DO HOMEWORK TRACKERS AFFECT STUDENTS’ ACADEMIC PERFORMANCE?

LuisDaniel Barrera
barreral@cwu.edu

Follow this and additional works at: https://digitalcommons.cwu.edu/etd

Part of the Educational Leadership Commons, Educational Methods Commons, Other Education Commons, Science and Mathematics Education Commons, Secondary Education Commons, Secondary Education and Teaching Commons, and the Special Education and Teaching Commons

Recommended Citation
https://digitalcommons.cwu.edu/etd/686

This Thesis is brought to you for free and open access by the Master's Theses at ScholarWorks@CWU. It has been accepted for inclusion in All Master's Theses by an authorized administrator of ScholarWorks@CWU. For more information, please contact pingfu@cwu.edu.
DO HOMEWORK TRACKERS AFFECT STUDENTS’ ACADEMIC PERFORMANCE?

A Thesis

Presented to

The Graduate Faculty

Central Washington University

In Partial Fulfillment

of the Requirements for the Degree

Master of Education

Special Education

by

L. Daniel Barrera

June 2017
CENTRAL WASHINGTON UNIVERSITY

Graduate Studies

We hereby approve the thesis of

L. Daniel Barrera

Candidate for the degree of Master of Education

APPROVED FOR THE GRADUATE FACULTY

__________________________
Dr. Janet Spybrook Committee Chair

__________________________
Dr. Mark Oursland

__________________________
Dr. Kelly Benson

__________________________
Dean of Graduate Studies
ABSTRACT

DO HOMEWORK TRACKERS AFFECT STUDENTS’ ACADEMIC PERFORMANCE?

by

L. Daniel Barrera

June 2017

With new state assessment requirements for high school graduation, teachers are focusing on different strategies to assist students to achieve those goals. Many teachers state that students who complete homework perform better academically. The current study analyzed whether homework planners (trackers) had any positive effect on the academic performance of 16 seventh grade students in a very small and rural school district. This was a mixed study (quantitative and qualitative). Students’ grades, district assessments, state assessments, and teacher surveys were analyzed. The results showed that students improved their math and English Language Arts (ELA) district assessment scores when compared from fall to spring of the 2016-2017 school year. The results also showed that students that turned in homework trackers more than 40% of the time had higher math district and state assessment scores than those with less than 40%. Students that had a higher homework tracker completion rate, also had the highest math and ELA state assessment scores. When looking at all the data, the results added to the existing literature knowledge that homework trackers does positively affect students’ academic performance.
Key words: homework, homework planner, homework tracker, rural middle school setting, academic performance, district assessments, state assessments, student grades, and parent communication.
ACKNOWLEDGMENTS

First and foremost, I would like to give the honor and glory to my God for giving me the strength throughout this journey. I would like to thank my beautiful wife Olivia, my sons AL, Salvador, and Johncarlo for fully supporting me and giving me the time to focus on each class. I thank them for sacrificing much of their quality time for the last two years. I owe them an extended vacation. I would to thank Dr. Janet Spybrook for guiding me throughout this process and for giving the time to complete every course. I would like to acknowledge Dr. Mark Oursland for being a math support since I began my mathematics degree at Central in the spring of 2013. Each time I have needed help, Dr. Oursland has always said yes. I would also like to acknowledge Dr. Kelly Benson who inspired me to aim high and further my education to impact others. Dr. Dominic Klyve has also been a mathematics support in my career for the last three years. He assisted me in familiarizing with the appropriate statistics software utilized in this study.
TABLE OF CONTENTS

Chapter                                                                 Page

I INTRODUCTION ............................................................................................................... 1
   Statement of the Problem ....................................................................................... 4
   Background and Need ............................................................................................ 7
   Purpose of the Study ............................................................................................. 10
   Research Questions ............................................................................................... 12

II LITERATURE REVIEW ............................................................................................... 15
   Self-Regulation ....................................................................................................... 17
   Clear & Interesting Homework .............................................................................. 21
   Homework Resources ............................................................................................. 27

III METHODS .................................................................................................................. 29
   Setting ..................................................................................................................... 30
   Participants ............................................................................................................ 31
   Intervention and Materials .................................................................................... 31
   Materials ................................................................................................................ 32
   Measure of Instruments ......................................................................................... 32
   Procedure .............................................................................................................. 34
   Data Analysis ......................................................................................................... 34

IV RESULTS ..................................................................................................................... 36
   Statistic Program Utilized ..................................................................................... 36
   Homework Trackers ............................................................................................... 36
   Grades ..................................................................................................................... 37
   Measure of Academic Progress in Math ............................................................... 40
   Measure of Academic Progress in Reading .......................................................... 42
   Math Smarter Balance Assessment ....................................................................... 44
   English Language Art Smarter Balance Assessment ............................................. 45
   Communication with Parents ............................................................................... 46

V CONCLUSION ............................................................................................................... 49
   Participants’ Grades ............................................................................................... 49
   Measure of Academic Progress ............................................................................ 50
   Math and English Smarter Balance Assessments ............................................... 51
   Communication w/ Parents ................................................................................... 51
TABLE OF CONTENTS (CONTINUE)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limitations</td>
<td>51</td>
</tr>
<tr>
<td>Recommendations</td>
<td>53</td>
</tr>
<tr>
<td>Conclusion</td>
<td>54</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>56</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>62</td>
</tr>
<tr>
<td>Appendix A—Homework Tracker</td>
<td>62</td>
</tr>
<tr>
<td>Appendix A—Teacher Survey</td>
<td>63</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Participants w/ Ds &amp; Fs vs School Weeks</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>Ds &amp; Fs after Evidence-Based Practice vs Homework Trackers turned in</td>
<td>37</td>
</tr>
<tr>
<td>4</td>
<td>Ds &amp; Fs after Evidence-Based Practice vs Completed Homework Trackers</td>
<td>38</td>
</tr>
<tr>
<td>8</td>
<td>Spring vs Winter Math Measure of Academic Progress scores</td>
<td>39</td>
</tr>
<tr>
<td>9</td>
<td>Spring Math Measure of Academic Progress vs proportion of homework trackers</td>
<td>40</td>
</tr>
<tr>
<td>10</td>
<td>Spring Math Measure of Academic Progress vs completed homework trackers</td>
<td>41</td>
</tr>
<tr>
<td>12</td>
<td>English Language Arts Measure of Academic Progress Spring vs Fall scores</td>
<td>42</td>
</tr>
<tr>
<td>13</td>
<td>Spring English Language Arts Measure of Academic Progress Performance vs amount of homework trackers turned in</td>
<td>43</td>
</tr>
<tr>
<td>14</td>
<td>Spring English Language Arts Measure of Academic Progress vs completed homework trackers</td>
<td>43</td>
</tr>
<tr>
<td>15</td>
<td>Math Smarter Balance Assessment vs amount of homework trackers turned in</td>
<td>44</td>
</tr>
<tr>
<td>16</td>
<td>Math Smarter Balance Assessment vs completed homework trackers turned in</td>
<td>44</td>
</tr>
<tr>
<td>FIGURE</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>17</td>
<td>English Language Arts Smarter Balance Assessment vs amount of homework trackers turned in</td>
<td>45</td>
</tr>
<tr>
<td>18</td>
<td>English Language Arts Smarter Balance Assessment vs completed homework trackers turned in</td>
<td>45</td>
</tr>
<tr>
<td>19</td>
<td>Communication w/ parents about grades</td>
<td>46</td>
</tr>
<tr>
<td>21</td>
<td>Communication w/ parents about homework</td>
<td>47</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

According to the Department of Education (2004), the federal government recognized the universal importance of education and thus assumed a greater role in supporting public schools with the passage of the Elementary and Secondary Education Act (ESEA) of 1965. The ESEA has been since reauthorized several times. In 2001, the reauthorization included the No Child Left Behind (NCLB), which was signed into law by then president George W. Bush with overwhelming bipartisan support. Senators Ted Kennedy, Judd Gregg, Congressmen George Miller, and John Boehner were the sponsors in the Senate and in the House. The primary purpose of NCLB was to close the academic achievement gap in the early grades (Department of Education, 2004). The Department of Education (2004) stated that after four years of public education, most students performed below proficiency level in reading and mathematics. Furthermore, few students graduating from high school had acquired the math and science skills necessary to compete in the knowledge-based economy.

One of the most critical forms to provide all children with a great education and a way to close the achievement gap is by providing them with great teachers (Department of Education, 2004). The Department of Education reported that the single greatest effect on student achievement is teacher quality. A teacher who is highly qualified must hold a bachelor’s degree, a certification or license to teach in the state of employment, and have proven knowledge of the subjects he or she is planning to teach (Office of Superintendent of Public Instruction, 2016). NCLB gave the states the freedom to set their own standards for student performance and develop a system to measure the progress of all students in meeting those state standards. NCLB also allowed each state to set their own standards for teacher quality (Hardman & Dawson,
In essence, NCLB established accountability for results and expanded the inclusiveness, responsiveness, and fairness of education. The Department of Education (2004) reported that raising student achievement directly leads to national economic growth. Under NCLB, students who attend schools considered Title I that do not make adequate yearly progress (AYP) for two consecutive years have the option of transferring to a higher performing public school within their district.

