PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES: A PROJECT BASED WEBSITE

A Project
Presented
to the Faculty of
California State University, Chico

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education

by
© Joan Grohman

Spring 2016
PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES: A PROJECT BASED WEBSITE

A Project

by

Joan Grohman

Spring 2016

APPROVED BY THE INTERIM DEAN OF GRADUATE STUDIES:

________________________________
Sharon Barrios, Ph.D.

APPROVED BY THE GRADUATE ADVISORY COMMITTEE:

Ann Schulte, Ph.D.
Graduate Coordinator

Talya Kemper, Ph.D., Chair

Charles Zartman, Ph.D.

Steven Koch, Ph.D.
PUBLICATION RIGHTS

No portion of this project may be reprinted or reproduced in any manner unacceptable to the usual copyright restrictions without the written consent of the author.
ACKNOWLEDGEMENTS

I would like to begin by expressing my appreciation to my mentor, Dr. Ben Seipel, and my committee members, Dr. Talya Kemper, Dr. Charles Zartman, and Dr. Steven Koch who provided continuous support as I completed my Master of Arts in Education.

To my family, Julia, Linda, Joan, and Richard, who provided unconditional encouragement and are a constant inspiration. With their infinite love I am able to push myself to make a difference. Thank you for never giving up and always believing in me.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication Rights</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iv</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Project</td>
<td>3</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>3</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>4</td>
</tr>
<tr>
<td>II. Literature Review</td>
<td>6</td>
</tr>
<tr>
<td>Inclusion</td>
<td>6</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>7</td>
</tr>
<tr>
<td>Self-monitoring of Productivity</td>
<td>8</td>
</tr>
<tr>
<td>Self-monitoring of Accuracy</td>
<td>9</td>
</tr>
<tr>
<td>Self-monitoring of Attention</td>
<td>10</td>
</tr>
<tr>
<td>III. Organization of Project</td>
<td>12</td>
</tr>
<tr>
<td>Methodology</td>
<td>12</td>
</tr>
<tr>
<td>Materials</td>
<td>12</td>
</tr>
<tr>
<td>Descriptions</td>
<td>13</td>
</tr>
<tr>
<td>IV. Conclusions and Recommendations</td>
<td>15</td>
</tr>
<tr>
<td>Summary</td>
<td>15</td>
</tr>
<tr>
<td>Conclusions</td>
<td>15</td>
</tr>
<tr>
<td>Recommendations</td>
<td>16</td>
</tr>
<tr>
<td>References</td>
<td>18</td>
</tr>
<tr>
<td>Appendix</td>
<td></td>
</tr>
<tr>
<td>A. Promoting Self-Monitoring for Students with Exceptionalities</td>
<td>24</td>
</tr>
</tbody>
</table>
ABSTRACT

PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES: A PROJECT BASED WEBSITE

by

© Joan Grohman 2016

Master of Arts in Education

California State University, Chico

Spring 2016

Educational researchers have effectively used self-monitoring interventions within the context of special education settings, and general, to increase student attention, academic accuracy and productivity, as well as being effective across varying disabilities. Self-monitoring interventions should be better utilized in the general education setting, not only to ease the pressures of teachers but also to place more responsibility and ownership on the student and increase academic performance. Inclusion is mandated by law and pressure is growing to place students with special needs into general education classrooms where they have access to core curriculum.

There has been increasing awareness that students with exceptionalities need to be taught strategies to increase their independence. These students have an educational right to be placed in the least restrictive environment and should be taught specific skills and methods to regulate their academic work and behavior. Self-monitoring research is examined and organized into an educational resource for teachers and their students.
Previous research conducted in this field has been encouraging, but generally limited to special education settings. Therefore, it is recommended that there be a focus on general education settings and the addition of graphing to the primary three strategies. Larger and varied populations as well as lengthening the intervention phases are necessary to determine if self-monitoring can maintain the increase in academic achievement.
CHAPTER 1

INTRODUCTION

Background

Although there is an extensive body of research studying self-monitoring of students with exceptionalities in a special education setting, there is limited research in the general education setting. Federal law mandates that students with exceptionalities must be educated in the least restrictive environment, providing these students with access to the general education curriculum (IDEA, 2004). Students with exceptionalities exhibit diverse cognitive abilities, need multiple and varied instructional needs, and typically perform below their same-age peer group academically (Rock, 2005). Given the diversity and individualization general education teachers are often lacking knowledge of these teaching strategies and struggle to meet such a wide variety of needs (Loiacono & Valenti, 2010). Many general education teachers receive support from special education teachers in modifying curriculum and requirements, and providing accommodations and supports in the general education classroom (Evans & Weiss, 2014).

