RESISTANCE TO CHANGE:
TEACHER VARIABLES THAT MAY INFLUENCE ACCEPTANCE OF CURRICULUM-
BASED MEASUREMENT

A Thesis
by
MATTHEW AUSTIN GONSIEWSKI

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Abstract

RESISTANCE TO CHANGE:
TEACHER VARIABLES THAT MAY INFLUENCE ACCEPTANCE OF CURRICULUM-
BASED MEASUREMENT

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An abundance of research indicates that the use of Curriculum Based Measurement (CBM) as a screening and formative assessment tool in school settings increases student academic performance across subject areas. Despite the strong empirical support for CBM, many teachers harbor resistance towards adopting and implementing it in the classroom. In many schools that have implemented CBM, teachers may use it sparingly or not at all. Very few studies have examined the individual teacher factors that might influence this resistance to the implementation of CBM. Those studies that exist have investigated teacher variables in isolation. This study examined three individual teacher variables (teacher burnout, self-efficacy, and CBM acceptability) hypothesized to influence teacher adoption and implementation of CBM in their everyday teaching. Data were collected from a rural public elementary school located in the Southeastern United States. Fifty-seven classroom teachers

and other school faculty were administered a battery of surveys measuring the variables of interest.

Results indicated that educators who reported higher ratings of CBM acceptability were more likely to use CBM in more varied ways, and that educators who had a higher sense of self-efficacy in their instructional strategies were less likely to find CBM an acceptable educational practice. Additionally, educators who reported higher ratings of feelings of personal accomplishment (a subset of burnout) used CBM for more hours per week.   Finally, teachers of higher grades reported using CBM in fewer ways and for fewer hours each week.

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This thesis is written in accordance with the style of the
Publication Manual of the American Psychological Association (6th Edition) as required by
the
Department of Psychology at Appalachian State University

Resistance to Change:

Teacher Variables That May Influence Acceptance of Curriculum-Based Measurement

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Abstract

An abundance of research indicates that the use of Curriculum Based Measurement (CBM) as a screening and formative assessment tool in school settings increases student academic performance across subject areas. Despite the strong empirical support for CBM, many teachers harbor resistance towards adopting and implementing it in the classroom. In many schools that have implemented CBM, teachers may use it sparingly or not at all. Very few studies have examined the individual teacher factors that might influence this resistance to the implementation of CBM. Those studies that exist have investigated teacher variables in isolation. This study examined three individual teacher variables (teacher burnout, self-efficacy, and CBM acceptability) hypothesized to influence teacher adoption and implementation of CBM in their everyday teaching. Data were collected from a rural public elementary school located in the Southeastern United States. Fifty-seven classroom teachers and other school faculty were administered a battery of surveys measuring the variables of interest. Results indicated that educators who reported higher ratings of CBM acceptability were more likely to use CBM in more varied ways, and that educators who had a higher sense of self-efficacy in their instructional strategies were less likely to find CBM an acceptable educational practice. Additionally, educators who reported higher ratings of feelings of personal accomplishment (a subset of burnout) used CBM for more hours per week. Finally, teachers of higher grades reported using CBM in fewer ways and for fewer hours each week.

Keywords: Curriculum-Based measurement, Acceptability, Teacher resistance to change

Resistance to Change:

Teacher Variables That May Influence Acceptance of Curriculum-Based Measurement

Educational reform is not new; public schools have dealt with reform initiatives for many years. Constant pressure from many sources (parents, legislators, businesses, etc.) and a rapidly changing educational environment have pushed schools to implement a wide range of new programs in an attempt to improve student outcomes. Although many educational reform initiatives utilize alternative models of instruction, numerous schools still retain the traditional, teacher-centered model of instruction that has been prevalent since the advent of American public education (An & Reigeluth, 2011; National Educational Association, 2007). In the traditional model, classrooms are centered around group instruction, which often requires students to sit in their seats and passively absorb information as it is presented by the teacher. Assessment of student learning is typically restricted to summative assessments, and students who fail to acquire the presented knowledge are given little support to address their deficits until they are substantially behind. Even though the traditional model can be effective for the majority of students, in that most students will master grade-level subject matter, it leaves underachieving students who lag behind with little support to remedy their academic deficits until it is too late (National Educational Association, 2007; Reigeluth, 1999). One solution that has been proposed is for schools to shift to a learner-centered model of instruction. Learner-centered instruction utilizes individual and group assessments to create individualized instruction plans and lessons that are more intrinsically motivating to students. Research has shown that learner-centered models of instruction increase student retention of new knowledge and improve educational outcomes (An & Reigeluth, 2011;

Andrade, Huff, & Brooke, 2012). The learner-centered model is one example of an attempt toward school reform that has yet to be adopted by the majority of public schools.