To increase the performance of schools, the state of Washington implemented a system to evaluate the effectiveness of teachers and principals called the Teacher and Principal Evaluation Pilot (TPEP). This evaluation was designed in 2010 and signed into law in July of 2012. The TPEP evaluates eight criteria for teachers and principals (Danielson, 2013). There are two types of evaluations that are utilized to analyze teacher effectiveness. The first evaluation is a comprehensive and it evaluates the four teaching domains: planning and preparation, classroom environment, instruction, and professional responsibilities (Danielson, 2013). This includes all eight criteria that evaluate the teacher in detail. The comprehension evaluation is conducted every four years. The second is a focused evaluation. This type of evaluation focuses primarily on one teaching domain determined by the teacher and administrator and is completed every year with the exception of the fourth. Teachers are scored on a 1-4 scale as unsatisfactory, basic, proficient, and distinguished. Teachers who scored below proficient are placed on an improvement plan.

Both evaluations require teachers to set general and specific student goals (Danielson, 2013). The student goals teachers set must be based on academic performance and such goals must show growth between two points in time that are determined by the teacher. In most districts, teachers set their goals early in the fall with a target date for early spring of the same
school year. Teachers can utilize class assessments, district assessments, and even state assessments to show student academic growth. Depending on such growth or lack thereof, teachers’ goals for this criteria are scored using the same 1-4 scale system. If a teacher’s score is below basic, then he or she is put on an improvement plan. If a teacher does not meet the goals of an improvement plan, his or her teaching contract may not be renewed. Danielson (2013) states that the Common Core State Standards (CCSS) and this instrument to evaluate teachers share many similar principles: to prepare students for college and careers.

Unfortunately, this puts pressure on districts and teachers to find ways to assist and motivate students to pass their courses which will help them with their state assessments. The Washington state assessments that students must complete are the Smarter Balance Assessment (SBA) in math and in English Language Arts (ELA) as well as the End of Course (EOC) in biology. These are requirements for graduation (Office of Superintendent of Public Instruction, 2017). The lesson plans that teachers of Math, English Language Arts, and Science must embed the CCSS in them and reflect what students can expect on state assessments. According to the Office of Superintendent of Public Instruction (OSPI), the graduating class of 2019 will have to complete the SBA in Algebra 1 & 2 and Geometry. This is a change from the class of 2018 who was only responsible for the SBA in Algebra 1. According to the Washington State Report Card (2017) from the 2015-2016 school year, only 21% of the 11th grade students passed the SBA in math and 75.5% in ELA. Both middle and high school students averaged approximately 77% passing rate on the Biology EOC for the same school year (Washington State Report Card, 2017). It is interesting to point out that Washington state has invested more money on students than any other state in the United States (Dorn, Berge, & Kelly, 2015). In the 2013-2015 biennium, Washington state spent approximately 45% of their general fund on public education.
This translates to $14,833 billion. This amount increased by $2 million for the 2015-2017 biennium (Five Drivers of the 2015 Legislative Session, 2015).

As mentioned, this puts pressure on teachers to get students ready for such requirements. One special group of teachers that has a critical task in preparing students for these high-stake assessments is the middle school teachers. Middle school is a critical stage for students because they are coming from an environment where they spent the majority of their school day in one classroom. As they transition into middle school, most students have six to seven classes where they have to meet academic expectations from different disciplines. Teachers’ duties at this state are not only to teach content but also organizational skills. The content that students learn in middle school will assist them in being successful in high school classes and in state assessments. Students who do not pass their courses and district or state assessment in middle school will often struggle in high school as well (Casillas et al., 2012). Therefore, academic and behavior performance in middle school often predicts performance in high school (Casillas et al., 2012). According to the Washington State Report Card, only 58.5% of seventh graders and 59.7% of eighth graders passed the SBA in ELA and approximately 50 percent of seventh graders and 47.8% of eighth graders passed the SBA in math.

Statement of the Problem

Teachers in middle school have the challenge of getting students to pass their classes as well as district and state assessments. Many teachers state that students’ performance in middle school often predicts high school achievement (Casillas et al., 2012). One of these predictors is homework completion. In many middle school classes, homework accounts for a large percent of students’ grades. The current problem in the school where the study will take place is that
students are not completing their homework. A second problem is that communication between parents and teachers regarding homework is not occurring. This is affecting their class grades.

There are three components that are critical to homework completion: self-regulation, clear and interesting homework assignments, and homework resources (Brock, Lapp, Flood, Fisher, & Han, 2007). These three areas impact students’ ability to complete their homework and, in essence, pass their classes. Completing homework is a skill that will assist students in high school and postsecondary education. Self-regulation refers to self-efficacy where students set homework goals, select appropriate strategies, monitor progress, and evaluate homework outcomes (Bembenutty, 2011). This requires that teachers have clear homework expectations and that the homework given, is work students can do (Brock et al., 2007). Such homework must be interesting to capture students’ attention (Ramdass & Zimmerman, 2011). Furthermore, it is critical that teachers are aware of the home resources students need and have in order to complete the assigned homework (Kitsantas, Cheema, & Ware, 2011).

**Self-regulation.** According to Bembenutty (2011), self-regulation refers to homework goals, being organized, selecting appropriate goals, selecting appropriate learning strategies, maintaining motivation, monitoring progress, and evaluation homework outcomes (grades). This can present as a problem for students in middle school who may not have these skills and as of consequence their homework can significantly be impacted. If students are not organized about their homework, they can misplace it and very frequently, forget that they had any. Many students often do not monitor or evaluate their performance on homework assignments and thus do not use that feedback to adjust. This can result in students receiving low grades in classes and often, this decreases their motivation.
**Clear homework expectations.** Another problem that impedes students from completing their homework is having clear homework expectations. Many middle school students already feel overwhelmed with the different six to seven new settings they have to navigate and learn and having to decipher difficult homework instructions can only add more frustration (Bembenutty, 2011). When the homework or the instructions are not clear, students will often not attempt to complete the assignments. Furthermore, if homework is not structured, students will also struggle and give up (Kitsantas, Cheema, & Ware). Very frequently, these assignments are not interesting or adequately challenging to help motivation and self-regulation skills (Ramdass & Zimmerman, 2011). If students feel they cannot succeed in a certain homework assignment, they will not engage in it (Berbenuty, 2011).

**Homework Resources.** Another barrier for students to complete their homework is not having the necessary resources at home. Homework resources refers to parent support, an appropriate place for homework to be completed, and materials such as paper and pencils (Brock, Lapp, Flood, Fisher, & Han, 2007). Students who lack these resources will have a difficult time completing any homework. On many occasions, when students lack such needed resources, the quality of the homework is reflected. Sadly, this impacts many middle school students across age and gender. Furthermore, many students are not aware of the resources they need to complete their homework assignments. This is also the case for many parents who think they are helping their children but are not educated as to what resources have the greatest effect on their students’ education.

In order for students to be successful in completing their homework and in essence their classes, they will need to overcome the three problems mentioned: self-efficacy, clear homework expectations and work that is achievable and interesting, and homework resources. As
mentioned, self-efficacy refers to students’ self-regulation, self-reflection, and self-responsibility. On many occasions, homework completion requires intrinsic reasons (Xu, 2005). When homework expectations are not explained or taught, structure will vary for many students. This causes confusion and many times increases the achievement gap. Furthermore, if homework is not appropriately challenging and interesting, students will view it almost as a punishment. Finally, students that are self-regulated and understand the homework expectations may still struggle with homework assignments because of a lack of home resources. When middle school students are faced with these issues, their homework suffers as well as their class grades because homework accounts for a large percent of many middle school courses.

**Background and Need**

While lack of homework completion has been an issue for some students at the school where the study will take place, it has never been a problem for so many at once. Students are unorganized and are forgetting their homework, and are not communicating with their parents if they have any homework. Fortunately, there are many effective tools and practices that students, parents, and educators can implement to reduce the obstacles and challenges presented to complete homework assigned. For example, Agran, Cavin, and Wehmeyer (2006) recommend an evidence-based practice (EBP) called the Self-Determined Learning Model of Instruction (SDLMI) to teach students to regulate their own learning. Research by Pisha and Stahl (2005) reports that homework assignments and instruction in general must be in a language that can be understood by students. This requires defining important terms used because words have different meanings for different students (Dettmer, Knackendoffel, & Thurston, 2013). Teachers must also be aware of the resources that students may or may not have at home to complete
homework. This requires that educators constantly collaborate with parents to communicate with them and involve them in their children’s education (Ames, 1993).