However, students with exceptionalities can and should be taught skills that can help them be independent when in this setting (Bouck, Savage, Meyer, Taber-Doughty, & Hunley, 2014). Educational researchers have effectively used self-monitoring interventions within the context of special education settings, and general, to increase student attention, academic accuracy and productivity, as well as being effective across varying disabilities. Self-monitoring interventions should be better utilized in the general education setting, not only to ease the
pressures of teachers but also to place more responsibility and ownership on the student and increase academic performance.

Inclusion refers to the placement of students with exceptionalities in the same educational setting as students without special needs, commonly referred to as the least restrictive environment (LRE) (McLeskey, Waldron, & Redd, 2014). Individuals with Disabilities Education Act (2004) defines LRE as children with disabilities being educated with children who are not disabled to the maximum extent appropriate, and are only removed from the regular educational setting when the severity or attributes of the child’s disability is such that schooling in regular classes with the use of aids and services cannot be attained satisfactorily. Students with special needs have an educational right to be placed in the general education setting and should be taught specific skills and methods to regulate their own academic and social behaviors. If students are able to function, learn, and make academic progress in general education classrooms then the use of self-monitoring procedures should be utilized to further advance their performance.

Self-monitoring is defined as an effective intervention to decrease distractions, increase engagement, and enhance academic skills, such as productivity and accuracy (Carr & Punzo, 1993; DiGangi, Maag, & Rutherford, 1991). Self-monitoring is often presented in the form of a worksheet, requiring quick and simple recording. Students can then see their work efforts first hand which serves as intrinsic motivation, rather than extrinsic motivation like verbal praise and tangible rewards. Any steps to help move students with exceptionalities towards independence and relying less on others should be utilized. Self-monitoring strategies can be used not only in the special education setting, but also in the general education setting to ease the pressures felt by those teachers to accommodate students with exceptionalities.
Purpose of the Project

This project seeks to create a website that will promote the use of self-monitoring by students with exceptionalities. The self-monitoring strategies address aspects of students’ academic performance, including productivity, accuracy, and attention. This website will have current information and resources on self-monitoring strategies for teachers to implement in their classrooms. The website will include self-monitoring information, implementation ideas, differentiated tracking worksheets, and progress graphing worksheets. Although this website is intended for special education teachers and the special education population, it can also be utilized in the general education setting. The website will be available to the public but is intended for educational teachers to support and increase student achievement.

The motivation of this research is to identify self-monitoring strategies that are proven to be effective and lead to increased independence. It also aims to eliminate the lack of information and resources available to teachers that want to implement self-monitoring strategies in their classrooms. The questions to be answered are:

1. Does inclusion have a positive effect on students with exceptionalities?
2. Does self-monitoring have an effect when used successfully?
3. Which self-monitoring strategies are successful in special education settings?
4. Can self-monitoring be utilized in general education settings as well?

Limitations of the Study

This project was constructed to help teachers give students with exceptionalities self-monitoring strategies to become more independent. Given that each student who receives special education services is vastly different from the others, what works successfully for one individual may or may not work for another. Each student must be looked at individually in order to
discover what their needs are and what will allow them to thrive. Therefore, the self-monitoring strategies discussed in the research that follows may not serve well for every individual student. Depending on students’ ability level the training of these strategies and self-monitoring worksheets may need to be modified.

**Definition of Terms**

**Students with exceptionalities**

Students identified as having one or more of the following and receive special education services because their educational performance is adversely affected: acquired brain injury, development delay, gifted and talented, hearing loss, medical condition, mental illness/health, neurodevelopmental disorders, intellectual disability, specific learning disorder, physical disability, speech and/or language disorder, and vision loss (IDEA, 2004).

**Inclusion**

The placement of students with special needs in the same educational setting as students without special needs commonly referred to as the least restrictive environment (McLeskey, Waldron, & Redd, 2014).

