Motivate Me! 20 Tips for Using a MotivAider® to Improve your Classroom

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An Article Published in

TEACHING Exceptional Children Plus

Volume 2, Issue 2, November 2005

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Abstract

The MotivAider is a small electronic device that can be set to vibrate at different times to remind people to manage their behavior. This article includes several examples of how the MotivAider can be effectively used in the classroom to manage both student and teacher behaviors.

Keywords

self management, self motivation, motivation techniques

Acknowledgments:

We express our sincere appreciation to the Franklin County Board of Mental Retardation and Developmental Disabilities, Columbus, Ohio and to Columbus Public Schools, especially Mr. Chris Brady, for allowing us to work with their staff and students and for their support of the Buckeye Behavior Analysis Service. In addition, we thank Dr. Nancy Neef for her assistance with this article. The data collected for the projects described in this article were also supported in part by a Leadership Training Grant (#H325D980018) to The Ohio State University from the Office of Special Education and Rehabilitation Services, U.S. Department of Education.

SUGGESTED CITATION:

Flaute, A.J., Peterson, S.M., Van Norman, R.K., Riffle, T., & Eakins, A. (2005). Motivate me! 20 tips for using a MotivAider® for improving your classroom. *TEACHING Exceptional Children Plus*, 2(2) Article 3. Retrieved [date] from http://escholarship.bc.edu/education/tecplus/vol2/iss2/art3

Ms. Foster, a first-year teacher in a classroom for students with severe disabilities, was nervous enough when the school year began, but she's reaching panic mode now. She has learned that a new student will be joining her classroom, Brian, a 14-year-old with a well-earned reputation for engaging in aggression (hitting, kicking, biting, scratching, throwing objects), destructive behavior, cursing, screaming, self-abuse, and non-compliance. Because of these behaviors, Brian comes to her classroom with a behavior management program that forever relies on aversive consequences such as time-out or a two-person seated basket hold for inappropriate behavior. In attempt to curb his problem behavior, the behavior plan also recommended that Brian work in his own study carrel because he is so disruptive to the rest of the class. However, results of a recent functional behavior assessment indicated that Brian's behaviors appeared to be maintained by attention. Ms. Foster believed forcing Brian to work in a study carrel deprived him of the attention he desired. So she removed the study carrel and provided Brian with more frequent positive attention for engaging in appropriate behavior. However, this still did not curb the behaviors; Brian often did not seem to realize he was displaying problem behavior until it was pointed out to him. Ms. Foster needed something else to help manage his behavior, something that would help Brian to become more aware of his problem behavior. That's when Ms. Foster discovered the MotivAider®, a nifty little device for reminding people to manage their behavior.

The MotivAider® was designed approximately 15 years ago by clinical psychologist Steve Levinson to help his clients manage their own behavior more effectively. The MotivAider® is a small battery-operated device about the size of a pager. It weighs less than three ounces and can be set to vibrate at different intervals (see Figure 1 for a photo).

Figure 1: The MotivAider

Photograph used with permission from www.habitchange.com.

The vibration can be set to last from 1 to 5 seconds as a steady vibration or several short, quick vibrations. It can be set to vibrate as frequently as every few seconds or as infrequently as once in a 24 hour period. The MotivAider® displays the interval countdown on its LCD screen and after it vibrates, starts the countdown cycle over until the device is turned off. If the visual countdown is problematic because the individual using the device keeps looking at it to see how much time is left, it can be changed to show the time of day or a small graphic display. Other features of the MotivAider® include varied magnitudes of the vibration, variable (or average) interval vibrations, fixed (or regular) interval vibrations, and intervals of either seconds, minutes, or hours. Please see Figure 2 for more information about how to purchase a MotivAider®.

Figure 2: How to obtain a MotivAider ®

A MotivAider costs approximately $60 and can be purchased from www.habitchange.com, by calling 1-800-356-1506 or through email at info@habitchange.com

Although there are many ways to use the MotivAider®, its basic purpose is simple: the vibrations remind people of whatever message that they personally associate with the vibration. The MotivAider® can help keep students focused on a task, reduce "nagging" from a teacher, and eliminate the need for constant reminders to the student to stay engaged. Some examples of how we have used the MotivAider® are listed in Table 1.