Legislation

In the past decade, pressure to document student attainment of educational goals in United States public schools has increased substantially, particularly after the introduction of the No Child Left Behind (NCLB) legislation in 2001. The purpose of this legislation was to increase accountability in schools, with an explicit focus on student performance as measured through high-stakes end-of-year test results in grades 3 through 8. NCLB mandates that all children reach grade-level proficiency by the end of the 2013-2014 school year, with gradual improvements in overall basic academic skills by the end of each school year prior. If certain schools fail to attain the required achievement goals for all students, sanctions may be imposed on school staff. Disciplinary actions may include teacher retraining, removal of staff, or restructuring as charter schools if student performance continually fails to meet criteria. Most schools elect to utilize end-of-year, summative assessments to determine if students have met the required achievement goals. While these tests document student proficiency at the end of the school year, they do not yield information that would allow educators to determine ahead of time which students might not be able to achieve proficient scores. High-stakes tests are administered after a year's worth of instruction has occurred, which only identifies students in need after they have failed in the classroom. Because accountability relies on summative testing, many schools are searching for methods that will allow them to identify at-risk students as early as possible. NCLB also requires that schools collect and report data, documenting student response to evidence-based interventions (NCLB, 2001).

Another piece of recent legislation that has had a significant impact on the data collection methods used by schools is the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004. The reauthorization of this law allows schools flexibility in how they can meet improvement goals, specifically by allowing scientifically-based alternatives to the "Refer-Test-Place" model of special education decision making (IDEIA, 2004; NCLB, 2001). The most prevalent model rising out of this newfound flexibility has been Response to Intervention (RtI). RtI is based on the premise that all children should be screened for academic and behavioral difficulties so that those identified as at-risk for failure may be exposed to evidence-based interventions as early as possible. The intensity of interventions varies based on the response the student exhibits to interventions and may increase for students who fail to respond to initial intervention. Within an RtI model, all students move through various tiers of instruction. Only when a student has demonstrated a lack of response to the most intensive interventions should he or she be considered for special education placement (Cicek, 2012). More simply put by Burns and VanDerHeyden (2006), "RtI [is] the systematic use of assessment data to most efficiently allocate resources in order to enhance learning for all children" (p. 3).

Curriculum-Based Measurement

Though much of the attention in current RtI research is focused on the interventions themselves, a critical aspect often overlooked in schools is the use of formative assessment to universally screen and identify at-risk students. Another potential use of formative assessment is to regularly monitor the academic progress of at-risk students as they are exposed to varying degrees of intervention. There are many methods schools may use to accomplish these goals; one of the more common methods is curriculum-based measurement

(CBM). CBM consists of various brief assessments that may be used for both screening and progress monitoring in basic academic areas. These areas are measured in isolation and are not necessarily linked to the curriculum, but are correlated with school success (e.g., mathematics, oral reading fluency, number and letter sense). Introduced in the early 1980s, CBM offers a variety of 1-5 minute assessments of individual student performance by using items and passages drawn from grade level curriculum. CBM is particularly useful for screening and progress monitoring purposes because it is a standardized assessment that yields scores that may be compared to both local and national norms. Students who do not meet the norms in screening can have their screening data used as a baseline for future progress monitoring, utilizing the same screening tools. Additionally, CBM combines the benefits of standardized testing with advantages of informal observation (flexibility, ease of administration, able to be performed individually at any time) (Deno, 1985). Many different sets of CBMs are available through commercial publishers, (e.g., AIMSweb, easyCBM, STAR), and although these tools may have aesthetic differences, they all fundamentally share the same purpose, which is to provide educators with high quality, norm- and criterion-referenced measures that assess the current academic abilities of students. While CBM can be administered by hand, computerized assessments that automatically score, compare, and track progress of students' performance are increasingly available. Numerous alternate forms allow CBM probes to be administered as frequently as needed. School-wide use of CBM in yearly benchmarking procedures enables schools to identify students at-risk. Furthermore, frequent systematic use of CBM can provide teachers with data on the efficacy of applied interventions (Deno, 2003). Teachers can also use CBM data for instructional decision making, as it may be administered while instruction is ongoing. Unlike end-of-year

assessments, which have been the traditional measure of student performance and achievement, CBM allows educators to intervene immediately when a student is struggling, rather than waiting for them to fail before identification occurs (Deno, 1986).