**Least Restrictive Environment (LRE)**

A setting in which children with disabilities are educated with children who are not disabled to the maximum extent appropriate, and are only removed from the regular educational setting when the severity or attributes of the child’s disability is such that schooling in regular classes with the use of aids and services cannot be attained satisfactorily (IDEA, 2004).
Self-contained classroom

A classroom in which the class size is smaller in order to better meet the needs of students with exceptionailities, and is taught by a special education teacher as well as a trained para-professional (Mattison, 2011).

Self-monitoring

A skill in the self-management paradigm involving strategies to facilitate a student’s ability to manage his or her own academic progress and behavior (Shapiro, 1981).

Self-monitoring of productivity

Students record the number of items, problems, or words completed out of the total number assigned (Carr & Punzo, 1993).

Self-monitoring of accuracy

Students record the number of items, problems, or words correct out of the total number completed (Carr & Punzo, 1993).

Self-monitoring of attention

Students record whether they are on-task at either constant or variable intervals during a work period. The students are cued to record their attentiveness, or lack of, by their teacher, a tone played from some type of audio player (Harris, 1986).
CHAPTER 2

REVIEW OF RELATED LITERATURE

Inclusion

The emphasis on inclusion for students with exceptionalities has grown over the years, as well as the pressure on general education teachers to serve a variety of needs and individualize instruction (Loiacono & Valenti, 2010; McCray & McHatton, 2011). Reauthorizations of IDEA have put increasing stress on schools to be equitable in meeting the needs of each and every student. Research shows that advances have been made towards including most students with special needs in general education classes for a large portion of the school day (McCray & McHatton, 2011; McLeskey, Landers, Williamson, & Hoppey, 2011; McLeskey & Waldron, 2011). The percentage of students with special needs who are taught for 80% of the school day or more in a general education settings has increased from 34% in 1990-1991 to 58% in 2007-2008 (McLeskey et al., 2011). This increase is assuring that IDEA is being followed and students with disabilities are being educated in the general education setting and have access to core curriculum.

Students who spend their school day in an inclusive setting make more progress and achieve more academically than in a specialized setting (Carter & Hughes, 2006; Downing & Peckham-Hardin, 2007). Black (2010) found a strong correlation between the amount of time students with special needs were integrated in the general education setting and achievement rates in math and reading. Peetsma, Vergeer, Roeleveld, and Karsten (2001) compared the academic growth of students with disabilities in the special education setting and the inclusive setting, and determined after two years they made more gains in mathematics in the inclusive
setting than in the special education setting. There is additional evidence showing several schools have achieved high outcomes for a majority of students, which include those with special needs and other academically struggling students (Farrell, Dyson, Polat, Hutcheson, & Gallannaugh, 2007).

Several studies examine common themes across schools that are highly effective in inclusion. The effective practices utilized by these schools lead to improved student achievement for students with special needs (Huberman, Navo, & Parrish, 2012; McLeskey, Waldron, & Redd, 2014). Those practices involve inclusion and access to core curriculum, collaboration and shared decision making, continuous assessment and data-driven decision making, high quality instruction, and targeted professional development. Creating an inclusive school setting can be challenging because it is a multi-layered concept that contains formal policy and pedagogical coaching and development of all staff in school (Evans & Weiss, 2014; O’Connor, 2007). Inclusion is largely a whole school endeavor that can make a transition to such a program difficult. Yet efforts should be made to increase inclusion for the sake of students’ achievement. Research indicates that isolating students is damaging to the development of their academic and social needs and adds to the segregation of those with disabilities in society (Zionts, 1997).

If students could be given the tools necessary to successfully function and perform independently in a general education setting then the occurrence of inclusion would likely rise. Self-monitoring is one tool that students can be taught to use in any classroom setting.

Self-monitoring

Self-monitoring of academic productivity, accuracy, and attention or engagement can increase performance and achievement of students with special needs (Carr & Punzo, 1993; DiGangi, Maag, & Rutherford, 1991; Rock, 2005). Self-monitoring is most commonly studied
during independent work periods, but varies in subject areas. Students are generally taught or trained to use the self-monitoring procedures being utilized and most studies calculate interrater reliability using the number of agreements recorded by students and teachers.

