The Relationship Between Self-Monitoring and On-Task Behavior for Students with Developmental Disabilities

Corrin Mann
mannco@mnstate.edu

Follow this and additional works at: https://red.mnstate.edu/thesis

Part of the Special Education and Teaching Commons

Recommended Citation
https://red.mnstate.edu/thesis/125

This Project (696 or 796 registration) is brought to you for free and open access by the Graduate Studies at RED: a Repository of Digital Collections. It has been accepted for inclusion in Dissertations, Theses, and Projects by an authorized administrator of RED: a Repository of Digital Collections. For more information, please contact RED@mnstate.edu.
The Relationship between Self-Monitoring and On-Task Behavior of High School Students with Developmental Disabilities

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

By
Corrin Mann

In Partial Fulfillment of the Requirements for the Degree of Master of Science in Curriculum and Instruction

December 2018
Moorhead, Minnesota
Table of Contents

ABSTRACT ................................................................................................................. 8

CHAPTER ONE ............................................................................................................ 9

Introduction .................................................................................................................. 9

General Problem/Issue .............................................................................................. 9

Subjects and Settings ................................................................................................. 11

Description of subjects ............................................................................................ 11

Selection criteria ........................................................................................................ 11

Description of setting ................................................................................................. 11

Research Ethics .......................................................................................................... 11

Permissions .................................................................................................................. 11

IRB approval ............................................................................................................... 12

Informed consent ........................................................................................................ 12

Method of assent ......................................................................................................... 12

CHAPTER TWO ........................................................................................................... 13

Review of Literature ................................................................................................ 13

Definition of Terms .................................................................................................... 13

Description of Strategy .............................................................................................. 14

Components to Consider ........................................................................................... 15

Barriers of Self-Monitoring ......................................................................................... 16

Benefits of Self-Monitoring ....................................................................................... 16

Typical Research Participants ................................................................................... 17
Typical Research Designs……………………………………………………..…18
Conclusion……………………………………………………………………………..….18
Hypothesis Statement……………………………………………………………………….18

CHAPTER THREE………………………………………………………………..………19

Research Plan……………………………………………………………………………19
Research Questions………………………………………………………………………19
Methods and Rationale……………………………………………………………………19
Table 3.1 – Research Schedule………………………………………………………..….21
Ethical Issues…………………………………………………………………………………..22
Anticipated Response………………………………………………………………………22

CHAPTER FOUR……………………………………………………………………23

Data Collection and Interpretation…………………………………………………………..23
Research Days……………………………………………………………………………….23
Student G’s Self-Monitoring Data…………………………………………………………..24

Student background……………………………………………………………………………24

How will monitoring on-task behavior increase the student’s on-task behavior?…………………………………..24
How accurate will the monitoring data be?……………………………………………………………..24
How will the accuracy of the data relate to the effectiveness of self-monitoring?………………………………………..25

Summary………………………………………………………………………………..…25

Student N’s Self-Monitoring Data…………………………………………………………..26

Student background……………………………………………………………………………..26
How will monitoring on-task behavior increase the student’s on-task behavior? .....................................................................................................26

How accurate will the monitoring data be? .................................................................................................................................26

How will the accuracy of the data relate to the effectiveness of self-monitoring? .................................................................................................................................27

Summary..................................................................................................................................................................................27

Student JA’s Self-Monitoring Data ........................................................................................................................................28

Student background................................................................................................................................................................28

How will monitoring on-task behavior increase the student’s on-task behavior? .................................................................................................................................28

How accurate will the monitoring data be? .................................................................................................................................................................................................28

How will the accuracy of the data relate to the effectiveness of self-monitoring? .................................................................................................................................29

Summary..................................................................................................................................................................................29

Student R’s Self-Monitoring Data ........................................................................................................................................30

Student background................................................................................................................................................................30

How will monitoring on-task behavior increase the student’s on-task behavior? .................................................................................................................................30

How accurate will the monitoring data be? .................................................................................................................................................................................................30

How will the accuracy of the data relate to the effectiveness of self-monitoring? .................................................................................................................................30

Summary..................................................................................................................................................................................31

Student A’s Self-Monitoring Data ........................................................................................................................................32
Student background...........................................................................................................32

How will monitoring on-task behavior increase the student’s on-task behavior?...........................................................................................................32

How accurate will the monitoring data be?......................................................................32

How will the accuracy of the data relate to the effectiveness of self-monitoring?...........................................................................................................32

Summary..................................................................................................................................33

Student J’s Self-Monitoring Data..........................................................................................34

Student background...........................................................................................................34

How will monitoring on-task behavior increase the student’s on-task behavior?...........................................................................................................34

How accurate will the monitoring data be?......................................................................34

How will the accuracy of the data relate to the effectiveness of self-monitoring?...........................................................................................................35

Summary..................................................................................................................................35