Research has identified several positive outcomes associated with CBM usage in schools. A positive correlation exists between CBM implementation (including administration of assessments as well as use of gathered data for instructional planning and progress monitoring) and student achievement (Allinder, 1995). Allinder (1996) found that teachers who implemented CBM in math classrooms saw significantly greater gains in math achievement than those who did not. McGlinchey & Hixson (2004) observed similar findings in reading classrooms and reading achievement and these improvements extended to performance on end-of-year standardized tests. Additional studies have indicated that CBM is a useful tool for schools concerned with student performance (Merino & Beckman, 2010; Nese, Park, Alonzo, & Tindal, 2011).

Despite the plethora of existing research supporting the benefits of CBM usage in schools, many educators remain reluctant to use it. This research-to-practice gap has prompted many researchers to examine and identify variables that may hinder educator adoption of CBM. Many studies have focused on school- and individual-level variables (e.g., acceptability, top-down support, self-efficacy) that are associated with successful implementation and adoption of CBM (Allinder, 1995; Allinder, 1996; Allinder & Oats, 1997; Foegen, Espin, Allinder, & Markell, 2001). However, many researchers have overlooked the interactions of individual teacher factors that may inhibit the implementation of new programs and tools, including CBM (Deno, 2003).

Teacher Variables

Change in any area of life can be anxiety inducing. Teachers are constantly bombarded by new ideas, and many may be reluctant to implement new programs, especially if they will have to make major changes in their instructional practices (Mann, 1978). In order to improve teacher acceptance of new initiatives, factors that facilitate and hinder implementation must be explored.

In this study, Expectancy X Value theory was utilized as a theoretical construct for selecting variables to be measured (Wigfield & Eccles, 2000). Under Expectancy X Value theory, behavior (in our study implementation of CBM) can be explained in terms of expectancy beliefs and subjective task values. Expectancy beliefs are defined as an individual's perceptions of how well they will do on an activity, while value beliefs are defined as the extent to which the individual values an activity. According to this theory, a person is more likely to engage in a behavior when he/she has both high levels of positive expectancy beliefs and high levels of value beliefs, with the likelihood of behavior decreasing as either of these variables decreases. For our study, CBM acceptability reflects educators' value of CBM, and the self-efficacy variable reflects teachers' expectancy towards CBM, with burnout being an additional moderating factor influencing educators' value of CBM..

CBM Implementation. CBM implementation, or using CBM as a professional tool in the ways it was designed to be used, is the outcome behavior variable represented in the Expectancy X Value framework used in this study. In the classroom setting, CBM is designed for four main types of uses (Deno, 2003):

- Progress monitoring, including following a student's rate of advancement in learning basic academic skills, including while being administered an intervention for RtI processes.

- Informing instruction, such as using screening data to determine the learning needs of an entire class, as well as to evaluate the efficacy of instruction within a class.

- Tailoring interventions, including dynamic adjustment of goals, adjustment of intervention, and selection of specifically targeted interventions.

- Professional collaboration, such as utilizing CBM data to communicate a student's current academic level, or sharing data to design intervention plans.

The amount of time an individual uses CBM each week is also an indicator of implementation, in that individuals who implement CBM more often are likely using it for more time each week.

Acceptability. Acceptability refers to the subjective attitudes of individuals involved in the implementation of a particular innovation (Kazdin, 1980). In our study, CBM acceptability ratings reflect educators' value of CBM in the Expectancy X Value framework. Positive correlations exist between teachers' acceptability of CBM and their implementation of CBM in the classroom. In one study, Allinder & Oats (1997) found four factors that impacted CBM acceptability: severity of the problem, time required to implement CBM, limited negative side effects, and alignment with the teacher's personal qualities or professional orientation. Furthermore, their results showed that teachers who had a higher acceptability of CBM implemented at least some components with greater fidelity. Teachers with higher CBM acceptability scores tended to administer probes more often and set more ambitious goals for their students. Although the relationship between acceptability of CBM

and the number of times goals were increased did not reach a sufficient level of significance, it approached significance. Although that study indicates that teacher acceptability of CBM is essential to its implementation, research examining other individual variables that may influence acceptability is limited.