**Self-monitoring of productivity**

Students who were involved in self-monitoring of productivity in the subsequent studies recorded the number of items, problems, or words completed out of the total number assigned. The participants or researchers then calculated percentages for graphing purposes. Self-monitoring is documented on tracking worksheets at the end of each work session.

For a group of students with learning disabilities in a self-contained, special education classroom, self-monitoring of productivity increased their response rates in spelling and math work periods (DiGangi et al., 1991; Harris, 1986). In the study conducted by Harris (1986), interviews were completed after the study, in which the participants stated they would recommend self-monitoring of productivity over accuracy, and thought it would continue to improve their spelling practice. Students with behavioral disorders and/or diagnosed as emotionally disturbed made gains in productivity when using self-monitoring during reading, math, and/or spelling periods (Carr et al., 1993; Levendoski & Cartledge, 2000; Rafferty & Raimondi, 2009). For students who have a diagnosis of learning disabled and ADD/ADHD, self-monitoring of productivity increased their performance in reading comprehension, math, and written expression (Shimabukuro, Prater, Jenkins, & Edelen-Smith, 1999). Researchers also found that productivity increased further when self-graphing was added to self-monitoring (Carr et al., 1993; DiGangi et al., 1991; Shimabukuro et al., 1999). The visual features of graphing can explain this, and seeing gains in their academic performance is intrinsically reinforcing.
Rock (2005) conducted a study that examined students in a general education setting who self-monitored academic productivity during math and reading work periods using a strategic procedure. The participants varied greatly in their diagnoses, or lack thereof, including learning disabled, ADHD, Asperger syndrome, Floating Harbor syndrome, speech and language impairments, typically developing, and gifted and talented. Some students included in the study had co-morbid diagnoses, or having a diagnosis of two disabilities. The researcher found that the specific self-monitoring procedure increased productivity for all students. In all the above studies, the students produced valid and accurate self-recordings based on daily teacher and researcher review.

**Self-monitoring of accuracy**

Students involved in self-monitoring of accuracy recorded the number of items, problems, or words correct out of the total number completed. As with productivity, the students or researchers then calculated percentages for graphing purposes. Self-monitoring was documented on tracking worksheets at the end of each work session, and self-recordings were validated daily by the teacher or researcher.

Self-monitoring by students with learning disabilities in a special education setting increased their accuracy in spelling and math work periods (DiGangi et al., 1991; Harris, 1986). An increase in accuracy was found in students with behavioral disorders and/or diagnosed as emotionally disturbed when using self-monitoring during math and spelling periods (Carr et al., 1993; Levendoski et al., 2000). Students with a learning disability and ADD/ADHD increased their performance in reading comprehension, math, and written expression when self-monitoring accuracy (Gureasko-Moore, DuPaul, & White, 2007; Shimabukuro et al., 1999). Researchers
also found that accuracy increased further when students graphed and corrected their work, or self-evaluated (DiGangi et al., 1991).

Studies have more recently examined self-monitoring of accuracy and its effects on academic performance in inclusive settings. Students with ADHD experienced an increase in accuracy on spelling tasks when using a self-monitoring procedure (Harris, Friedlander, Saddler, Frizzelle, & Graham, 2005). Although the study conducted by Rock (2005) failed to support an increase in accuracy while self-monitoring during math work sessions, scores were maintained throughout. This finding is explained by the continuous introduction of new concepts. A more recent study provided strong evidence for the effectiveness of self-monitoring in improving accuracy of homework (Falkenberg & Barbetta, 2013; Gureasko-Moore et al., 2007).

**Self-monitoring of attention**

Students involved in self-monitoring of attention recorded whether they were on-task, indicating yes or no. This occurred at either constant or variable intervals during a work period (Harris, 1986). The students were cued to record their attentiveness, or lack of, by their teacher, a tone played from some type of audio player. Self-monitoring has been implemented successfully to increase on-task behavior for a range of behaviors (Amato-Zech, Hoff, & Doepke, 2006; DiGangi et al., 1991; Holifield, Goodman, Hazelkorn, & Heflin, 2010; Legge, DeBar, & Alber-Morgan, 2010).