Student K’s Self-Monitoring Data..........................................................................................36

Student background...........................................................................................................36

How will monitoring on-task behavior increase the student’s on-task behavior?...........................................................................................................36

How accurate will the monitoring data be?......................................................................36

How will the accuracy of the data relate to the effectiveness of self-monitoring?...........................................................................................................37
Summary..................................................................................................................37
Overall Summary of All Student Data.................................................................38

How will monitoring on-task behavior increase the student’s on-task behavior?........................................................................................................38
How accurate will the monitoring data be?..........................................................38
How will the accuracy of the data relate to the effectiveness of self-monitoring?.............................................................................................38
Summary..............................................................................................................38

Hypothesis...........................................................................................................39

CHAPTER FIVE........................................................................................................40
Action Plan and Plan for Sharing.........................................................................40
Plan for Taking Action..........................................................................................40
Plan for Sharing....................................................................................................40
REFERENCES........................................................................................................41
APPENDIX A..........................................................................................................44
APPENDIX B..........................................................................................................45
APPENDIX C..........................................................................................................46
ACKNOWLEDGEMENTS......................................................................................47
Table of Figures

| Figure 4.1. | G’s Self-Monitoring Data | 24 |
| Figure 4.2. | N's Self-monitoring Data | 26 |
| Figure 4.3. | JA's Self-monitoring Data | 28 |
| Figure 4.4. | R's Self-monitoring Data | 30 |
| Figure 4.5. | A's Self-monitoring Data | 32 |
| Figure 4.6. | J's Self-monitoring Data | 34 |
| Figure 4.7. | K's Self-monitoring Data | 36 |
ABSTRACT

The purpose of this research was to determine whether the practice of self-monitoring would improve the on-task behavior of high school students with developmental disabilities. The study tracked the effects of self-monitoring on a student’s on-task behavior while in a functional life skills class through a transition program. Students practicing in this study demonstrated off-task behavior while in the life skills class. The students were taught to keep track of their on-task behavior with the use of a timer and a self-monitoring checklist. The acronym CLAWS was used to help students remember what on-task behavior looked like. Data was collected with the student’s self-monitoring checklist and compared to an adult’s self-monitoring data for each student. The research conducted proved that self-monitoring was an easy and effective way to increase on-task behavior for students with developmental disabilities. The student’s on-task behavior increased while the strategy was used, however decreased when the use of the strategy ended. There were no ethical issues that arose during the research study.
CHAPTER ONE

Introduction

General Problem/Issue

Students in a High School Special Education Transition Program have a wide variety of developmental disabilities, including intellectual disabilities, attention deficit hyperactivity disorder (ADHD), and autism. When teaching these students, lessons and activities are developed that will help them gain new skills and further develop the skills they already have. The hope is for the students to gain skills needed to live as independently as possible. The students work on family living skills, community skills, recreation and leisure skills, post-secondary education skills, and employment skills. Time in school is valuable. It needs to be used wisely in order to help students with developmental disabilities live independently and successfully participate in things like cooking for themselves, paying their own bills, participating in post-secondary education, finding and maintaining employment, and enjoying life in the community which they live.

Students with intellectual disabilities have an intelligence quotient (IQ) of 70 or lower. Having an IQ of 70 or lower affects a wide variety of skills, including their intellectual functioning, like memory recall, motivation, and generalizing skills. The student’s adaptive behavior, including conceptual skills and social skills and their self-determination skills, including making choices, solving problems and setting goals are often affected (Project Ideal, 2013).

Many students in high school transition programs have ADHD. Almost two out of three students with a mental, emotional or behavioral disorder also have ADHD (Centers for Disease Control and Prevention, 2018). Rawe (2018) states that ADHD is a disorder that impacts the
student’s ability to focus, control their impulses and responses. Rawe provides a list of many activities that students with ADHD may struggle with, including following directions, getting started on tasks, managing their time, thinking before they speak or act, and focusing on what’s not important. Morin (2018) states that students with ADHD often struggle with a variety of skills on a daily basis. They may not be able to focus in class and struggle to switch from one task to another. They often quickly lose interest in one topic and blurt out their thoughts and may talk non-stop. Students with ADHD often struggle to listen and follow directions.

Students who qualify under the autism spectrum disorder have different needs or mannerisms and may participate in high school transition programs. According to Project Ideal (2013), students with autism often have delays in their communication skills which will likely affect their relationships, schooling, and employment. They may require non-stop attention or may not want any attention. Short phrases and pictures typically work best when instructing students with autism. They may focus on information that is not important or relevant to the topic being discussed and changes in the schedule sometimes results in negative behaviors.