Self-Efficacy. One factor that may contribute to teachers' resistance to change is their self-efficacy, or personal attitudes about their ability to effectively educate their students. In an Expectancy X Value framework, self-efficacy reflects educators' expectancy of CBM. When teachers experience low self-efficacy in the classroom, they may be hesitant to accept and adopt new programs (Lortie, 1975). Many teachers fear that changing their strategies and methods will lead to failure, and this failure will negatively impact their students' academic outcomes and others' perceptions of their abilities. Even when teachers possess considerable evidence of the efficacy of a new program, they may refuse to implement it out of fear that they will be unable to properly use the program (Bolster, 1983). By identifying the relationship between teacher self-efficacy and acceptability, we will be better able to understand the factors that might enhance implementation of CBM.

Teacher self-efficacy has been subdivided into two factors. The first factor is teacher personal efficacy, or the belief that one possesses the skills necessary to effect change in students (Ashton & Webb, 1986). The second factor is teaching efficacy, or the belief that students will benefit from their educational experiences (Gibson & Dembo, 1984). These factors are often positively correlated with each other, but this correlation is not absolute. Some teachers have high personal efficacy but low teaching efficacy, reflecting the belief that they possess the skills necessary to teach students, but that outside factors might interfere with student mastery of academic skills and concepts.

High personal efficacy has been correlated with teachers' expectations of themselves and their students and positive interactions with their students (Ashton & Webb, 1986). Allinder (1995) examined the relationship between self-efficacy and implementation of CBM in schools, particularly when CBM was used for academic goal setting and instructional modification. The results indicated that teachers who rated themselves higher on measures of self-efficacy tended to set more ambitious goals and to adjust those goals more frequently than teachers who had lower ratings of self-efficacy.

Burnout. Another factor that may influence how educators respond to and implement new innovations is the degree of professional burnout they experience. Although not directly represented by a specific variable in Expectancy X Value theory, burnout can be thought of as one of many possible moderating variables affecting the expectancy and value variables within the framework. For example, if an educator feels high levels of burnout, their implementation of CBM may significantly differ from other educators who have lower burnout, regardless of their feelings of expectancy or value. Burnout is conceptualized as emotional and/or physical exhaustion that leads to diminished interest in a specific activity. Teachers must perform many demanding tasks throughout the school day. Routine demands, such as classroom management, instruction, lesson planning, individual student assessment, professional development, parent conferences, and other daily tasks can often lead to exhaustion. The majority of United States public school teachers also must deal with inadequate pay and poor public perceptions of their profession. Farber (1991) found that, at any one point in time, between 5% and 20% of American teachers could be classified as suffering from burnout.

Research on the relationship between teacher burnout and self-efficacy indicates that the two variables are negatively correlated. Teachers with high self-efficacy are less likely to experience teacher burnout, whereas those who do not perceive themselves as effective tend to show higher levels of burnout (Brouwers, Tomic, & Boluijt, 2011; Brown, 2012; Bümen, 2010; Evers, Brouwers, & Tomic, 2002). Although the relationship between self-efficacy and burnout has been consistently identified as strong, the relationship between burnout and acceptability of new educational programs is less established. One study did not identify a significant relationship between teachers' reported burnout and negative attitudes towards new educational innovations (Evers, Brouwers, & Tomic, 2002). One explanation for these findings is that many teachers with high levels of burnout might not implement the programs at all, and thus did not have enough exposure to develop negative attitudes.

Purpose of the Study

The primary purpose of this study was to identify individual educator factors that influence acceptance and adoption of CBM. Based on the framework of the Expectancy X Value theory, we focused on the degree to which educator self-efficacy, educator burnout, and educator demographics predicted acceptability and implementation of CBM. Specifically, we examined the relationship between individual variables and the amount of time educators spent using CBM in their duties on a weekly basis. These variables have been investigated in isolation, but not together, and in order to promote successful adoption of CBM, individual-level variables should be examined in combination (Allinder, 1995; Allinder & Oats, 1997; Foegen, Espin, Allinder, & Markell, 2001). Existing research focuses on how school-level variables, such as administrative support, professional development, and school climate, predict acceptance of change, but less research has examined individual

variables. This topic is significant because findings may shed light on variables that enhance or impede the educational reform process (in this case, transitioning to the use of formative assessment rather than sole reliance on summative data).