Table 1: 20 Ways to use the MotivAider®

Problem	**How the MotivAider® Can Help**
1. A group of students are having problems staying on-task during reading class or other group lessons.	Set the MotivAider® on a desk. When it randomly vibrates against the desk (it will be loud enough for everyone to hear), all students in reading group who are on-task will receive some sort of established reinforcement, such as a point or a piece of candy.
2. A student does not complete many problems on a worksheet or read enough pages or words in a book.	When the MotivAider® signals at regular intervals, the student counts and self-records the number of problems completed or words read. The student is encouraged to exceed this number by the next interval.
3. Students are sitting too long in an environment where they need to move often, such as during center time activities.	The MotivAider's® vibrations provide a silent reminder to the teacher to change groups or engage students in another activity.
4. One student in the class needs extra reinforcement and attention.	The MotivAider® reminds the teacher to deliver praise or to check on the student's progress at regular intervals, and not when the student is exhibiting undesirable behaviors that demand a teacher's attention.
5. A student is easily frustrated by difficult tasks.	When the MotivAider® signals, the student can take a brief break (which has a set amount of time) from the task. Other schedules and procedures should also be in place so that the student can also earn the break by productive work.
6. A student needs to calm down after becoming upset.	The student is given a predetermined amount of time to calm down without any other person or intervention. Nobody else in the class has to know what that time period is, and it can be a way for the teacher to enforce control over the classroom without being overbearing to students.
7. A student frequently runs out of time during tests.	A student sets the MotivAider® for 10 minutes less than the time allotted for the test. The MotivAider® signals to the student that there are only 10 minutes left. The vibrations can also send regularly spaced reminders throughout the test to keep focused, and give some indication of the time remaining.
8. A student forgets to use a newly learned skill.	When the MotivAider® signals, a message can be associated with the signal to cue the new habit or to practice a new skill, such as remembering to wipe a nose or double-check work.
9. A student forgets when to take medication.	The MotivAider's® signal prompts the student to take medication at a particular time or regular interval by setting it in the morning to the exact number of hours and minutes required.

10. A student is not toilet trained or is on a toileting schedule.	The student can wear the MotivAider® to be reminded to use the restroom, or a staff member can wear it to have a less disruptive reminder to help a student to the restroom. Another way the MotivAider® can be used is to give a student automatic permission to leave class for the restroom without asking when it goes off.
11. A student is easily distracted when writing.	When a person is writing, he or she can set the MotivAider® to vibrate, reminding them to get back to work, focus, and relax.
12. A student bites his or her nails or exhibits other bad habits.	When the MotivAider® signals, the student stops the bad habit if he/she is doing it and records whether or not he/she engaged in the bad habit during the interval.
13. A student needs to self-monitor some behavior.	The MotivAider® provides reminders to record behaviors at regular or variable intervals.
14. A teacher needs to collect data with momentary time sampling or interval duration, but no clock is available and/or a beeper sound is not desirable.	The MotivAider's® vibrations cue the teacher when to observe students and record data.
15. A teacher frequently goes over the time allotted for a lesson.	The MotivAider® can be set to signal the teacher when a specific amount of time remains in the lesson, or at regular intervals to provide proper pacing.
16. A teacher is stressed out.	The MotivAider® can signal the teacher to take deep breaths or to practice brief stress relieving techniques.
17. Staff meetings run too long.	Although the MotivAider® will not stop a person from talking or make the topics more interesting, it can signal meeting coordinators as to how much time has elapsed so that agenda items receive the appropriate amount of time allotment.
18. The timer for a classroom board game has been lost and students need to be reminded of when their turn is over and the game period has ended.	The MotivAider® can be used in many different classroom games to monitor time as determined by the game or indicate the amount of time allotted to play games.
19. A timer is needed for classroom activities.	Place the MotivAider® on a desk or table, and set it to desired time. Vibrations on desk are as loud (or louder!) as a typical beeper timer.
20. A wheelchair-bound student needs to move around on a regular basis.	The MotivAider® can be set at a regular interval (such as every 15 minutes) to remind the student to exercise arms and adjust him or herself in their chair.