Students with intellectual disabilities, ADHD, and autism struggle with a wide variety of tasks, including motivation, staying on-task and communicating. It is their teacher’s job to find strategies that will help each of them gain as much information as possible. Keeping students on-task can be a challenging behavior. Off-task behavior is a common issue and it negatively affects the students within a classroom. Finding strategies that will help students focus on the tasks at hand will benefit the student, their peers and the teacher. The less time a teacher spends redirecting students, the more time they can learn and practice new skills. Ganz (2018) claims that self-monitoring has benefited all types of students, including students with a wide variety of disabilities.
Subjects and Settings

Description of subjects. Participants in this study were selected from a group of ninth through twelfth grade students who have an individualized education program plan and are participating in a transition program for students with developmental disabilities.

Selection criteria. Seven participants were chosen based on their participation in a life skills class through a senior high school developmental disabilities transition program and their demonstration of any off-task behavior.

Description of setting. The classes were sized between five and eight students and had anywhere from one to two adults present throughout the class period. The school was located in northern Minnesota where there is little population diversity. At the senior high, 86% of the population is Caucasian, 6% of the students claim two or more races, 4% is American Indian/Alaskan Native, 2% of the population is Hispanic/Latino, 2% of the students are Black/African American, and 1% is Asian. In 2017, the high school had one teacher for every eighteen student and graduated 95.2% of their seniors. In 2018, 13% of the student population was enrolled in special education and 29% qualified for free and reduced lunch (Minnesota Department of Education, 2018).

Research Ethics

Permissions. Permission was obtained from the Institutional Review Board (IRB) at Minnesota State University Moorhead and from the school district to conduct this study. Written permission was received from three people in the school district, including the Superintendent, Director of Special Education, and the High School Principal where the research was conducted.

Protection of human subjects participating in the research was assured. Participants and their parents or guardians were informed of the purpose of the research and any activity or
information required by the participant, including disclosure of risks or benefits. Confidentiality was protected through the use of pseudonyms without identifying information. The choice to participate or withdraw at any time was outlined both verbally and in writing.

**IRB approval.** The IRB provided permission prior contacting parents and starting the research project.

**Informed consent.** Parents were informed of the research project and provided written consent prior to starting the research.

**Method of assent.** The students were provided a space to sign on the consent form and they were informed their parents gave permission for them to participate in the research study. They were given the option to opt out of the study with no negative effects. Each student participated in the research project on a voluntary basis with no connection to their final grade.
CHAPTER TWO

Review of Literature

Academic engagement serves as a predictor of academic performance. Consistent off-task behavior in the classroom may cause negative results, such as lower academic skills, behavior issues and high rates of dropping out of school (Otero & Haut, 2015, p.91). Students with developmental disabilities are not self-motivated (Texas Council for Developmental Disabilities, 2013). Research shows that students with intellectual disabilities struggle to stay on-task, attend to tasks and maintain attention for long periods of time (Rosenberg, Westling, & McLeskey, 2013). According to PBIS World (2018), an appropriate time for teachers to implement self-monitoring strategies in their classroom is when students are struggling to pay attention or control their impulses.

Definition of Terms

For the purpose of this study, the following terms are defined.

- On-task behavior: The student demonstrates on-task behavior by having their eyes on the teacher or the person talking, keeps their hands to themselves, only talks about the lesson being discussed, waits their turn to talk, stays in their seat, and works on given assignments.

- CLAWS: A strategy to help students remember what on-task behavior looks like. It stand for Control your body, Listen to the person talking, Ask and answer questions, Work on your assigned tasks, and Stay in your seat. This is similar to the popular SLANT strategy.

- SLANT: A strategy to help students pay attention in class. The strategy stands for Sit up, Look or Listen, Active thinking or Ask and answer questions, Note key information or Nod your head and Track the talker or speaker.
Self-monitoring: Students self-monitor their behavior by determining if they have been on-task for 10 minutes and marking yes/no on a grid worksheet provided to each participant.

**Description of strategy**

There are a variety of ways to teach students how to use self-monitoring strategies and a variety of tools that can be used. The following are two different ways to teach and use self-monitoring strategies in the classroom. Although the strategies are different, they share the same goal of teaching students self-monitoring skills.

Wright (2013) describes self-monitoring as a tool to change a student’s behavior. When using self-monitoring techniques in the classroom, students monitor and record their own behavior and evaluate it based on predetermined behavior guidelines. Students learn the expectations in the classroom and actively participate in their behavior intervention. Wright provides seven steps that help make self-monitoring successful. The first step is for the teacher and student to determine which behavior will be addressed. Second, they will determine how the data will be recorded. Data may be recorded with a rating scale, a checklist, or a frequency count. The third step is to choose a monitoring schedule, because the students will be monitoring their behavior at predetermined times. The teacher and student may decide they want to monitor at the beginning of the day or class period, at the end of the day or class period, transition periods, at the beginning or duration of an assignment, or during fixed intervals throughout the school day. The fourth step is to pick a cue that will remind the student it is time to monitor their behavior. An audio beeping sound, a timer, a teacher cue or a student cue are all cuing options. The fifth step is to determine if the students will receive rewards and what the rewards will be when they demonstrate a behavior change. The sixth step is for the teacher to periodically check
the students recording accuracy and the last step is to fade the self-monitoring plan with the hope and expectation that the strategy will continue.