In the special education setting, a group of students with learning disabilities self-monitored their attentional behavior during spelling and math work periods (Harris, 1986). Students diagnosed as having emotional disturbances and/or behavioral disorders increased their on-task behaviors when self-monitoring attention during reading, math, and spelling periods (Carr et al., 1993; Levendoski et al., 2000; Rafferty & Raimondi, 2009). Students with a learning
disability and ADD/ADHD showed significant gains in on-task behavior when self-monitoring attention in reading comprehension and math, but not in written expression (Shimabukuro et al., 1999). Students with autism successfully monitored their attention, which lead to immediate improvements in attending to the task at hand (Holifield et al., 2010).

In a general education setting, students with ADHD saw an increase in on-task spelling behaviors when using self-monitoring of attention (Harris et al., 2005). The researchers also found an increase in stability of on-task manners throughout the intervention phases. In the study conducted by Rock (2005), students of varying exceptional needs had increased engaged behaviors and remained stable, while negative behaviors decreased. A self-monitoring intervention using an application on a handheld tablet showed positive, stable improvements for on-task behavior for students with ADHD and specific learning disabilities (Wills & Mason, 2014).
CHAPTER 3

ORGANIZATION OF PROJECT

Methodology

The purpose of this project was to develop a website that educates teachers about self-monitoring strategies and provides them with a resource for implementation in order to promote its use.

The researcher reviewed current literature on self-monitoring and identified the main ideas and most effective practices. Essential information was extracted and organized into coherent sections. Ideas for the tracking sheets were brainstormed and drafted to start, making adjustments along the way. The researcher was provided with feedback from fellow teachers. The Resource tracking sheets were designed first, and then modifications were made to create the additional sheets for SDC and SH classrooms.

The researcher inspected a variety of free website building platforms. Once a website platform was chosen, the organized self-monitoring information was entered into formulated pages. The website was organized into sections, or pages, and material is presented in a sequential order, which lends to being understood easily. This was achieved by providing background information first, then suggestions for implementation, and finally printable tracking sheets.

Materials

The website was built using a free platform on Weebly.com. The information presented on the website was taken from the review of literature on self-monitoring. All tracking sheets were designed and created by the researcher using Microsoft Word and Excel programs. Pictures
displayed on the website were available for use through the platform. Examples of math and
ELA worksheets were taken from the search engine Google.

Descriptions

Home page

The home page gives a basic definition of self-monitoring and simple overview of what
the intervention entails. This page also states what audience the website is intended for and has a
button to take viewers to the next page for more detailed information.

About SM page

The “About SM” page provides general information on how self-monitoring is presented
for student utilization, as well as how students self-monitor using three strategies. Productivity,
accuracy, and attention are defined and described briefly.

Productivity and accuracy page

This page goes into detail about the monitoring of productivity and accuracy, discussing
when they are used and what academic work they are effective with. How students self-monitor
their productivity and accuracy is explained and examples are provided, including sample
worksheets.

Attention page

This page goes into detail about the monitoring of attention and discusses when it is
appropriate to use this strategy. The simplicity of monitoring attention is explained and how
students are cued to record.

More/additional information page

The additional information page starts by introducing an added piece to the intervention
that is optional. An explanation of graphing is presented, how it can be motivating, and the visual
benefits it has for students. Validity is discussed and how teachers can check their students’ self-monitoring for accuracy. Finally, the flexibility when implementing self-monitoring strategies is examined.

**Implementation page**

The implementation page provides teachers with suggested steps for implementing self-monitoring in their classroom. Some of the main ideas are introducing the concept, discussing and modeling the recording process, establishing one strategy to begin with, checking recording accuracy for validity, and graphing.

**Tracking sheets page**

This page gives a brief description of the tracking sheets available and has download links underneath. The tracking sheets are organized by the type of special education classroom they are suggested to be used in, which include Resource, SDC (Special Day Class, and SH (Severely Handicapped). The printable documents include productivity, accuracy, and attention tracking, as well as a graphing sheet.