A secondary purpose was to examine how predictor variable outcomes in combination have an effect on predicted educator acceptance of CBM.

In sum, we addressed the following research questions:

1. How is CBM implemented at the participating school?

    a. What are the various ways in which CBM is used?

    b. How frequently is CBM used?

    c. Is there a relationship between types of use, hours of use, and educator demographics?

2. Do educator ratings of self-efficacy and burnout influence educator acceptability of CBM?

3. What does the relationship between CBM acceptability, individual educator variables, and implementation reveal about educators who implement or fail to implement CBM?

Hypotheses

We hypothesized that most educators would use CBM in only one or two ways, with few educators using it in multiple ways. We also hypothesized that most educators would use CBM for 1-2 hours per week, with few educators using CBM for more than 5 hours per week. No extant research could be found examining the relationship between educator demographics and CBM acceptability, but because CBM measures student acquisition of basic academic skills such as math computation and reading fluency, it is more applicable to

the screening and monitoring of general education students in the early grades where these

skills are taught (Deno, 1985), we hypothesized that we would find that teachers in lower

grades would express higher levels of CBM acceptability and higher levels of CBM

implementation than teachers in higher grades, and that educators who had been working in

education longer would express lower levels of CBM acceptability and lower levels of CBM

implementation than those who had been working in education for shorter periods of time.

Past research has identified correlations between self-efficacy, burnout, and

acceptability of new programs in schools. Based on the results of previous research, our

second hypothesis was that we expected to find that educators with higher self-efficacy

ratings and lower burnout scores would have higher acceptability and implementation of

CBM.

Allinder & Oats (1997) found a link between acceptability and CBM implementation,

but these variables were investigated in isolation. To our knowledge, research specifically

investigating the relationship between individual educator variables and CBM acceptability/

implementation does not exist (Allinder, 1995). In accordance with the results of preliminary

research, we hypothesized that high self-efficacy, low burnout, and high acceptability would

predict increased implementation of CBM.

In sum, our hypotheses were as follows:

1. a. Most educators would use CBM in only one or two ways, with the fewest educators
    using it in four ways.

    b. Most educators would use CBM for 1-2 hours per week, with the fewest educators
    using CBM for more than 5 hours per week.

    c. Teachers in lower grades would express higher levels of CBM acceptability and

implementation than teachers in higher grades, and that educators who had been

working in the education field longer would have lower levels of acceptability and

implementation than those who had been working in the field for shorter periods of

time.

2. Educators with higher self-efficacy ratings and educators with lower burnout scores

   would have higher acceptability of CBM.

3. Educators with high self-efficacy, low burnout, and high acceptability would have

   increased implementation of CBM.

Method

Setting and Participants

This study took place at a small, rural elementary school in the Southeastern United

States that was in the process of implementing a web-based formative assessment system.

The school consisted of classes ranging from kindergarten to eighth grade and used

AIMSweb as their CBM service provider. The participants were 57 certified staff members,

including general education instructors, special education instructors, secondary curriculum

instructors (e.g., art, PE), counselors, speech therapists, the principal, and assistant principals.

Additional demographic data on the participants was collected, including grade taught, years

teaching, and position within the school.

Procedures

Data for this study was collected in conjunction with the study *Educational Reform:

What Factors Influence Teacher Acceptance of New Practices?* (Fearrington, 2014).

Participation in this study was completely voluntary. In May 2013, an email was sent to all

certified staff who agreed to participate in the study. Participants were asked to complete an

online battery of surveys. Once participants completed the survey, they were paid $50.00 each. IRB Approval was obtained on September 24, 2012.

Measures

      Self-Efficacy. The Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk-Hoy, 2001) was used to measure educator perceptions of self-efficacy. This scale contains 24 9-point Likert-type items with possible responses from 1 (*nothing*) to 9 (*a great deal*). The TSES produces scaled scores on three factors associated with educator self-efficacy: Student Engagement, Instructional Strategies, and Classroom Management. The TSES has strong psychometric properties, with internal reliability coefficients ranging from .87 to .94. A copy of the TSES is provided in Appendix B.