More detailed examples of how we have successfully used the MotivAider® to help teachers and children manage their behavior are described in the sidebars in this article. The MotivAider® is not the only tool that can help manage behavior. Table 2 lists some other tools that may be used in place of the MotivAider® in some cases, but most require someone to reset them at every interval.

Table 2: Other timing devices that can also help to manage behavior

Time Tracker Visual Timer & Clock by Learning Resources This is a timer with a red, yellow, and green light on it. It will show visual cues with the lights and can be set with or without a variety of sounds. It is useful to help students with disabilities transition from one class to another.
Egg timer or digital timer This is a "regular" timer that can be used for classroom activities. It is also useful if a student needs to go to the office or restroom in a timely manner. If there are two timers, they are both set at the same time and can be clipped to a belt like a pager. The student is to come back to class before the timer goes off.
Vibrating timers
Talking alarm clocks
Stop watches

Case Study A: *Am I sitting? And am I working?*

Jamal was a 3rd grade student in a general education classroom who was referred for behavioral support services by his classroom teacher, Mr. Seduta, for disruptive behaviors (crying, talk outs, out of seat, and playing with objects). Jamal was often off-task during independent work periods, and his schoolwork was inaccurate and incomplete. Mr. Seduta reported that he felt that Jamal was capable of doing better independent work; however, Jamal seemed to expect that answers should be given to his questions without having to put forth any effort himself first.

The intervention designed for Jamal included a self-monitoring intervention using the MotivAider®. The goals of the intervention were to decrease his inappropriate behavior, increase his on-task behavior, and improve his work performance during an independent work period. Two different self-monitoring conditions were implemented based upon a study conducted by Maag, Reid, and DiGangi (1993). In all conditions, Jamal wore the MotivAider® on his pants pocket. The MotivAider® was set to vibrate at variable intervals averaging 60 seconds and Jamal recorded some aspect of his behavior whenever the MotivAider® vibrated.

- *Condition #1: On-task/In-seat.* Jamal self-recorded his behavior by asking the following questions: "Am I sitting? And am I working?" If he answered both questions "Yes," then he marked a checkmark on the self-monitoring sheet.
- *Condition #2: Productivity.* Jamal wrote the number of the last problem he had completed when the MotivAider® vibrated on the self-monitoring sheet.

Results were consistent with Maag et al. (1993), in that both self-monitoring of on-task and work productivity resulted in improvements in on-task behavior and decreases in inappropriate behavior. However, self-monitoring of work productivity also resulted in gains in both problems attempted and problems correct. In addition, Jamal indicated that he preferred the productivity monitoring activity over the in-seat/on-task condition.

Suggestions for setting the MotivAider® intervals

The following are some common questions—and answers—that teachers have when using a MotivAider® in a self-management intervention:

How often should I set the MotivAider® to vibrate?

It is best to determine the interval length by considering the behavior you would like to change, how often that behavior currently occurs, and how often you would like the behavior to occur. If the behavior occurs frequently and you want to decrease its occurrence, it is often helpful to count how many times the behavior occurs naturally and then divide the number of minutes you were watching the individual by the number of occurrences. This will allow you to obtain what is referred to as the "mean interresponse time." For example, if you wanted to decrease Joey's thumb sucking, you could first observe Joey for several timed observation sessions and count how many times he sucked his thumb. Assume you obtained the information in the chart at the bottom of this page. In this case, the mean interresponse time is 2.3 minutes, which means that Joey sucks his thumb about once every 2 minutes and 18 seconds. You want to set the MotivAider® to vibrate *more frequently* so the MotivAider® can remind him not to suck his thumb *before* the behavior occurs. So you might set the MotivAider® to vibrate every 2 minutes.

What if the behavior I want to change is not a quick, easy-to-count behavior?

When a behavior you want to change has a longer duration, for example on- or off-task behavior, you should still determine interval length based on the individual's current level of performance. However, using mean interresponse time as your performance measure is difficult. Instead of using mean interresponse time, keep track of how long the target behavior lasts before you start your intervention. For example, if you want to improve Kaitlyn's on-task behavior, you could observe her for a period of time and record the duration of on- and off-task behaviors. For example, you could use a recording sheet like the one on the following page.