Ganz (2008) also uses seven steps to teach self-monitoring. There are some similarities and differences between Ganz and Wright’s strategies. According to Ganz, the first is to choose a specific behavior will be focused on. Second, the student will learn what self-monitoring means and the benefits of the strategy. Third, the teacher will determine how they will measure the behavior and take baseline data. Fourth, a self-monitoring technique that is appropriate for the student will be chosen and the teacher will determine if and how the student will be reinforced for their behavior. Fifth, the student will be taught how to self-monitor. Sixth, the student will begin self-monitoring. The teacher will also keep data to determine whether or not the student is collecting accurate data. Finally, the teacher will determine if the self-monitoring is effective for the student and fade the strategy once the positive behavior has been maintained. After fading the strategy, another behavior may be address through self-monitoring.

**Components to Consider**

Harris, Friedlander, Saddler, Frizzelle and Graham (2005) believe students can monitor their own behavior without recording, however recording data helps with the success of the intervention. Ganz (2008) lists a variety of ways to keep track of self-monitoring, including paper-based systems, like checklists or hands-on systems, like tokens. Students have more success when they are invested in the outcomes of the intervention. Researchers believe the act of self-monitoring is more important than the accuracy of the data (Ganz, 2008). Student success increases when they are allowed to choose which intervention they will use. If students can choose between monitoring their on-task behavior and how well they complete an assignment,
they will likely increase both their on-task behavior and the amount of assignments completed (Dougherty, 2018, p.3).

**Barriers of Self-Monitoring**

Although students may benefit from self-monitoring skills at any age, Kartal & Ozkan (2015) believe it is most beneficial to teach self-monitoring skills at an early age. As the students get older, it is more difficult for them to gain the skills needed to self-monitor. According to Ganz (2008), self-monitoring is an effective strategy to use with students of all abilities, including students with mild and severe disabilities, however Agran, Sinclair, Alper, Cavin, Wehmeyer, and Hughes (2005) have found that few teachers actually teach and use self-monitoring skills in their classroom.

**Benefits of Self-Monitoring**

Using self-management strategies can be a positive experience for both teachers and students. Using self-management strategies increases on-task behavior, decreases disruptive behavior and does not increase the teacher’s workload (Wills & Mason, 2014).

Teaching students to self-monitor can be fast and simple. Amato-Zech (2006) taught three fifth graders to self-monitor using the SLANT strategy in two thirty-minute sessions. According to Amato-Zech, Hoff, & Doepke (2006), “SLANT is an acronym that stands for Sit up, Look at the person talking, Active thinking, Note key information, and Track the talker” (p. 214). The SLANT strategies have a few variations. One variation is Sit up, Lean forward, Ask and answer questions, Nod your head, Track the speaker (Professional Learning Board, 2018) or another version is Sit up tall, Lean forward, Activate your thinking, Note key ideas, and Track the talker (Shoopman, 2012). According to Shoopman (2012), the SLANT strategy helps students understand the behaviors expected in the classroom, especially for students with ADHD.
Using the SLANT strategy takes the pressure off the teacher and places it on the strategy. Shoopman found that using the strategy or a similar acronym had great results for the students and classroom management.

Mammolenti, Vollmer, & Smith (2002) and Ganz (2008) believe self-monitoring does not have to be accurate in order to work. Student on-task behavior will increase whether their data collection is accurate or not, because recording the behavior increases the student’s awareness. When students are provided with reinforcement, the accuracy of their self-monitoring records will increase.

According to Holifield, Goodman, Hazelkorn, and Heflin (2010), self-monitoring not only increases student’s on-task behaviors, but also helps with social skills and classroom management. When students develop self-monitoring skills, they generalize those skills to other environments and responsibilities.

**Typical Research Participants**

There have been numerous studies completed about the use of self-management strategies, however they are not typically completed with high school students who have developmental disabilities. The majority of the research has been completed with students who have a learning disability (Davis, Dacus, Bankhead, Haupert, Fuentes, Zoch, & Russell, 2014), in the general education setting (Dougherty, 2018), and with elementary students (Clemons, Mason, Garrison-Kane, & Wills, 2016). Although there is not an abundance of research, self-management strategies have been found useful for students with disabilities at the high school level. More than one research study of self-management skills at the high school level has shown an improvement in reading, math, and writing. These studies also found improvement in the student’s on-task behavior and task completion (Clemons, Mason, Garrison-Kane, & Wills, H.,
There has not been an excessive amount of research studies completed about the use of self-management with high school students who have developmental disabilities, but there has been enough to prove it is worth exploring.