**Self-Determined Learning Model of Instruction.** To help students complete their homework, the SDLMI can be used to teach students self-regulation skills. Self-regulation skills involve the activation and supporting of goal-directed cognitions and behaviors. With the SDLMI, students can set homework goals, organize homework, select appropriate learning strategies, maintain motivation, monitor progress, and evaluate homework outcomes (Agran, Cavin, & Wehmeyer, 2006). The SDLMI can be used with general education students as well as students in special education. One critical component in learning self-regulation is to effectively manage time and distractions (Ramdass & Zimmerman, 2011). Teachers that consistently teach and model this skill, have a high rate of students completing their homework. This includes structuring and scaffolding homework assignments for high rates of success (Alleman et al., 2010). Another EBP teachers can implement to help students complete homework is homework logs (Ramdass & Zimmerman, 2011). These are also referred to as homework trackers and homework planners.

**Clear and interesting homework.** To help with self-regulation skills and homework completion, teachers can assign homework assignments that are adequately challenging and interesting. This does not only help students in general education but also struggling and at-risk students and students with learning disabilities. Bembenutty (2011) states that students engage in tasks which they believe they can succeed. This requires that teachers inspire them and provide rewarding and self-directed assignments. This means providing clear homework assignment expectations. When teachers assign homework that is clear and meaningful as well as having a rational purpose, students are more likely to complete their homework (Bembenutty, 2011). This
strategy is supported by research from Alleman (2010) who states that teachers who design meaningful homework assignments and model what completion of such assignments should look like, have a higher rate of homework completion.

**Homework resources.** In addition to teaching self-regulation, self-efficacy skills, and providing clear homework expectations, teachers must also be aware of what resources are needed to complete homework and if such resources are available to assist students at home (Brock, Lapp, Flood, Fisher, & Han, 2007). These resources include parents and older siblings that can assist (Xu, 2005). Many students report that they are more attentive to homework when they complete it with a parent or a sibling rather than with a peer or on their own (Xu, 2005). This occurs across age, gender, and socioeconomic levels. Having parents and family members involved in their children’s education has a paramount academic and social impact (Jacobs, 2009). Additionally, having an appropriate and quiet environment to study, a desk, pencils, and paper can increase student homework completion (Ramdass & Zimmerman, 2011). Research by Chita-Tegmak, Gravel, Serpa, Domings, and Rose (2011) suggest that teachers that implement the Universal Design Learning (UDL) with students have a higher rate of homework completion. UDL allows students to access and present homework in different formats. Furthermore, evidence points out that the homework given to students must focus on basic skills such as math, reading, and spelling. This is because, even if students have parents at home who can assist, providing homework that is confusing and complex may only increase the achievement gap (Kitsanta, Cheema, & Ware, 2011).

The SDLMI model can be used to teach self-regulation and self-efficacy skills that can assist in completing homework. Homework trackers can also aid with the acquisition of self-regulation and self-efficacy. Teachers can provide clear expectations and a rationale as well as
meaningful homework assignments to increase the rate of completion. Additionally, teachers must collaborate with parents to determine what homework resources are available and what needs to be provided. There are many solutions to the three problems presented (self-regulation, clear and interesting homework expectations, and homework resources) that often impede students from completing their homework. When these solutions to these problems are implemented, students have higher rates of homework completion and have higher rates of passing their classes. The current research on homework and its cause and effect is significant with average size and large schools. However, there is a need to explore how homework completion affects middle school students’ class grades as well as their district and state assessments in very small rural middle schools of less than 25 students.

**Purpose of the Study**

The purpose of this study was to analyze whether implementing homework trackers for seventh grade students (15) in a small rural school of less than 46 total secondary (7-12) students had any effect on homework completion, on their class grades, and their district as well as state assessments. Hardman and Dawson (2008) report the NCLB states that every student in the United States schools needs to achieve higher levels of academic performance. This translates to students meeting content standards measured by assessments set by each state. As a consequence, it puts pressure on districts and teachers to prepare students to master the CCSS that will be tested by the state assessments. These state assessments are required to be passed in high school in order for students to graduate (OSPI, 2017). Small rural schools are not exempt from these requirements. Because of the low number of students in rural areas, schools often house elementary and secondary students in the same building and often the secondary students (7-12) are in mixed classes. This creates additional challenges for teachers to prepare students as
there are less resources available. These teachers have the same students from seventh grade until graduation and often notice homework patterns in middle school that predict high school academic success. They also implemented the homework trackers to raise student academic performance and to meet the teacher evaluation student goals they set early in the year.

To improve homework completion for the seventh graders (with and without disabilities) and assist them in passing their classes as well as district and state assessments, teachers in one small rural secondary school implemented homework trackers. Homework trackers are considered to be an EBP, self-regulation strategy, and material organizers (IRIS Center, 2013). The IRIS Center (2014) states that there are many benefits of implementing EBPs in the classroom. For example, one benefit of using EBPs is that they have scientific evidence that show their effectiveness. That is, there is an increased accountability because there is data to back up the selection of a practice or program, which in turn facilitates support from administrators, parents, and others rather than just anecdotal evidence. Because there is rigorous research supporting an EBP, another benefit is an increased likelihood of being responsive to learners’ needs. Furthermore, because research shows it works, teachers have a greater likelihood of convincing students to try an EBP.

The homework trackers implemented required students to write the homework assignment next to each class as well as obtaining that teacher’ signature. The homework tracker was numbered one to seven representing the seven classes in which the students were enrolled. These trackers went home for the parent to sign acknowledging that the student had completed the homework. The next day, a selected teacher collected the homework trackers and provided students with new ones for the day. This teacher also recorded data of students that turned in their homework trackers as well as if such trackers were fully completed.
As a result of implementing this EBP, teachers expected the seventh-grade students to complete their homework and, thus, pass their classes because many of them had Fs. This EBP also intended to have a positive effect on students’ district and state assessments. Furthermore, teachers implemented this EBP as an additional mode to communicate with parents because many often complained that their children never had homework. In open house and during conferences, teachers communicated to parents the goals of homework trackers as well as how they were to be used.

**Research Questions**

It is critical to consider the following questions from this study: What effect will homework trackers have on students’ grades? How will district and state assessments be affected by homework trackers? How will communication between parents be affected by the usage of homework trackers?

**Definitions**

- **Archival data**: Archival data is any data that is collected prior to the beginning of the research study (Eckles & Stradley, 2012).

- **Dependent variable**: The result of an influencing factor often denoted with a variable Y (Kusurkar, Cate, Asperen, & Croiset, 2011).

- **Descriptive statistics**: The collection, organization, analysis, and presentation of data (Hawks & Marsh, 2005).

- **English Language Arts (ELA)**: A state assessment that evaluates students’ reading, writing, listening, speaking, and research skills (OSPI, 2017).

- **Empirically based**: Instructional approaches that have proven to be effective through rigorous research (Torres, Farley, & Cook, 2012).
• End-of-Course (EOC) exams in math and biology allow students in grades 9-12 to be tested on the knowledge and skills they have gained from taking specific courses (OSPI, 2017).

• Homework: tasks assigned to students by their teachers that are designed to be completed during non-instructional time (Bembenutty, 2011).

• Independent variable: A controlling factor (often denoted as X) that influences an outcome (Kusurkar, Cate, Asperen, & Croiset, 2011).

• Learning disability: A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may present itself in the lacking ability to listen, think, speak, read, write, spell, or to do mathematical calculations (OSPI, 2016).

• Measure of Academic Progress (MAP): are assessment tools widely employed for universal screening in schools (January & Ardoin, 2005). The MAP assess students’ skills in math, reading, and science.

• Quantitative research: Quantitative research gathers data in numerical form that can be put into categories (Cresswell, 2012). This type of data can be used to construct graphs and tables of raw data.

• Special education: Special education is specially designed instruction that addresses the unique needs of a student eligible to receive special education services (OSPI, 2016).

**Limitations**

It is important to consider some limitations that may skew the EBP implementation results. For example, there is a lack of control group. Teachers can provide resources to parents but ultimately it is up to the parents whether they check their children’s homework trackers. On
some occasions, there was a lack of parents or older siblings that could ask or remind students for the homework trackers. There is also an external validity limitation because the population studied was very small and in a very rural area of approximately 400 habitants. The study population can only be generalized and compared to similar demographics.