**Contact page**

The contact page includes the author’s educational background and motivation behind the creation of the website. The page also provides readers with a contact form in order to send the author questions or comments.
CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

Summary

Overall, self-monitoring procedures have proven to be effective at increasing students’ academic achievement in the areas of productivity, accuracy, and attention. Performance was shown to further improve with the addition of self-graphing. When self-monitoring of productivity, accuracy, and attention occur together, the increase of on-task behaviors aids the increase of academic performance. This is reasonable given those two actions are compatible and go hand in hand. Self-monitoring was also shown to be operative across varying diagnoses and exceptionalities, and leads to increased independence. Although variations in procedures may be necessary, self-monitoring is and can be utilized for all students in both special and general education settings. These findings were used to develop a self-monitoring resource for teachers and their students. The website has information and tracking sheets that can be used to promote and help implement such strategies in a classroom. Suggestions for implementation are offered in hopes that teachers have guidelines to follow if they choose to employ self-monitoring strategies with their students.

Conclusions

The review of the literature demonstrated the effectiveness of self-monitoring by students with exceptionalities. Self-monitoring increased academic productivity and accuracy as well as attention. From the literature it can be concluded that self-monitoring strategies are effective for students to increase their independence in any educational setting.
The website covers self-monitoring by providing teachers with the information necessary to implement those strategies in the classroom. It aims to eliminate the current lack of self-monitoring resources available to teachers. By providing teachers with such a resource more students can be taught these strategies to increase their academic productivity, accuracy, and attention. By increasing their academic achievement these students also increase their independence. Students with exceptionalities can function more effectively in the classroom and community if they are independent from ongoing aid by teachers and caretakers. If independence is supported at school then generalization is likely to occur outside of the educational setting and throughout an individual’s life.

Recommendations

The largest gap in existing research is the study of self-monitoring in general education settings, therefore creating the first area for future research to address. Secondly, considering the increase in productivity and accuracy when graphing was added to self-monitoring, researchers are recommended to include this step in future studies. The visual cue lends itself to different learning styles and increases intrinsic motivation. Further research should also include fading of the self-monitoring procedures being used to increase or maintain high levels of academic achievement. The end goal is for students with exceptionalities to not be required to depend on the use of self-monitoring strategies and perform on their own.

Another recommendation is to extend or lengthen the intervention phases given some of the aforementioned studies used relatively short ones. The time of year at which one study was conducted occurred at the end of the school year, when there is often an increase in absences, field trips, and other non-academic activities. Therefore, such parts of the school year should be avoided if possible.
Researchers should also examine the use of self-monitoring by other populations, like typically developing and gifted and talented students. Positive findings regarding a few students who fall into those categories provide for such a need. Finally, researching effective and specific strategies in which to promote generalization of these results is essential. This is too often a problem in the field of special education because of the diversity and individualization of its student population.
REFERENCES
References


Black, K. (2010, January 1). Closing the achievement gap: Impact of inclusion upon achievement rates of students with special needs. *ProQuest LLC.*


APPENDIX A
http://promotingstudentselfmonitoring.weebly.com/

Home Page

PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES

Self-Monitoring

Self-monitoring is an effective intervention to...

- decrease distractions
- increase attention
- enhance academic skills such as productivity and accuracy

Self-monitoring is the use of simple tracking sheets to continually record the productivity and accuracy of academic work, as well as attention, or on-task behaviors, during work times.

Learn More

This website is intended for, but not limited to, special education teachers who want to educate themselves on self-monitoring and implement such strategies in their classroom. General education teachers and parents are encouraged to use these strategies as well.
Self-monitoring is an intervention that is most often presented in the form of a worksheet, or tracking sheet, requiring quick and simple recording. Students continually record their productivity, accuracy, and/or attention during groups or work periods. By doing this, students get to see their academic progress first hand, as well as what they are excelling in, what needs work, and if they are engaged and staying on-task.

**Productivity**
- Students record their productivity at the end of the work period, or activity.
- The number of items or problems completed out of the total number assigned is recorded.
- Percentages for completed items can be calculated for graphing purposes.

**Accuracy**
- Students record their accuracy at the end of the work period or activity.
- The number of items or problems that are correct out of the total number completed is recorded.
- Percentages for correct items can be calculated for graphing purposes.