Date	Instances of thumb sucking	Duration of observation
April 26 April 26 April 27 April 27	15 10 5 17	30 minutes 40 minutes 5 minutes 35 minutes
TOTAL	47	110 minutes
Mean interresponse time = 110 minutes/47 instances = 2.3 minutes		

On/Off Task	Begin Time	End Time	Total Time
On	12:15	12:17	2 minutes
Off	12:17	12:32	15 minutes
On	12:32	12:38	6 minutes
Off	12:38	12:45	7 minutes
On	12:45	12:53	8 minutes
Off	12:53	1:04	11 minutes

Notice that Kaitlyn stays on task for about 2 to 8 minutes (average = 5.3 minutes) at a time. In this case, you might set the MotivAider® for an interval of somewhere around 2 to 5 minutes. You might even consider making the intervals somewhat random, varying from 2 to 8 minutes (averaging about every 5 minutes) so that Kaitlyn cannot predict when she will be checked for on-task behavior.

What if the target behavior is a quick, easy-to-count behavior, but it is a behavior I want to increase, not decrease?

This is the easiest situation. For example, Mrs. Luckey wants to increase the number of times she praises students during reading class. She can simply determine how many times she wants to praise the students over the 45-minute period and set the MotivAider® accordingly. For example, if she wants to deliver praise at least once per minute (or 45 times during the period), she can set the MotivAider® to vibrate every minute. Mrs. Luckey will not necessarily praise at each vibration automatically. She will use the vibration to remind her to catch the next student being good and then praise him or her.

When should I change the interval, and how should I determine what that change should be?

Over time, you may want to increase the time between intervals so that eventually the individual will no longer need the MotivAider's® reminder to maintain his or her behavior. A good rule of thumb is to increase the interval gradually after success has been achieved. If you increase the interval too much, you may no longer achieve the desired results. Think small—think success. If you do make a mistake and increase the interval too much, just return to the last previously successful interval to reestablish success. Then increase the interval by a smaller amount the next time around.

Back to Brian

Let's look at the procedures used in Brian's intervention to illustrate how the MotivAider® can be used to improve behavior. In Brian's case, Ms. Foster determined the appropriate interval for Brian, which initially was 2 minutes, because Brian had difficulty maintaining appropriate behavior for any longer than the 2 minutes. Brian began each day by putting the MotivAider® on his belt and reviewing the class rules in a group meeting with his classmates. Then he selected

a reward to work for that day, which was often one or two gummy bears, or a few potato chips. Brian set his MotivAider® to the designated time interval and activated it. His teacher also wore a MotivAider® that was synchronized with Brian's. When the MotivAider® vibrated, Brian looked at his rule checklist and read through the class rules. After each rule, he circled either a smiley face if he had followed that rule or a frowning face if he had not. His teacher simultaneously filled out a copy of Brian's checklist. Because the functional behavior assessment had indicated that many of Brian's problem behaviors functioned as attention-seeking behaviors, his teacher ignored his problem behaviors during the interval, but she provided him with enthusiastic praise when he engaged in appropriate behavior. During the initial phase of the program, Brian received one token for following all of his rules and another token if his list matched the teacher's list exactly, to encourage accurate self-monitoring. When Brian earned 10 tokens, he could exchange them later for rewards from the class cash-in menu (e.g. soda pop, bottled water, gum) or he could save them to purchase a lunch outing with his teacher. To provide more immediate access to rewards for good behavior, Brian was also given a small reward (the reward he had selected just prior to the session) after each intervention session.

The interval gradually increased after the initial training. Eventually, Brian worked up to monitoring himself only every 10 minutes. After one full week with no problem behavior at 10-minute intervals, the intervals were further increased to 15 minutes, then 20 minutes, and then 30 minutes. As the time intervals grew longer, the tokens were faded by delivering them for only following all the class rules and not for matching the teacher's ratings of his behavior. However, tangible reinforcers were always paired with frequent social praise and high fives.