**Ethical Consideration**

This researcher analyzed archival data that was collected by school teachers on homework trackers, students’ grades, and district as as state assessments. Since this researcher was employed at the school where the archival data was collected, an exemption request was petitioned from the Institutional Review Board (IRB). Such request was granted. A cooperation letter was also requested from this researcher’s employer and sent to the IRB. Furthermore, this researcher completed the Responsible Conduct of Research (RCR) trainings that were required before conducting human subject research. Certification of such training is on file with the IRB office.
CHAPTER II
LITERATURE REVIEW

The federal government recognized the universal importance of education and thus passed the ESEA in 1965. Since 1965, the ESEA has been reauthorized several times and in 2001, the reauthorization included the NCLB. The primary purpose of NCLB was to close the academic achievement gap in the early grades and increase the rate of students graduating high school with math and science skills necessary to compete in the knowledge-based economy. NCLB gave the states the freedom to set their own standards for student performance and develop a system to measure the progress of all students in meeting those standards. This puts pressure on districts and teachers to find ways to assist and motivate students to pass their courses which will help them with their state assessments. In Washington state, students must take the SBA in Algebra 1, Algebra 2, Geometry, and in ELA as well as the EOC in biology in order to graduate (OSPI, 2017).

One special group of educators that have a critical task in preparing students for these high-stake assessments is the middle school teachers. Middle school is an important stage for students because they are transitioning from a one-classroom environment to six or seven-classrooms environment. Teachers of this population have to teach content and organizational skills. The content that students learn in middle school will assist them in being successful in high school classes and in state assessments. Students that do not pass their courses and district or state assessment in middle school will often struggle in high school as well (Casillas et al., 2012). Therefore, academic and behavior performance in middle school often predicts performance in high school (Casillas et al., 2012).
Teachers in middle school have the challenge of getting students ready to pass their classes as these will help them with district and state assessments. Many teachers in this setting state that one of the reasons students do not pass their classes, which affect their district and state assessments, is due to the lack of homework completion. The current problem in the school where the study will take place is that students are not completing their homework. A second problem is that communication between parents and teachers regarding homework is not occurring. The purpose of this study was to analyze whether implementing homework trackers for seventh grade students (15) in a small rural school of 46 total secondary (7-12) students had any effect on homework completion, on their class grades, and their district as well as state assessments.

**Homework**

According to Brock, Lapp, Flood, Fisher, and Han (2007), trends in Americans’ views toward homework have changed several times over the past century from seeing homework as an essential part of students’ academic success to seeing it as an interruption on family time. Several historical circumstances and events in American society, such as the Russian Sputnik satellite to the current push for improved testing scores, have brought changes in public perception about the significance of homework relative to students’ academic success. With the growing concern for achievement in high-stake assessments and America’s global competitiveness, the general perception from the American people is that the more homework schools assign, the better (Brock, Lapp, Flood, Fisher, and Han, 2007). Cooper (1998) defines homework as any task assigned by teachers developed for students to be completed during non-school hours.

The literature review of this study will address three areas related to homework completion and student academic performance. The first section will address research related to
student self-regulation with regard to homework completion. The second section will focus on research studies about having clear homework expectations and assigning adequately challenging homework. Finally, the third section of the literature review will discuss research related to homework resources affecting students’ homework.

**Self-Regulation**

According to Bembenutty (2011), students must be self-regulated in order to be successful in completing homework. Self-regulation involves setting goals, selecting appropriate strategies, maintaining motivation, engaging in self-monitoring, and evaluating one’s own academic performance. Self-regulation also includes cognitive and metacognitive knowledge about the tasks, strategies for learning, and contexts in which learning can be applied (Bembenutty, 2011). Another component of self-regulation is self-efficacy. Self-efficacy refers to one’s beliefs in his or her ability to perform a designated level (Bembenutty, 2011).

**Study 1.** Xu (2009) conducted a study that analyzed self-regulation strategies with middle school students. The purpose of this study was to analyze homework behavior and self-regulation processes. The study took place in rural and urban settings. The participants consisted of 633 eighth grade students with diverse cultural and socioeconomic backgrounds. Students were given the Homework Management Scale (HMS) that consisted of 22 items and measured the following homework strategies: arranging the homework environment, managing time, handling distraction, monitoring motivation, and controlling emotions. The results showed that the students reported significantly more effort on handling distractions and arranging the homework environment than managing time. The study also showed that students reported more effort on managing time compared to monitoring motivation or controlling emotions. Urban students reported being more self-motivated during homework than their rural peers. In regards
to student achievement, students with higher grades reported more frequently arranging the homework environment, handling distractions, monitoring motivation, and controlling their emotions compared to low achieving students. Xu (2009) suggested that rural youth may be more hesitant about graduating from high school and going to college and this may explain why they place less emphasis on homework and academics. This study had some limitations, for example, it was based on self-reported data from students. In addition to being a correlational study, it is possible that other predictor variables such as parental monitoring may have affected homework management strategies.

**Study 2.** In a similar study on self-regulation, Zimmerman and Kitsantas (2005) analyzed the interventional role of self-efficacy for learning and perceived responsibility beliefs between students’ homework reports and their academic performance. This study took place in a private parochial school in a major metropolitan area of the United States. The sample consisted of 179 high school girls. Students’ ages ranged from 14 to 19 years old. These students had, on average, three hours of daily homework.

The instrument used was the Self-Efficacy for Learning Form (SELF). It consisted of a data questionnaire and a homework survey that measured the quantity and quality of students’ homework, self-efficacy for learning, and perceived academic responsibility. The SELF had 57 items for reading, note taking, writing, test taking, and general studying. The findings from the SELF showed that the effect of homework quality on grades was intervened through the students’ self-efficacy and perceived responsibility beliefs. Furthermore, the study showed that the quality of homework was correlated with the quantity of homework. This implied that students who studied more also used self-regulatory strategies, such as having a regular place and time to study, approximating the time needed to complete their assignments, setting
homework priorities, and completing their daily assigned homework successfully. This study, nonetheless, had some limitations to consider. For example, the school was a private setting and may be generalized to public schools. Additionally, the study was conducted only with female students and cannot be compared with other schools that have mixed genders.

**Study 3.** Because homework is not just given in middle or high school, Bembenutty (2009) conducted a study to determine the different relationships between college students’ homework behaviors and their reported use of self-regulatory strategies, self-efficacy, outcome expectancy beliefs, intrinsic interest, willingness to delay gratification, and grades. The participants consisted of 58 at-risk freshmen from a two-year community college. The measures were academic delay of gratification and self-efficacy. The researcher defined delay of gratification, for example, as going to the movies and then studying for a math exam versus going to the movies after taking the exam. Self-efficacy was referred to as being confident of learning the necessary material for an exam. The researcher examined outcome expectancy (performing well on an exam will assist the student in attaining future goals); intrinsic interest (studying for math is motivating); and self-regulation of learning (setting specific goals to guide student’s efforts while completing the practice problems for a math exam). The researcher also analyzed the frequency of math homework completion. Open-ended questions were used for homework activities such as where do you usually study for the math course and how often do you complete your studying for the math midterm exam with the television on. Students completed a homework log to report homework activities.

This researcher was able to obtain midterm and final course grades to determine if there were any connections between self-regulation and academic performance. The study results showed that hours of studying math on a weekly basis was positively correlated to intrinsic
interest. Hours of studying for all classes was positively correlated to math homework completion, delay of gratification, and midterm exam grades. Students’ grade expectations for the midterm were significantly related to math homework completion, self-regulation, self-efficacy, intrinsic interest, midterm exam grade, and final exam grade. The results showed no major relationships between studying with the television on and students’ motivational beliefs and self-regulation of academic performance.

These results suggest that students’ self-efficacy to learn and master the course material is related to the time they spent on homework tasks and the grade they expect for the course. Disposition to delay gratification and use of self-regulatory strategies were important factors in students’ homework activities. The findings revealed that students who set general goals had high self-efficacy beliefs for doing well on the midterm exam. Time management accuracy was positively related to math homework completion and midterm exam grades. The results showed it is possible to incorporate an array of self-regulated behaviors in homework activities and help at-risk college students. The use of the homework logs revealed how students managed their time, inhibited distractions, delayed gratification, and increased self-satisfaction during homework completion.

While this study had positive results, it is important to consider some limitations. For example, the sample size was only 58 students. To make this study stronger, a larger sample would be needed to improve the power of statistical analysis. Additionally, the only homework content was math. It is important to evaluate other content areas to assess the motivational and self-regulatory behaviors. Since the sample population was from a two-year community college, it may not be generalized to four-year institution programs.
Conclusion. It is important that students have self-regulation skills in order to be successful in completing homework (Bembenutty, 2011). Teachers can utilize the SELF and HMS to teach students self-regulation skills that can be implemented in homework activities. Previous findings support student achievement and the use of self-regulation strategies during homework completion (Zimmerman & Kitsantas, 2005). The studies above revealed that quality measures of homework such as managing distractions, self-efficacy and perceived responsibility for learning, setting goals, self-reflection, managing time, and setting a place for homework completion are more effective than just considering the time spent on homework assignments. As a result, self-regulation and homework are related and the findings showed that from elementary grades to college, skilled learners engaged in the above self-regulatory behaviors during homework activities. Self-regulatory behaviors develop gradually over time with repeated practice. While not all students have these skills, students can be taught to develop such skills during homework activities (Ramdass & Zimmerman).