**Attention**
- Students record their attention at either constant or variable intervals during work periods.
- Attention is recorded with a simple yes or no.
- Students can be cued to record their attentiveness by a tone played from some type of audio player.
Self-Monitoring of Productivity and Accuracy

Productivity
Students record their productivity by recording the number of items completed out of the total number assigned. For example, if a math worksheet has 20 items or problems, and the student completes 15 of them, then that student would record their productivity as 15/20 (see worksheet below). For students that have a lower ability level, it might be simply recording the number of items completed.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accuracy
For accuracy, students record the number of items correct out of the total number completed. For example, if an ELA vocabulary worksheet has 8 items or questions, and the student gets 7 correct, then that student would record their accuracy as 7/8 (see worksheet below). If that student completed only 6 of those 8 questions, and correctly answered 5 of them correct, then they would record their accuracy as 5/6. Again, for students that have a lower ability level, it might be appropriate for them to simply record the number of items they answered correctly.

| Name: ___________________________ | Date: ____________ |

**Vocabulary Worksheet (Fill in Part 1)**

Directions: Read each sentence below. Fill in the blank with a vocabulary word from the word box.

- asleep
- afternoon
- telephone
- scare
- band
- exciting
- practice
- many

1. In the ________________, we will go home from school.
2. I fell ________________ at night.
3. The ________________ played a lot of good songs.
4. The game was very ________________ at the end.
5. I used my ________________ to call my parents.
6. My older brother wanted to ________________ me.
7. I watched my older sister ________________ her lifelong sweetheart.
8. We had basketball ________________ after school.
Self-Monitoring of Attention

Self-monitoring of attention occurs while students complete academic work or during any period of time in which attentiveness is important. Students record if they are on-task when cued verbally by the teacher, an alarm, or a tone played from an audio player. How the students are cued is up to the teacher. Students may be cued in whichever way is the easiest and the most convenient for the teacher.

Self-monitoring occurs during work times so it is critical that the recording does not interfere with the students' academic work. The students, therefore, simply check yes or no on a tracking sheet to indicate if they were on- or off-task each time they are cued. This can look like anything from tally marks to coloring in a happy or sad face.

Totals are calculated at the end of the work period, activity, or school day, depending on the teacher's preference and tracking sheet being used.
PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES

Additional Information

Graphing
To provide students with a more visual representation of their self-monitoring, percentages can be calculated from the data on the tracking sheets. Those percentages can be graphed each week so students can see how they performed academically over a longer period of time. The visual features of graphing can be intrinsically reinforcing and can potentially motivate students to strive for more each week. For students with lower ability levels, raw numbers can be graphed rather than calculating percentages, but the number assigned should be the same for accurate graphing.

Validity
Self-monitoring can easily be validated by the teacher or a paraprofessional by periodically comparing students’ academic work to their tracking sheets for productivity and accuracy. Attention can be recorded by the teacher the same way students were instructed to do so, and then be compared to their tracking sheets as well.

Flexibility
There is no one way to implement the self-monitoring strategies discussed on this site. Each teacher must identify what is needed in their classroom and for their students. If one strategy is more effective than the others, that strategy should continue to be utilized and the other strategies should not. Students may also show differences in their needs, with one showing improvements while tracking attention and another tracking accuracy. This flexibility helps teachers make decisions when it comes to implementing self-monitoring in their classroom.
References include research articles on self-monitoring and inclusion.


Blair, K. (2010). January 1. Closing the achievement gap: Impact of inclusion upon achievement rates of students with special needs. ProQuest LLC.


References Page continued


PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES

How To Implement Self-Monitoring in Your Classroom

Some suggestions for implementation...

1. Introduce the concept of self-monitoring to your students, including vocabulary like productivity, accuracy, and attention.

2. Discuss how it will be implemented, or used, during group and work times (which subjects/activities it will be used with, where tracking sheets will be kept, etc.). It is useful to have examples of the tracking sheets you want to use with your students and model the recording process. Allow students to ask questions and practice recording with the tracking sheets.

3. When implementation occurs, start with one strategy and the corresponding tracking sheet to ensure students understand the process and are efficient in recording. Note that the productivity and accuracy recording is similar, while the recording of attention is a bit different. The first two might be implemented more quickly because of their similarities.

4. For the first couple of weeks it is important to check students’ self-monitoring closely to make sure that their recordings are valid. Either the teacher or a paraprofessional can check students’ tracking sheets against their actual work to make sure productivity and accuracy are correct. For attention, either teacher or para may want to record a student’s attentiveness and compare that to the student’s tracking sheet.