Case Study B: *Stop Biting Your Nails!*

A third grader, David, was a nail biter. A self-monitoring intervention using the MotivAider® was implemented with David as one component of a habit reversal intervention (Woods, Miltenberger, & Lumley, 1996). David wore the MotivAider® on his waistband; if he was not biting his nails when it vibrated, he clicked a golf counter. At the end of the session, he received a reward for accurate self-monitoring. Initially, the MotivAider® was set at a variable interval of 40 seconds (VI40). When David was successful at this interval, the average interval length was increased in 20-second increments until a 100-second interval was reached. The percentage of intervals in which nail biting occurred decreased from an average of 83% of intervals during baseline to 7% of intervals at VI40, 11% of intervals at VI60, fewer than 1% of intervals at VI80, and 3% of intervals at VI100.

Before the MotivAider® program was implemented with Brian, he averaged 28 inappropriate vocalizations and instances of noncompliance per day. Throughout the previous school year, Brian had exhibited extremely high rates of aggression (hitting, kicking, biting, scratching, throwing objects), destructive behavior, cursing, screaming, self-abuse, and noncompliance. Eight months after the self-monitoring program with the MotivAider®, Brian did not display any instances of these inappropriate behaviors. He has learned to recognize whether his behavior is appropriate or not and to manage his behavior

effectively. Brian's use of the MotivAider® has been faded over time. In fact, he no longer needs to wear the MotivAider® because he monitors his behaviors only two times each day, once after lunch and again immediately before "cash-in time" at the end of the school day. Ms. Foster, Brian's teacher, happily says, "He has gone months with no disruptive behaviors!" Even more pleasing, with the decrease in disruptive behaviors, an increase in appropriate behaviors has occurred, including Brian's use of appropriate attention-seeking behaviors. For example, he now quietly raises his hand to get his teacher's attention rather than engaging in disruptive behavior, and he is compliant to almost all adult requests. Importantly, as a result of the MotivAider® program, Brian's teacher was able to eliminate the use of an aversive behavior plan that was in place prior to the more positive MotivAider® program. Not only did the MotivAider® help Brian, but it has also helped his teachers and other classmates. The atmosphere in the entire class is so much more conducive for learning.

This is what Brian has to say about his MotivAider®: "I really liked working with (the trainers) and I really like using the MotivAider® and earning money to buy stuff at cash-in time!"

Case Study C: *The MotivAider® at Work for General Classroom Management*

Mrs. Laud wanted to improve her chaotic classroom. Her students were often out of their seats, calling out, and generally unproductive. Mrs. Laud knew that kindergartners needed high rates of positive feedback so that appropriate classroom behaviors could be shaped over time. Thus, Mrs. Laud wanted to increase her behavior-specific praise to increase her students' on-task behaviors and decrease their call-outs and overall classroom disruptions. However, Mrs. Laud was concerned about her ability to remember to praise students at a rate great enough to make a difference in their behavior. She was also concerned that her classroom assistant seemed to deliver too many reprimands for misbehavior. Mrs. Laud wished her assistant would praise the students who were displaying appropriate behavior instead of consistently attending to their disruptive behavior. She was not confident that just telling the assistant to increase her praise rates would be effective in changing her behavior. This is where the MotivAider® came to the rescue. She referred to her copy of *The Tough Kid Book* by Rhode, Jenson, and Reavis (1992) and used the beeper tape section to create her own intervention in which she incorporated the MotivAider®.

The classroom teacher and her assistant decided to each wear a MotivAider® set on a variable interval 60-second schedule. The teacher's MotivAider® cued her to deliver behavior-specific praise to the students who were participating in her reading lesson, and the classroom assistant's MotivAider® reminded her to deliver behavior-specific praise and tokens (lima beans) to students who were appropriately working on independent seatwork. The beans were placed in a daily reward jar, then transferred to a weekly reward jar, and finally put into a monthly reward jar. When the students reached their monthly goal, the teacher gave the students the choice of a pizza

party, a movie, or free time.

The teacher collected baseline data on her students' behaviors both before and during her praise and token intervention to evaluate the effectiveness of the program and to make decisions about the duration of the interval. When the data indicated a substantial decrease in disruptions and a sizable increase in on-task behavior as compared to baseline data, the teacher and classroom assistant agreed that the extra cue from the MotivAider helped them deliver behavior specific praise, which greatly impacted student performance. The teacher and classroom assistant decided that the 60-second interval was manageable and that changing to a larger interval was not necessary.

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