Clear & Interesting Homework

To help with self-regulation skills and homework completion, it is important that teachers assign homework assignments that are clear, adequately challenging, and interesting. This helps students in general education, struggling and at-risk students, and students with learning disabilities. Bembenutty (2011) states that students engage in homework assignments in which they believe they can complete. When teachers assign homework that is clear and meaningful, students are more likely to complete their homework (Bembenutty, 2011).

Study I. Brock, Lapp, Hood, Fisher, and Han (2007) conducted a study about teacher homework practices. The purpose of this study was to explore what type of homework teachers, in one large urban city in the United States, assign and what their beliefs are about the impact of
homework on students’ success in school. These teachers had many students from non-dominant backgrounds who spoke a language other than English. The researchers of this study used interviews as well as questionnaires to survey staff. The participants consisted of 133 teachers from kindergarten through middle school. From this sample, 27 teachers were interviewed to gather further detailed data. The results showed that most teachers assigned homework that was skills-based in math and in spelling. Most teachers made provisions for the fact that many students came from homes where English was not spoken. The researchers suggested that teachers must focus on assigning homework that focuses on basic skills such as math, reading, and spelling. While this study adds to the body of literature, there are some limitations to consider. For example, the data cannot be generalized to teachers in high schools. Because the topics that teachers focused on were basic in math, reading, and spelling, this study cannot be compared to other subjects such as biology or history. Therefore, it is important to consider other subjects to study.

Study 2. Thelamour and Jacobs (2015) analyzed a study that looked at an English-as-Second-Language (ELS) class. The purpose of this study was to determine if homework follow-up practices had any effect on student academic performance. The follow-up practices were: checking homework completion; answering questions about homework; checking homework orally; checking homework on the board; and collecting and grading homework. The participants consisted of 26 ESL teachers and 553 sixth grade students. On average, these teachers had 19 years of teaching experience. Once per week, during 6 weeks, the teachers used a particular type of homework follow-up practice they had been assigned to utilize. As a baseline, the researchers took an end-of-the-year test that students had completed the prior school year. As an outcome measure, the teachers administered an ESL exam at the end of the six-week period. The results
showed students who had teachers who had been given instructions to use the follow-up practices had higher exam scores than those who did not. The findings also showed that the three types of homework follow-up practices that had the most impact on students’ performance were: checking homework orally; checking homework on the board; and collecting and grading homework. One limitation to consider, however, is the impact of combining follow-up practices. That is, since the researchers gave instructions to only use one practice at a time, the data on the effect of using multiple practices was not available and must be studied. Furthermore, the independent variables (the practices) were only used in an ESL class. That is, it is not clear if it would have had the same effect on general class such as math.

**Study 3.** To answer this concern, Rosaio et al. (2015) analyzed the design of homework assignments math teachers gave to students. The purpose of this assignment was to examine the effect of three homework purposes (practice, preparation, and extension) on students’ academic performance. Their performance was also analyzed by their actual homework completion. The participants were 27 mathematics teachers and 638 sixth grade students. The researchers used pretests as well as posttest to measure the effect of homework design. Once per week, during a period of six weeks, teachers assigned a task that had a specific type of homework purpose. At the end of the six-week period, the students were given a mathematics achievement exam. The findings revealed that after controlling for student characteristics and class-level variables, extension homework positively affected students' mathematics performance, while practice and preparation homework did not. The results emphasized the significance of the teacher’s role in designing homework with a specific purpose. These findings also revealed that when students had a prior knowledge on their homework, they had higher rates of homework completion. One limitation from this study to consider is the fact that teachers only provided homework once per
week. The study did not detail how many math problems were given as this may be a factor for students to complete their homework.

**Conclusion.** It is critical that teachers consider the types and the amounts of homework given to students. The results from the first study showed that teachers assigned homework that was skills-based in math and in spelling in elementary schools. In other words, no complex homework was given to elementary students. Teachers also designed their homework assignments considering the fact that some of these students came from a non-English speaking home. The second study revealed that when teachers use homework follow-up practices such as checking homework orally and on the board, as well as collecting and grading homework, students’ academic performance is impacted the most. The third study strengthened the body of literature on the significance of the teacher's role in designing homework with a specific purpose. This was evident as the findings showed that when students engaged in homework in which they had background knowledge, they were more likely to complete it with high success.

**Homework Resources.**

While having homework assignments that are well designed and motivating is critical, it is also important for the teaching staff to consider the home support resources that students may need (Brock, Lapp, Flood, Fisher, & Han, 2007). Students who lack homework support resources will have a difficult time completing any homework. On many occasions, when students lack needed resources, the quality of the homework is poor and it is reflected in the poor quality of homework. Sadly, this impacts many middle school students across age and gender.

**Study 1.** Kitsantas, Cheema, and Ware (2011) explored homework resources and student academic achievement. The purpose of this study was to identify the extent to which time spent on mathematics homework, and if homework support resources predicted high school
mathematics achievement. The participants consisted of 3,776 ninth and 11th grade students from 221 schools across the United States. Students’ backgrounds included Caucasian, Hispanic, Asian, African American, and mixed ethnicities. The researchers used the Program for International Student Assessment (PISA) and school questionnaire surveys to obtain student data. PISA assessed reading literacy, mathematics literacy, and science literacy skills. The findings showed that achievement gaps diminished with the increase with the availability of homework resources. Increased portions of mathematics homework were linked to a decrease in mathematics achievement. These results showed that time on homework is not enough and homework support is essential for students to complete homework successfully. Homework resources included having a quiet area to study, a parent to help, and materials such as a computer or internet access. The greater the proportions of homework support resources, the higher students’ mathematics scores were (Kitsantas, Cheema, & Ware, 2011). Furthermore, the study also revealed that teachers need to structure homework assignments based on the availability of homework support resources. One limitation to consider from this study is that, students were selected at random from various schools and the researchers had no way of determining where a particular student came from. Which means that they could not prescribe a practice to a specific school based on students’ findings.

**Study 2.** In a similar study to determine homework support resources, Bang (2011) analyzed the homework experience of newcomer immigrant students. The purpose of this study was to describe the homework experiences of newcomer immigrants with regard to family and school characteristics. The study took place in an urban high school in a U.S. city. The participants consisted of 192 students (99 boys & 93 girls) from the international High School in New York City. Students’ languages include Spanish, French, English, Chinese, and Arabic. The
researcher used a questionnaire survey to collect student data and to determine the prevalence of homework enablers and obstacles these students experienced. The study showed these students struggled the most because of a lack of homework support. Other obstacles included understanding course materials, fatigue, motivational issues, organizational issues, high standards, and competing environmental demands. When it came to home support, many stated that they did not have a quiet place to complete homework and they had too many chores to perform that impeded homework completion. A big percentage of the students reported that having rewards and encouragement helped the most. These were in the forms of rewards from parents, parents’ encouragement, and praise from teachers. Having a conducive environment and having available reference materials were common facilitators for many. It is noteworthy that this study did have some limitations however. For example, the participants were all ESL students and this can only be generalized to similar populations. The second limitation is that the survey was only administered to ninth and tenth graders and thus cannot be assumed that the findings can be generalized with middle school students. Another limitation was the lack of parental input about their student’s homework.

**Study 3.** Thelamour and Jacobs (2014) examined the issue of ESL with this population in study they conducted. The purpose of their study was to compare the homework practices of non-English speaking parents to determine how they differ from their English-speaking counterparts. They used a national data set of 7,992 students across ages and backgrounds and investigated, via surveys and interviews, the frequency and type of homework practices their parents used. The study showed major differences between the overall homework practices between the two groups as well as differences between the types of homework strategies they employed. English-speaking parents were more likely to provide a place for homework and
helped with homework while non-English parents were more likely to check for homework completion. These findings add information to the body of literature on homework. That is, it contests the conception that non-English speaking parents are less involved in their children’s homework. Even though these parents did not speak English fluently, they had accountability for their students’ education. This study had one critical limitation, however, and this was the lack to mention the age of students involved. This could be of significance because parents tend to be more involved in their children’s education in early grades as compared to high school (Thelamour & Jacobs, 2014).

**Conclusion.** The three studies presented above have analyzed the homework support resources from different population settings and they all have common findings. That is, homework support such as parents, a quiet area to study, reference materials, access to internet, and materials can impact students’ homework and academic performance. When assigning homework, teachers must be aware of what, if any, homework support resources students have and modify homework assignments to meet their needs as these play a significant role in homework completion.

