averages of students' weekly quizzes to see if there is an effect on student achievement in social studies.

The data collection period is projected to be completed during this first quarter of school.

The results gathered from this study will only be used for this project. All data collected will be kept confidential and the outcomes which I present will not contain any personal or identifying information. As parents or guardians, you have the option to exclude your child from the study. Participation in this research study is voluntary and not a requirement. If your child participates in this study, they may withdrawal at any time without consequences of any kind. If at any time you would like your child to be excluded or withdrawn from this study, please let me know.

I have been granted approval by Casey-Westfield Jr./Sr. High School to conduct this research project in my 7th-grade social studies classes this semester. This study was also reviewed and approved by the Institutional Review Board at Eastern Illinois University. If you would like to speak with the Institutional Review Board at Eastern Illinois University about this study, you may call or write:

Institutional Review Board
Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217)581-8576
E-mail: eiuirb@www.eiu.edu

If you have any other questions or concerns about this research, please feel free to contact me at stephanie.scott@caseywestfield.org.

Thanks!

Stephanie Scott