**Typical Research Designs**

Multiple baseline design across participants was the most popular way to collect data. Agran et al. (2005); Kartal & Ozkan (2015); Holifield et al. (2010); and Harris et al. (2005) all used multiple baseline design across participants. Davis et al. (2014) used multiple baseline across settings design, while other researchers used a variety of ABAB designs.

**Conclusion**

Self-monitoring can help students in multiple settings by developing a positive attitude, increasing motivation, staying on-task, and increasing their engagement in daily activities (Dougherty, 2018). Little research has been completed for implementing self-monitoring strategies in a high school pull out classroom for students with developmental disabilities. A research study will help determine the relationship between self-monitoring and on-task behavior of high school students with developmental disabilities.

**Hypothesis Statement**

Self-monitoring will increase on-task behavior for high school students with developmental disabilities. The students will show measurable increases for on-task behavior during independent and group work times. Increasing the student’s on-task behavior will increase their academic and social success in school and those skills will be generalized to other aspects of their lives.
CHAPTER THREE

Research Plan

Research Questions

When working with students who have developmental disabilities, it is apparent that many struggle paying attention for any given amount of time during instructional, group activities and independent work periods. The overall goal is finding strategies that will help students stay focused and benefit from their education to the highest extent possible. The following three research questions for this project.

1. How will monitoring on-task behavior increase the student’s on-task behavior?
2. How accurate will the monitoring data be?
3. How will the accuracy of the data relate to the effectiveness of self-monitoring?

Methods and Rationale

The students were informed that they would be working on a goal to increase their on-task behavior in the classroom. The students received a lesson on what on-task behavior looks like, using a modified version of SLANT. The strategy used was called CLAWS. It stands for Control your body, Listen to the person talking, Ask and answer questions, Work on your assigned tasks, and Stay in your seat.

The students were taught to mark yes/no on a sheet of paper through a practice activity. They were cued to document their behavior with a pre-recorded bell sound four times throughout the class period. If the student remained on-task for ten minutes, they put a checkmark next to “yes”. If the student did not remain on-task for the ten minutes, they put a checkmark next to “no”. The students monitored their behavior every ten minutes, for 40 minutes. To determine accuracy, the students were observed and data was taken by another adult or their teacher. This
data collection method was chosen because it was a simple way for students with developmental disabilities to participate in the study and collect data. The validity of the research was high, because the students were only marking whether they were or were not on-task. The data was checked by an adult to determine accuracy. If the data was not accurate, that information was taken into account at the end of the study.

Data was also collected with observations and journal entries. The students were observed from start to finish and information was kept to document what was happening in the classroom, how the students were responding, whether or not their on-task behavior changed and any other pertinent information that may have been helpful. This data collection method was chosen because it is a fast and simple way to document the teacher’s point of view and keep track of any pertinent information that would be helpful when determining the results of the study.

Non-current multiple baseline design across participants with an AB design was used, including baseline data for each student. The baseline data occurred at various times for various lengths, depending on each student. There was a minimum of three baseline data points used for each student. Once baseline data was complete, the self-monitoring strategy was implemented. Data was recorded from the beginning of baseline collection to the end of the study.
Table 3.1.

*Research Schedule*

<table>
<thead>
<tr>
<th>Date</th>
<th>Plan/Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1-14, 2018</td>
<td>Solidify plans for the research project.</td>
</tr>
<tr>
<td>September 15-30, 2018</td>
<td>Gain permission from the Institutional Review Board through Minnesota</td>
</tr>
<tr>
<td></td>
<td>State University, Moorhead, School District Superintendent, District</td>
</tr>
<tr>
<td></td>
<td>Director of Special Education, and High School Principal.</td>
</tr>
<tr>
<td>October 1, 2018 - October 7, 2018</td>
<td>Determine which students will be appropriate for the study and gain</td>
</tr>
<tr>
<td></td>
<td>permission from them and their parents or guardians.</td>
</tr>
<tr>
<td>October 3-12, 2018</td>
<td>Baseline data will be taken once parental permission is granted.</td>
</tr>
<tr>
<td>October 15, 2018- November 9, 2018</td>
<td>The intervention will be introduced and used</td>
</tr>
<tr>
<td>November 10, 2018 - November 12, 2018</td>
<td>The research report will be written</td>
</tr>
<tr>
<td>November 13, 2018</td>
<td>The research report will be submitted.</td>
</tr>
</tbody>
</table>
Ethical Issues

There are ethical issues that may arise from conducting research with students who have developmental disabilities. First, although the parents/guardians will be giving informed consent, the students are not able to completely understand the implications of the study and give informed consent. Second, the student’s confidentiality may be compromised without careful consideration and planning. Third, the students may feel targeted or uncomfortable by being part of the research study.