**Conclusion of Summary**

In the literature review, the researcher analyzed the importance of the three components of homework: students’ self-regulation skills, clear and adequately challenging homework, and homework support resources. Successful homework completion requires self-regulation of learning. This includes attention, organization, elaboration, critical thinking, rehearsal, use of learning strategies, and comprehension monitoring. Bottge, Toland, Gassaway, M. B., Choo, Griffen, and Ma (2015) state that students with and without disabilities can learn self-regulation and therefore learn organization skills that can be utilized in completing homework. One method
of assisting students with self-regulation skills is with the use of homework trackers (Ramdass and Zimmerman, 2011). In a homework tracker, students write the homework for each class and teachers initial in the appropriate space. This homework tracker goes home and it serves as a reminder for the student and a mode of communication with the parent.

To help with this, homework should be given to provide the student with an opportunity to practice or review material that has already been presented in class. According to Ramdass and Zimmerman (2011), when assigning homework, teachers must take into account their students’ age, their grade level, and the subject matter. Ramdass and Zimmerman state that for elementary school students, assignments that are concise and relatively easy to complete would help create positive attitudes toward school and learning. The duration and challenge level of homework can increase as children progress to higher grades (Ramdass & Zimmerman, 2011). Furthermore, teachers need to motivate students to be engaged in learning by providing rewarding, clear, and adequately challenging homework assignments as this also helps with self-regulation skills.

To increase the rate of homework completion, teachers must be aware of the homework support resources as these play a significant role in homework completion. These resources can be having a quiet area to study, materials, and a parent. Xu (2005) found that students express that they are most attentive to homework when they completed it with a parent than with a peer or on their own. This was reported across age, gender, and socioeconomic levels.
CHAPTER III

METHODS

Teachers in middle school have the challenge of facilitating students to pass their classes as well as district and state assessments. Many teachers state that students’ performance in middle school often predicts high school achievement (Casillas et al., 2012). One of these predictors is homework completion. In many middle school classes, homework accounts for a large percentage of students’ grades. Teachers in middle school have the challenge of getting students to pass their classes as well as district and state assessments. Many teachers state that students’ performance in middle school often predicts high school achievement (Casillas et al., 2012). One of these predictors is homework completion. In many middle school classes, homework accounts for a large percent of students’ grades. The current problem in the school where the study took place is that students were not completing their homework. A second problem was that communication between parents and teachers regarding homework is not occurring. This is affecting their class grades.

There are three components that are critical to homework completion: self-regulation, clear and interesting homework assignments, and homework resources (Brock, Lapp, Flood, Fisher, & Han, 2007). These three areas impact students’ ability to complete their homework and pass their classes. Teachers can implement many evidence-based practices (EBPs) to assist students in homework completion. One of these EBPs is a homework tracker.

The purpose of this study was to analyze whether implementing homework trackers for 15 seventh grade students in a small rural school of less than 46 total secondary (7-12) students had any effect on homework completion, on their class grades, and their district as well as state assessments. This study also addressed the following questions: What effect will homework
trackers have on students’ grades? How will district and state assessments be affected by homework trackers? How will communication between parents be affected by the usage of homework trackers? This study followed a quantitative model. Archival data was analyzed to determine if there was a statistical difference on homework completion and academic performance. The researcher analyzed data that teachers collected on students’ homework trackers, district assessments before and after EBP implementation, D and F weekly list, and state assessments scores.

Setting

This study took place in a rural school district located in Central Washington. The total population of the town consisted of 478 people. The school district was composed of 111 students from kindergarten through 12th grade. Sixty five elementary students (k-6) were housed in one side of the building while the 46 secondary students (7-12) were housed in the other. Of the 111 total students, 78 were White, 25 Hispanic, three Native American, three African American, and three mixed race. Sixty-seven percent of students in the school received free lunch while 9% received reduced lunch costs. Fourteen received special education services and 16 received transitional bilingual education. The district employed a total of 25 staff members: 11 certified, two administration personnel, and 12 classified.

The archival data that the researcher analyzed were homework trackers, grades, and district and state assessments that was collected by teachers from October 24th 2016 to April 13th of 2017. Teachers were interviewed post intervention (See Appendix B). Homework tracker data was collected by an assigned teacher in the participants’ first period. Students turned in their homework trackers to this teacher and received new ones for the day. Students carried their homework trackers from class to class.
Participants

For this study, the convenience sampling model was utilized. That is, the entire seventh grade class, consisting of 16 students, was selected. Of this group, 11 were Caucasian, three were Hispanic, and two were mixed race. Participants’ ages ranged from 12 to 14 years old. Eight students were female, while 8 were male. With the exception of one English language learner (ELL), all spoke English fluently. During the time of this study, two students received special education services while three other students were referred to special education. The participants were selected because they had just transitioned from elementary to middle school and had difficulties in completing homework and passing their courses. All five secondary teachers shared the similar student academic concern: lack of homework completion. During their sixth grade, all 15 students were mainly taught via Ipad applications and Youtube videos and no homework was given.

Intervention and Materials

Early in October of 2016, the secondary teachers stated similar concerns of the new seventh graders. That is, they were not completing their work and a large percent of them were failing classes. They met, as a team, to discuss possible solutions to improve students’ academic performance in classes and in district and state assessments. It is important to note that these teachers have the same students from seventh to 12th grade and often notice patterns that predict high school performance. They decided to implement homework trackers to assist students’ academic performance and as a tool of communicating with parents. The homework trackers implemented required students to write the homework assignments next to each class as well as obtain that teacher’s signature. The homework tracker was numbered one through seven; each number representing the seven classes they had. The trackers went home for the parents to sign
acknowledging that the student had completed the homework. The next day, the first period teacher collected the homework trackers and provided students with new ones for the day. This particular teacher also recorded data of students that turned in their homework trackers as well as if such trackers were fully or partly completed. The homework trackers represented the independent variable while the academic performance and communication with parents represented the dependent variables.

**Materials**

See Figure A in the appendix section for a copy of the homework trackers students used. The homework trackers had a location at the top for student’s name and date. Below the name, there were seven spaces for students to write their classes and the homework for each. Students, often, only wrote the assignment name or page number. In classes that had no homework, they simply wrote “no homework” or “none.” A line space next to each corresponding class was provided for each teacher to initial the homework given. At the bottom of this EBP, there was a location for parents to sign acknowledging that students had completed their homework.

Because the researcher felt it was necessary to gather teachers’ input and feedback on the usage of homework trackers, a set of questions were given to teachers to answer (See Appendix B). All six secondary teachers were able to completed the survey given post the intervention. Because of this survey, the study became a mixed study; that is, quantitative and qualitative.

**Measurement Instruments**

**Grades.** To determine the impact of the EBP, the researcher analyzed participants’ grades and district as well as state assessments. The school principal generated and updated a weekly list of all secondary students that had any Ds or Fs for letter grades in their classes. The researcher analyzed these lists to determine if any participant completing their homework
trackers appeared on such list. The researcher also analyzed this archival data to determine if students came off this list after the implementation of the homework trackers.

Measurement of Academic Performance. The researcher analyzed participants’ MAP assessment scores before and after the implementation of the homework trackers to determine any cause and effect. The MAP is a district assessment the school administers to students two to three times per year to determine how students are performing. MAP is a norm-referenced measure of student growth over time. The MAP is computer-adaptive assessment administered to students typically in the fall and the spring of each academic year. It tests students’ skills in mathematics and reading from low to high skill levels (NWEA, 2015). MAP assessments assists teachers in identifying the instructional level of the student and also provide context for determining where each student is performing in relation to state standards and national norms (NWEA, 2015). In the school where the study took place, the MAP assessment was administered three times; fall, winter, and spring. The researcher analyzed the archival data from all three assessments.

Smarter Balanced Assessment. In addition to the MAP district test, the researcher analyzed the SBA. The SBA is a computer standardized test given to students in third through eighth grades as well as 11th in the content areas of Mathematics and ELA. The SBA is aligned to the Common Core State Standards (CCSS) that are now implemented in 48 states (Graham & Harris, 2013). The SBA is currently being used in 30 states, including Washington. Students must pass the SBA in the content areas mentioned in order to graduate from high school. The SBA is customized for each student to obtain an accurate measurement of their performance (OSPI, 2016). Throughout the test, the difficulty of questions is adjusted based on each student’s response. For example, depending on how a student answers a question, correct or incorrect, the
system will adjust the next question, more challenging or easier, to fully determine what the student’s academic performance is (OSPI, 2016). The SBA was administered to the 15 participants in Spring of 2017. Because the researcher completed the IRB form and received a letter of cooperation from the district, access to students’ SBA scores was granted.

**Procedure**

Due to the fact that the school was small and in a rural location, all participants had the same classes throughout the day (with the exception of the students who received special education services). During their first class (their natural setting), their teacher collected all homework trackers and recorded, in an excel sheet, whether they were turned in and if they were complete or incomplete. A completed homework tracker had a name, date, a description of homework for each class, teacher initials, and parent signature at the bottom. The teacher collected and handed out homework trackers from October of 2016 to May of 2017. It is also important to note that the teachers administered the MAP assessment before, during, and after the implementation. The SBA was administered to students only once and it was after the implementation of the EBP. Most students finished the MAP and SBA tests in one class period of 55 minutes.