5. Self-monitoring can be used alongside classroom management procedures and positive reinforcement. If you decide to implement these strategies then students need to be held accountable; otherwise it may not be taken seriously and will not be effective.

6. Graphing and/or setting short- and long-term goals may be added to the use of self-monitoring, and may help motivate students to strive for greater academic gains. Graphing is especially helpful for students who are visual learners.

7. Throughout the school year, it may be necessary to remind your students of the importance of self-monitoring and why they use these strategies. Touching back on #4, validity checks should be done through the school year to help keep students accountable.
PROMOTING SELF-MONITORING FOR STUDENTS WITH EXCEPTIONALITIES

Tracking Sheets Page

Printable Tracking Sheets

Located below are a variety of printable tracking sheets. These can be used by students to self-monitor their productivity, accuracy, and attention as well as graph their progress. There are tracking sheets available for varying ability levels so that this tool can be used by all students, young or old, high-incidence or low-incidence.

Productivity & Accuracy
- RSP SM Product/Accuracy Tracking Download File

Productivity
- SDC SM Productivity Tracking Download File

Productivity
- SM SM Productivity Tracking Download File

Attention
- RSP SM Attention Tracking Download File

Accuracy
- SDC SM Accuracy Tracking Download File

Accuracy
- SM SM Accuracy Tracking Download File

Graphing
- RSP SM Graphing Sheet Download File

Attention
- SDC SM Attention Tracking Download File

Attention
- SM SM Attention Tracking Download File

Note: 2nd and 3rd columns of tracking sheets have the graphing component designed into them.

All printable self-monitoring tracking sheets were designed and created by Joanie Gromman.
### Resource Productivity and Accuracy Tracking Sheet

<table>
<thead>
<tr>
<th>Activity</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Productivity** - # completed out of # assigned (/)

**Accuracy** - # correct out of # completed (/)

http://promotingstudentselfmonitoring.weebly.com/
Resource Attention Tracking Sheet

SM Attention Tracking Sheet

<table>
<thead>
<tr>
<th>Activity</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Recording attention** - Add a tally mark under **Y** if you are ON-task
Add a tally mark under **N** if you are OFF-task

http://promotingstudentselfmonitoring.weebly.com/
Resource Graphing Sheet

<table>
<thead>
<tr>
<th>Percentage</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date

http://promotingstudentselfmonitoring.weebly.com/
SM Productivity Tracking Sheet

Name __________________________

Group/Activity: ________________________________________________________________

Directions: Color in the number of items you did today.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://promotingstudentselfmonitoring.weebly.com/
SM Accuracy Tracking Sheet

Name ____________________________

Group/Activity: ________________________________________________________________

Directions: Color in the number of items you did correctly today.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## SDC Attention Tracking Sheet

<table>
<thead>
<tr>
<th>Activity</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Am I on-task?**

Color/shade in a box under **Y** if you are **ON**-task

Color/shade in a box under **N** if you are **OFF**-task

http://promotingstudentselfmonitoring.weebly.com/
SM Productivity Tracking Sheet

Name ________________________________

Group/Activity: ________________________________________________________________

Color in the stars for the number of items you did today!

Monday  Tuesday  Wednesday  Thursday  Friday
SM Accuracy Tracking Sheet  

Name _______________________________

Group/Activity: ________________________________

Color in the stars for the number of items you did correctly today!

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://promotingstudentselfmonitoring.weebly.com/
SH Attention Tracking Sheet

SM Attention Tracking Sheet

Name ____________________________

Group ____________________________

Am I on-task?

promotingstudentselfmonitoring.weebly.com

SM Attention Tracking Sheet

Name ____________________________

Group ____________________________

Am I on-task?

promotingstudentselfmonitoring.weebly.com
A little bit about myself...

My name is Joanie Grohman and I have an educational background in special education, psychology, and early childhood development. I have always been passionate about the special education population and strive to find ways in which to promote independence in these students. I found, through my research, that self-monitoring is effective but underutilized. I set out to create a self-monitoring resource for teachers that is easy to understand and implement.

Please feel free to contact me with any questions or comments. Thank you for your interest in my website!