Anticipated Response

If any ethical issue arises, including the issues listed above, they will be immediately dealt with. Parents or guardians and the students were communicated with prior to giving permission to participate in the study. They were ensured their privacy would be kept and the study would not negatively impact the student’s quality of education. The students and families were ensured they could exit the research study at any time.
CHAPTER FOUR

Data Collection and Interpretation

Research Days

The research study days vary for each student. The baseline data was collected as soon as permission was received for each student, taken anywhere between October 2, 2018 and October 11, 2018. By October 11th, each student had three or more baseline data points. On October 15th, the students were introduced to the intervention strategy and continued self-monitoring for the purpose of this research project until November 9th. Some students missed days due to absenteeism, speech or field trips.
Student G’s Self-Monitoring Data

Figure 4.1.

**G’S SELF-MONITORING DATA**

- Baseline Data
- Student’s Self-monitoring Data
- Teacher’s Interpretation of Student's Self-monitoring Data

**Student background.** G is a tenth grade, male with mild to moderate developmental disabilities. Prior to the intervention, G did not pay attention on a daily basis, specifically days where he was required to complete worksheets or answer questions about specific topics. He preferred listening to a book being read over other work assignments. G was falling asleep in class on a weekly basis.

**How will monitoring on-task behavior increase the student’s behavior?** It took G a few days to get into the self-monitoring strategy. By the end of the data collection period, G was consistently on-task, stopped sleeping in class and marked his sheet accurately. There was an obvious increase of consistent, on-task behavior while self-monitoring. His attitude was more positive and he seemed proud to be on-task.

**How accurate will the monitoring data be?** Although G was off-task the first day, he did not want to mark the sheet accurately. The second day he was still off-task, but marked accordingly. By the third day, G was accurately marking his data sheets on-task.
How will the accuracy of the data relate to the effectiveness of self-monitoring? At the beginning, G was not marking accurately and not on-task. He was initially upset and defensive when confronted with this information. The next day, G was more honest with himself and marked his data accurately, even when he was off-task. Although his data was not accurate to begin with, his overall on-task behavior increased.

**Summary.** G took the self-monitoring seriously and ended up increasing his on-task behavior. It appeared that by being asked to keep track of his behavior, G was more conscientious of his on-task behavior.
Student N’s Self-Monitoring Data

Figure 4.2.

Student background. N is a tenth grade, male with mild to moderate developmental disabilities. Prior to the self-monitoring intervention, N was consistently on-task, with very few off-task moments. He almost always participated in class, but periodically became side tracked by technology or things going on outside of school.

How will monitoring on-task behavior increase the student’s behavior? N didn’t need much help monitoring his behavior, because he was already on-task the majority of the time. The benefits for N seemed to be self-assurance that he was doing what he was supposed to be doing. He was more careful about taking his Ipad out and using it during class and encouraged his classmates to stay on-task as well.

How accurate will the monitoring data be? N’s self-monitoring accuracy was 100% accurate. He was on-task every day he was asked to keep track of the data and marked accordingly.
How will the accuracy of the data relate to the effectiveness of self-monitoring? His accuracy was 100% and his on-task behavior was 100%. He was typically on-task prior to the intervention, but the process of documenting his behavior made him diligent about how on-task he was.

Summary. N could go with or without self-monitoring. He has the skills needed to self-monitor, without being told to self-monitor. He was a good sport though and would be willing to self-monitor if everyone else is doing the same.
Student JA’s Self-Monitoring Data

Figure 4.3.

Student background. Ja is a ninth grade, male with severe to profound developmental disabilities and a speech impairment. Prior to the self-monitoring intervention, Ja’s on-task behavior varied. He often seemed to be thinking about something other than the topics being discussed in class. He rarely could answer a question about what was being discussed, partially due to his speech impairment, partially due to not listening. Ja’s participation expectations were modified to help him communicate with the class. He often did not have an answer or know what we were talking about, when he was expected to respond to questions.

How will monitoring on-task behavior increase the student’s behavior? Ja’s on-task behavior increased by day two and was almost always 100% on-task. Monitoring his behavior held Ja accountable and helped remind him what he needed to be doing in class.

How accurate will the monitoring data be? The student was almost always honest and accurate with his self-monitoring skills. One day he marked that he was on-task 100% of the time, when the teacher marked 75%.

![Graph showing student's self-monitoring data over 18 days. The student's self-monitoring data is mostly consistent with 100% on-task behavior, except for a few days where it varies. The teacher's interpretation of the student's self-monitoring data closely follows the student's data, indicating accuracy of the self-monitoring skills.]
How will the accuracy of the data relate to the effectiveness of self-monitoring? Ja’s data was consistently accurate, but even when it was not accurate, his overall participation and on-task behavior increased.

Summary. When Ja marked that he was on-task the entire time, he got a big smile on his face when handing it to the teacher. He would point and giggle. Having control over his own data seemed to make Ja want to listen and participate in class. Self-monitoring helped Ja stay on-task in class. He would benefit from continuing the strategy until he learns how to self-monitor on his own.
Student R’s Self-Monitoring Data

Figure 4.4.