**Data Analysis**

As mentioned, the data that this researcher analyzed was collected by the first period teacher and was inputted in excel sheets. In addition to this, the principal took the task to create a weekly list of all students that had a D or an F in their courses. This researcher was able to obtain a copy of this D and F list to determine if there existed a cause and effect with students completing homework and their grades. The teachers collected the MAP scores from the fall (baseline before EBP), winter (during implementation), and spring (after implementation). This
allowed the teachers to determine any growth students had over this time. These scores were imputed in an Excel sheet. After receiving the SBA scores from the state, teachers also imputed them in this same Excel sheet.
CHAPTER IV
RESULTS

The researcher analyzed archival data to determine if the implementation of homework trackers had any effect on students passing their classes and their district as well as state assessments. This study addressed the following questions: What effect will homework trackers have on students’ grades? How will district and state assessments be affected by homework trackers? How will communication between parents be affected by the usage of homework trackers? The following data were analyzed: amount of homework trackers that students turned in, D and F list before and after the implementation of home trackers, and district assessments before as well as the evidenced-based practice (EBP). State assessment scores were also analyzed.

Statistics Program Utilized

The statistical program used in this study was Minitab. Minitab is statistical software that is used in statistics introductory as well as advanced courses (Aylin, 2010). Because of the simplicity in using this software, more than 4000 institutions around the world use Minitab (Aylin, 2010). For this research, Minitab was primarily used to find the central tendencies as well as to create graphs to display the results. The researcher will focus on the mean and standard deviation because of the small amount of participants. levels between the Evidenced-based practice (EBP) and students’ academic performance.

Homework Trackers

Ninety-five homework trackers were given to students between October 31 2016 and April 13 2017. The mean for homework trackers turned in was 55.59% with a standard deviation of 16.32%. The minimum was .2526 which translates to a student who only turned in homework trackers 25.26% of the time. The maximum was .80 which translates to a student who turned in
homework trackers 80% of the time. On average, only 16.50% of the homework trackers were considered complete. The minimum was 1% and the maximum was 57%. This means that out of all the students that turned in homework trackers, the lowest complete percent of homework trackers was 1% and the highest student that turned in complete homework trackers was 57%. Complete homework trackers were those that had all assignments written, teachers’ signatures or initials, and parent signatures.

**Grades**

The first measurement that was analyzed to determine any relationship between homework trackers and students’ grades was the weekly D and F list. The school principal generated these lists from the sixth week through the 33rd week of school. The homework trackers were implemented from the eighth week through the 33rd week of school. Figure 1 shows the amount of students receiving Ds or Fs in their classes during the 33 weeks of school. There was an increase in students receiving Ds and Fs during the sixth to the eighth week. Upon implementing the EBP, a slight decrease (from 10 to seven) of students receiving Ds and Fs occurred bringing the total to nine. However, between the 12th and the 22nd weeks, the number of students receiving Ds and Fs increased to a total of 12 participants. This number decreased to a total of nine by the 33rd week. To summarize this graph, there were 10 students that had Ds or Fs before the implementation of the EBP, 12 during, and only nine after the implementation. The difference of students getting Ds or Fs was one. Before the EBP, the mean of students receiving D’s or F’s was 1.733 and the mean after the EBP was 1.457; a mean difference of .267. However, when looking at the number of participants individually with Ds or Fs before and after the EBP, 7 improved their grades, 5 remained unchanged, and 3 participants’ grades worsened. Note that the graph in Figure 1 does not make a distinction in the number of Ds or Fs each
participant had. Figure 2 compares the amount of students that received just Fs over the 33 weeks of school.

Figure 1

The number of students receiving Fs before the EBP was 5 and only 3 participants after the EBP. The mean for students getting F was .733 before the EBP and a mean of .533 after the EBP; a difference of .2. Figure 3 shows the amount of total homework trackers turned in versus the amount of Ds or Fs they had after the EBP. This graph does not show a clear positive or a negative relationship between the two. Figure 4 shows the amount of complete homework trackers turned in versus the number of Ds and Fs. Figure 5 shows the amount of homework trackers versus the amount of F students had after the EBP and Figure 6 shows the amount of complete homework trackers versus the amount of student Fs. There was no relationship between the amount of homework trackers student turned and the number of Ds and Fs or just Fs.
However, students who had the highest rate of complete homework trackers had the fewest Ds and Fs.
Measure of Academic Progress in MATH

Of the 16 participants, only 13 were able to complete the Fall MAP test. When analyzing these students’ fall and spring math MAP tests, it was determined that nine students increased their scores. Of the total participants, eight met the math Spring MAP benchmark score of 220. The mean of all 13 Fall Math MAPs scores was 216.62 (sd 11.34) and the mean for their Spring Math MAP scores was 220.15 (sd 11.34); a difference of 3.54. (See Figure 7). During the Winter Math MAPs test, however, 14 students were able to test. When the winter (212.33 mean, sd=17.01) and spring (220.07 mean, sd=11.98) were compared, there was a mean increase of 8.13 (See figure 8). This was considered a statistical difference. These results indicated that the EBP had an impact on students from winter to spring as determined by the scores. It is worthy to mention that those students that had a turn-in rate of 40% or greater had higher Math MAP scores than those who turned in homework trackers less than 40% of the time. Figure 9 displays the 10 students who turned in >40% had higher scores than those who had a lower rate. Of these 10 students, nine met Spring MAP Math benchmark. It also interesting to note that those students that had the highest percentages of complete homework trackers had the highest Math MAP scores (See figure 10).
Figure 7

Figure 8

Figure 9
Fourteen of the participants were given the MAP Reading test in the fall. The mean score was 214.21 with a standard deviation of 8.26. The fall reading benchmark score was 214 which means that only nine participants met this score. The same number (N=14) of participants were given the Winter MAP Reading test. The mean score was 216.21 with a standard deviation of 9.39. The benchmark score for this test was 217. Seven of the participants met such score. See Figure 11. The same number of students took the MAP ELA in spring. The mean for this test was 219.29 (sd=9.70). The benchmark score for this was 218. Seven of the 14 participants met this score. When Fall and Spring tests’ means scores were compared, there was a five-point increase (See Figure 12). This increase was large enough to state that the homework trackers had an impact. It is critical to note that there was no clear relationship between the amount of homework trackers turned in and the MAP ELA scores (See Figure 13). However, when the researcher analyzed the homework trackers that were considered complete and the MAP ELA scores, it was determine that there was a strong relationship (See Figure 14). That is, those that had the highest percentage of complete homework trackers turned in had the highest MAP ELA scores.
The Math SBA was administered to students in the first week of May of 2017. The SBA is scored using a 1-4 scale system. Levels 3 and 4 are considered to be passing levels. To pass the SBA in math, students need at least a score of 2484. Of the total participants, only 15 were administered this assessment. The mean score for these participants was 2478 with a standard deviation of 96.8. Seven of the participants were able to meet this score. When analyzing the amount of homework trackers turned in versus the Math SBA score, it was determined that students who turned in their homework trackers more than 40% of the time had higher scores (See Figure 15). More interestingly, those students that turned in complete homework trackers had two of the highest scores (See Figure 16).
English Language Arts Smarter Balance Assessment

Of the 16 participants, only thirteen of participants’ ELA SBA scores were available. The mean was 2548.3 (st=57.3), the minimum was 2478 and the maximum was 2655. Eight of the total participants met the state standard score of 2552. Figure 17 shows the number of homework trackers turned in and the scores participants received on this test. Figure 18 shows the number of complete homework trackers turned in and the score participants receive.
Communication with Parents

Because there were only six secondary teachers, the researcher interviewed them to determine if communication with parents had improved after implementing the EBP. The questions that teachers were asked were:

- How many times per week did parents contact you regarding student homework before the EBP?
- Before the EBP, how many times per week were you contacted by parents regarding student grades?
• After implementing the homework trackers, how many times per week were you contacted by parents regarding homework?

• After implementing the homework trackers, how many times were you contacted by parents regarding student grades, would you implement this EBP next year?

• Do you think parent communication has improved because of the EBP?

Figures 19 and 20 show the number of times teachers were contacted about grades before and after the EBP. Before the EBP, teachers were contacted by parents on average 1.5 times per week and .33 times per week after the EBP. The mean difference was 1.167. It was clear that teachers were contacted less after the EBP.

Figure 21 and 22 show the amount of times per week teachers were contacted by parent regarding homework. Before the EBP, teachers were contacted on average 1.667 and .208 times after the EBP; a mean difference of mean decrease of 1.458. This implies that the EBP served as a positive homework communication tool between teachers and parents. Five of the six teachers said they would implement this EBP the next academic year because they felt it served to communicate with parents. These five teachers also said, it allowed students to be more organized and they never used the excuse of forgetting what the homework was because they had
it written down. One of the six teachers stated that it created too much work for her to ask students to write down homework and to initial each student tracker.