**R’S SELF-MONITORING DATA**

<table>
<thead>
<tr>
<th>DATA COLLECTION DAYS</th>
<th>ON-TASK PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>75</td>
</tr>
<tr>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>14</td>
<td>50</td>
</tr>
<tr>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

**Baseline Data**

**Student’s Self-monitoring Data**

**Teacher’s Interpretation of Student’s Self-monitoring Data**

**Student background.** R is a ninth grade, male student with mild to moderate developmental disabilities. Prior to the intervention, R was on-task most of the time, but had regular moments of off-task behavior.

**How will monitoring on-task behavior increase the student’s behavior?** R benefited from monitoring his own on-task behavior because he honestly self-reflected every day.

**How accurate will the monitoring data be?** R was often accurate with his data collection, especially as time went on. If there was a discrepancy with the data, it was typically R marking himself off-task and the teacher marking him on-task. He marked his sheets the same as the teacher in ten out of twelve trials.

**How will the accuracy of the data relate to the effectiveness of self-monitoring?** R’s data collection was not always accurate, but his overall on-task behavior seemed to increase with or without accurate data collection.
Summary. Overall, R’s on-task behavior increased and became more consistent with the class expectations. He learned to ignore other student’s off-task behavior and increased his participation level.
**Student A’s Self-Monitoring Data**

Figure 4.5.

**A’S SELF-MONITORING DATA**

**Student background.** A is an eleventh grade, male student with mild to moderate developmental disabilities, including autism and a speech impairment. Prior to monitoring his behavior, A was often off-task between 50% and 100% of the time. He was not able to answer questions in class and refused to complete his work.

How will monitoring on-task behavior increase the student’s behavior? A’s on-task behavior drastically increased when he started monitoring his behavior. He was more alert and participated with one or two prompts, rather than three or more.

How accurate will the monitoring data be? A was not always accurate with his self-monitoring data. He never wanted to say he was off-task, always marking yes. Although the teacher talked to A about this on three separate occasions, he continued to mark yes whether he was on-task or not.

How will the accuracy of the data relate to the effectiveness of self-monitoring? Even though A’s data was not always accurate, his overall on-task behavior increased.
**Summary.** Monitoring his behavior encouraged A to be aware of his expectations and put effort into being on-task while in class. There was an obvious change in A’s attitude about being in class and his willingness to participate.
**Student J’s Self-Monitoring Data**

Figure 4.6.

![J's Self-Monitoring Data](image)

**Student background.** J is a ninth grade, male student with severe to profound developmental disabilities and mild speech impairment. Prior to monitoring his on-task behavior, J was inconsistently on-task. There were days where he was on-task 50 or 75% of the time, but he rarely had a day where he was on-task the entire period.

**How will monitoring on-task behavior increase the student’s behavior?** It took J a while to get the hang of self-monitoring and to increase his behavior, but he eventually increased his on-task behavior and became a valuable member of the class discussions.

**How accurate will the monitoring data be?** J’s self-monitoring data was not accurate at first. There were many days where he marked himself higher than the teacher. The teacher encouraged J to truly consider whether his behavior was on or off-task and mark accordingly. J was reminded of the CLAWS strategy and encouraged to use it when determining whether or not his behavior was on or off-task. By the end of the data collection, J was marking his sheet the same as the teacher.
How will the accuracy of the data relate to the effectiveness of self-monitoring?

Although J was not always accurate, he eventually increased his overall on-task behavior. It did not seem to matter whether or not J’s data was accurate. For J, monitoring his behavior allowed him to truly consider what on-task looked like and personally work on those expectations.

Summary. J’s behavior fluctuated a lot at the beginning of the trial, but by the end of the trial he was consistently on-task and a valuable member of the class discussions. The trial seemed to help J and encouraged him to stay on-task.
Student K’s Self-Monitoring Data

Figure 4.7.

**K’S SELF-MONITORING DATA**

Student background. K is a tenth grade, male student who has severe to profound developmental disabilities and a vision and speech impairment. Prior to monitoring his on-task behavior, he was consistently off-task and often asked to leave a class, because he does not stop talking during instruction. During class instructions, K will shout out random comments and questions that have nothing to do with the task or topics being discussed. Baseline data was taken on this student and then he was out for a week for medical reasons. He started taking his own data five or six days after the rest of the students.

**How will monitoring on-task behavior increase the student’s behavior?** Within eight days of monitoring his behavior, K was consistently on-task in class. His participation increased and became more appropriate for class.

**How accurate will the monitoring data be?** It took a few days, but K eventually increased his data accuracy and became consistently accurate throughout the last six days of data collection.
How will the accuracy of the data relate to the effectiveness of self-monitoring?
Although K’s first couple of data collections were not accurate, he increased his on-task behavior throughout the study.