**Figure 21**

Histogram of Homework Contact before EBP

**Figure 22**

Histogram of Homework Contact after EBP
CHAPTER V
CONCLUSION

Teachers and students are focusing on state assessments more than ever. This is because students must pass state assessment requirements in order to graduate. This has affected high school as well as middle school teachers and students. Many teachers state that students’ performance in middle school often predicts high school achievement (Casillas et al., 2012). This has put pressure on teachers to find different strategies they can utilize to assist students in passing their classes and in meeting district and state assessments. The purpose of this mixed (quantitative and qualitative) study was to analyze archival data to determine if homework trackers had any positive effect on seventh-grade students’ class grades and district as well as state assessments scores. The researcher also sought to determine if homework trackers had any effect on communication with parents.

Participants’ Grades

Based on the data analyzed, students with and without disabilities were able to improve their grades during the period of the homework tracker intervention. Ten of the 16 participants had Ds and Fs before the intervention and only nine afterwards. Even though, participants’ names continue to appear on this list throughout the intervention, seven improved their grades by reducing the number of Ds and Fs. When the mean of all Ds and Fs from before and after the intervention was analyzed, it was determined that a decrease occurred. While there was not a statistical difference, It is important to point out that there was a strong relationship between the number of complete homework trackers and the amount of Ds and Fs. That is, those that had a higher completion rate also had fewer Ds and Fs. This suggested that students that those who had
complete homework trackers, and thus their homework, had better grades than those who had a lower completion rate.

**Measure of Academic Progress**

When fall and spring math scores were compared, it was determined that there was an increase in scores. This increase, however, was not significant to conclude that it was because of the EBP. This may have been because only 13 of the total participants were administered the fall math test. During winter test, 14 of the participants were able to test. When these 14 students’ winter and spring math mean scores were compared, it was determined that there was an increase indicating that the EBP had a positive effect. When the researcher analyzed the math scores and the homework trackers turned in, it was determined that students who turned in homework trackers more than 40% of the time, had higher grades than those with less than 40% turn-in rate. This may imply that completing the homework trackers positively affects student district assessments. Two students who had the highest completion rate of homework trackers had two of the highest spring math scores. Again, this implies that those students that completed their homework trackers and finished their homework performed better on district assessments. This was confirmed by an increase in students’ spring ELA MAP scores when compared with their fall ELA MAP scores. When the researcher analyzed the amount of homework trackers turned in and spring ELA MAP scores, no apparent relationship was observed. There was, however, a strong relationship between homework trackers completion rate and the spring ELA MAP scores. That is, those participants that had the highest homework tracker completion rate, had the highest scores. This may have been because complete homework trackers are those that have teachers’ initials as well as parents’ signatures. If homework trackers have parents’ signatures, students are most likely to have completed their homework.
Math and English Language Arts Smarter Balance Assessment

Students who turned in their homework trackers more than 40% of the time had higher math SBA scores than those who did not. This implies that homework may have had a positive effect on state standards. This observation was not observable with the ELA SBA. This may have been because only 13 ELA scores were available. Students that had the highest homework tracker completion rate, however, had the highest scores in the math SBA and in the ELA SBA available. These same students were able to meet state standards in math and in ELA.

Communication with Parents

The number of times teachers were contacted on a weekly basis by parents regarding grades was reduced but not by much. That is, the number of parents contacting teachers before the EBP was already low. This may have been because parents had access to students’ grades electronically. The number of times teachers were contacted by parents regarding homework, however, was reduced significantly to conclude that homework trackers did assist teachers in communicating with parents about homework. Approximately 88% of the secondary teachers said they would support using this EBP in the upcoming academic year because they saw homework trackers as powerful homework communicator.

Limitations

Although most teachers reminded students to write down their homework on a daily basis, teachers could not control whether homework trackers were checked at home. That is, teachers communicated with parents about homework expectations but some parents did not ask or remind their children about homework. There were several participants’ parents that worked in the evening and thus were unable to serve as resources or motivators. Some of these participants also lived in single-parent families where the participants served as caretakers and
often did not complete homework. One of the most often missing components of the homework trackers were the parent signature. Although it was one component, it was one of the most important factors of the EBP. The parent signature indicated that the student had completed the homework for the day. This is no surprise why the homework tracker turn-in rate was 57% while the completion rate was only 16.2%.

Another limitation to the study was the full support of the staff. While most of the teachers supported the EBP, not all of them were proactive in explaining to students why they were implementing this EBP. The principal, who only had a background in elementary, did not think homework played a significant role in students’ academic success. She expressed this belief with some staff members before the implementation of the EBP and to the researcher while it was being implemented. Some students and one teacher saw this intervention as a burden and as just another thing to do. This may have been because when deciding on the EBP early in the fall, this staff member was not in the deciding meeting.

A third limitation to this study was the actual sample size. While extensive data were collected from October 31, 2016 to April 13th 2007, one or two participants could have affected test score means as well as the D and F list mean score. This happened when comparing the Math MAPs scores. Only 13 tested in the fall while 14 tested in the winter and spring. When the 13 participants’ pre and post scores were analyzed, there was not a statistically significant increase level. However, when the 14 students’ scores were analyzed, there was a statistically significant level to support the usage of the EBP. The study results would have been stronger if the sample size would have been larger. When looking at the two students with disabilities and the three others that were referred for special education, it was determined that four of them improved their grades and district assessments in math and in ELA. The data however was not
statistically significant to conclude that the homework trackers had any effect. This may be explained because the student that had the highest turn in rate was about 37% and the highest completion rate was 14%. Nonetheless, students in special education with higher completion rate had better grades.

**Recommendations**

Based on the results of the study, there are some recommendations that future researchers can implement to extend the findings found. For example, since teachers will never have control of what happens outside the classrooms, they can continue to educate parents in supporting their children’s education by reminding them about their homework. This can be done during conferences or by making periodical phone calls. Teachers must also provide the necessary tools that students will need to complete any assigned homework. For example, the school where the study took place will allow students to take Ipads home in the upcoming academic year. It would be interesting what the results would be if this study was replicated if students are given Ipads or any other electronic device.

It is also critical that all staff members understand why an EBP is chosen. Therefore, all if not the majority of teachers, have to be part of the EBP decision making process. Greene (2016) states that when staff members are involved in making decisions, they are more willing to implement them because they feel they have a ownership of such decision. Most importantly, staff members need to understand that whatever EBP is being implemented is to attempt to enhance students’ education. This applies to students themselves. They need to be reminded why they have homework trackers and how it helps with their education.

Since this was a mixed study (quantitative and qualitative), future researchers need to analyze larger samples of students with and without disabilities to obtain stronger results based
on more than 16 participants. Score means and standard deviations were changed when three students did not test. With larger sample sizes, this would not play a significant factor. Future researchers should also select sample groups that are more diverse. This would extend this study and thus add to the body of research on this topic.

**Conclusion**

Based on the study results, there are four major conclusions. Although, students improved their grades, the total amount of homework trackers turned did not have a statistically impact on the number of students with Ds and Fs. Students with and without special educational needs that turned in their homework trackers more than 40% of the time had a higher score in the Spring Math MAP and SBA. The third conclusion is that students that had the highest homework tracker completion rate had the highest scores on the Math and ELA spring MAP tests as well on the Math and ELA SBA; which may imply that when students completed their homework, their district and state performance was higher that those who did not complete their homework. The fourth conclusion is that when most of the participants’ Math and ELA MAP scores were compared before and after the intervention, there was a evidence to support the usage of homework trackers to help students’ performance. The fifth conclusion is that homework trackers did assist teachers in communication with parents about homework.

One implication that is common with all the findings, is that teachers must be proactive and loyal in the implementation of the homework tracker intervention. That is, there must be a buy in from all staff members and all must consistent in reminding students to write complete their homework trackers. This must happen until students master the process. A reward system may be beneficial to motivate students to complete their homework trackers and in essence their
homework. It is also necessary to have an open and constant line of communication with parents to inform them of the intervention.
REFERENCES


Dettmer, P., Knackendoffel, A., & Thurston, L. P. (2013). Collaboration, consultation, and teamwork for students with special needs (7th Ed.) Boston,
MA: Pearson.


Office of Superintendent of Public Instruction (2016). Special education. Retrieved on April 8,


Appendix A

<table>
<thead>
<tr>
<th>Per.</th>
<th>Name:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B
(Teacher Survey)

1. How many times per week did parents contact you regarding student homework before the EBP?

2. Before the EBP, how many times per week were you contacted by parents regarding student grades?

3. After implementing the homework trackers, how many times per week were you contacted by parents regarding homework?

4. After implementing the homework trackers, how many times were you contacted by parents regarding student grades, would you implement this EBP next year?

5. Do you think parent communication has improved because of the EBP?