**Summary.** Overall, this study was beneficial for K, because it gave him specific guidelines to follow. K wants to be in class and wants to participate, but is often distracted by other thoughts that do not have anything to do with the lesson. It would be beneficial to try this strategy in other settings with K.
Overall Summary of All Student Data

**How will monitoring on-task behavior increase the student’s behavior?** Although there is not an abundance of research, self-management strategies have been found useful for students with disabilities at the high school level. (Clemons, L.L., Mason, B.A., Garrison-Kane, L., & Wills, H., 2016). Ganz (2008), has found that self-monitoring is an effective strategy to use with students of all abilities, including students with mild and severe disabilities. The students in this study all increased their on-task behavior while self-monitoring. The overall participation levels increased and off-task behavior decreased.

**How accurate will the monitoring data be?** The student’s accuracy varied from student to student and day to day. More student’s struggled during the first few data collection days and increased their accuracy as they became comfortable and confident in their data collection. A few students were consistently accurate.

**How will the accuracy of the data relate to the effectiveness of self-monitoring?** The accuracy did not affect whether or not they increased their on-task behavior. Whether the students documented accurate data or not, they increased their on-task behavior. According to Ganz (2008), students have more success when they are invested in the outcomes of the intervention. Researchers believe the act of self-monitoring is more important than the accuracy of the data.

**Summary.** Overall the students all increased their on-task behavior in class and the class became more productive. The teachers and support staff all agreed that when the students started to monitor their on-task behavior, their participation went up and the class become calmer. Overall, everyone involved agreed that the strategy was easy to implement and worked well for students with developmental disabilities. Wills and Mason (2014) believe that using self-
management strategies can be a positive experience for both teachers and students. Using self-management strategies increases on-task behavior, decreases disruptive behavior and does not increase the teacher’s workload. The strategy was easy to implement, easy for the student’s to understand and required very little class time. After the research was complete and the student’s stopped self-monitoring, their on-task behavior decreased and was more similar to their behavior prior to the intervention. It was clear the students were not ready to independently self-monitor.

**Hypothesis**

**Self-monitoring will increase on-task behavior for high school students with developmental disabilities.** The data collected determined that this hypothesis statement was accurate. Self-monitoring can work for students with developmental disabilities at the high school level.
CHAPTER FIVE

Action Plan and Plan for Sharing

Plan for Taking Action

I will use this strategy in every academic class that I teach and use it as part of their grade. A large part of grades within my classroom has to do with classroom participation. I will have students document their on-task behavior, determine the accuracy and use the accurate data for a portion of the student’s grades. I found that this did not take a lot of time and was an efficient way to keep track of their level of appropriate participation.

Plan for Sharing

I plan on sharing this data with all of the high school special education teachers and possibly teachers from other schools in the district. The data collected during the short intervention period reflects positive results for the use of self-monitoring within the special education classroom. I will present this research report with my Special Education Professional Learning Community.
References


http://www.projectidealonline.org/v/intellectual-disabilities/


https://www.education.com/reference/article/characteristics-intellectual-disabilities/


http://www.projectidealonline.org/v/intellectual-disabilities/


Retrieved July 9, 2018, from

https://www.interventioncentral.org/self_management_self_monitoring
## APPENDIX A

### Self-monitoring

**Student:** ____________ (students will be identified by a letter to ensure confidentiality)

**Date:** ______________

**Directions:** A timer will go off every ten minutes. After the timer goes off, determine whether or not you were on-task during those ten minutes. If you were on-task for the ten minutes before the timer, mark yes. If you were not on-task for the ten minutes before to the timer, mark no. The timer will start over. You will determine whether or not you were on-task four times.

**Was I on-task?**

<table>
<thead>
<tr>
<th>Timer</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st timer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd timer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd timer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th timer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

Baseline and Staff Data Collection

Student: _____________ (students will be identified by a letter to ensure confidentiality)

Date: ________________

**Directions:** A timer will go off every ten minutes. After the timer goes off, determine whether or not the student was on-task during those ten minutes. If they were on-task for the ten minutes before the timer, mark yes. If they were not on-task for the ten minutes before to the timer, mark no. The timer will start over. You will determine whether or not the student was on-task four times.

**Was the student on-task?**

<table>
<thead>
<tr>
<th>Timer</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st timer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd timer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd timer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th timer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

CLAWS

C – Control your body

L – Listen to the person talking

A - Ask and answer questions

W - Work on your assigned tasks

S - Stay in your seat
Acknowledgments

I would like to thank the people who helped me throughout my post-secondary journey. My husband, Eric, supported me through many late, sleepless nights. My kids were forgiving when I didn’t have the time or energy to spend time with them. Thank you to my co-workers who were always willing to listen when I needed an ear and to my students for allowing me to use them as part of my research and learn from them, every single day.