      Educator Burnout. The Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986) is a widely used tool that measures job burnout in research and professional venues. The educator's edition of the MBI (MBI-ED, Maslach, Jackson, & Leiter, 1996) has been adapted for use with educators by rewording items to reflect relevance in school contexts. The MBI-ED contains 22 7-point Likert-type items with possible responses from 0 (*never*) to 6 (*every day*) that assess the frequency of feelings associated with professional burnout. The MBI-ED produces three subscales: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. Subscale scores are summed to produce a total MBI-ED score. The MBI-ED has strong psychometric properties, with internal consistency ranging from .76 to .90, and Cronbach's alphas ranging from .64 to .90 (Maslach, Jackson, & Leiter, 1996). Copyright restrictions prohibit full reproduction of the MBI-ED. Three sample items are provided in Appendix B.

Educator Acceptability of CBM. Educator acceptability of CBM was measured by a researcher-modified version of the Curriculum-Based Measurement Acceptability Scale (CBM-AS, Oats & Allinder, 1995). The language was revised to reflect the commercial CBM product used in the school (AIMSweb). The modified CBM-AS used in this study consisted of 20 items on a 5-point Likert-type scale with possible responses from 1 (*strongly agree*) to 5 (*strongly disagree*). The items were then reverse coded for analysis. Questions address educator understanding of CBM components, judgments of effectiveness, and practical issues related to day to day implementation of CBM. Internal consistency reliability of the CBM-AS is .90 (Oats & Allinder, 1995). The modified version of the CBM-AS is provided in Appendix B.

Implementation and Use of CBM. Educator implementation of CBM was measured through researcher-constructed questions that examined the various ways in which educators used CBM in their duties. Specifically, participants were asked if they used CBM to progress monitor students, to inform their instruction, to tailor intervention needs of struggling students, and to collaborate with other professionals. They also were asked to estimate the amount of time per week that they used CBM (none, < 1 hour, 1-2 hours, 2-5 hours, or > 5 hours). The survey also included an open-ended response for participants to specify if they used CBM for other purposes. A copy of the questions used to obtain these data is provided in Appendix B.

Demographics. Educator demographics were divided into three categories: position within the school, years spent as an educator (first year, 2-4 years, 5-8 years, 8-14 years, 15-20 years, and >20 years), and grade currently taught (Kindergarten through 8th grade). To

increase power for further analysis, grade taught was combined into three groups (K-2, 3-5, and 6-8).

Data Analyses

Four analyses were performed to answer each individual research question. A frequency analysis was used to obtain an overview of how CBM was used by participants. A correlation matrix was constructed to explore relationships between CBM acceptability, CBM implementation (number of ways CBM is used, hours of CBM use per week), and educator demographic variables (years of experience, grade taught). A correlation matrix was also constructed to explore relationships between educator ratings of self-efficacy and burnout, educator ratings of CBM acceptability, and CBM implementation variables. Lastly, two regression analyses were performed to examine the relationship between variables found to have significant correlations and both CBM implementation variables.

Results

Table 1 depicts the frequency counts for the two CBM implementation variables that were measured. Frequency analysis of the types of ways CBM is used revealed that CBM was most often used for progress monitoring purposes (84% of participants), followed by professional collaboration (60% of participants), and tailoring interventions (40% of participants). Only 38% of participants reported that they used CBM to inform instruction. Table 1 also includes a breakdown of the percentages of participants who reported using CBM for one or more purposes. Examination of response frequencies regarding the amount of time using CBM per week indicated that 14% of participants reported spending no time using CBM per week, 47% of participants reported spending less than one hour per week using CBM, 28% of participants reported spending between one and two hours per week

using CBM, and 11% of participants reported spending between two and five hours per week

using CBM.

Of the 57 participants, 38 indicated that they were core instructors, 3 were teaching

assistants, 3 were administrators, 6 were secondary instructors (art, music, P.E., etc.), and 7

were support staff (speech/language pathologists, school psychologists, counselors, etc.).

Table 2 presents the CBM use response frequencies reported by each position group. Table 3

details hours of CBM use by each position.

Table 4 displays the correlations between educator demographic variables (years of

experience, grade taught among educators who reported teaching a specific grade), CBM

implementation variables, and CBM acceptability. Most participants reported teaching a

specific grade ($n = 47$), but not all. An examination of correlations between these variables

identified a positive correlation between CBM acceptability and number of ways CBM is

used, $r(55) = .30$, $p = .025$. Significant negative correlations were found between grade

taught and CBM use, $r(45) = -.29$, $p = .047$, and between grade taught and hours of CBM use

per week, $r(45) = -.39$, $p = .007$.

Correlation coefficients between CBM implementation variables, CBM acceptability,

and the burnout and efficacy subscales appear in Table 5. A marginally significant negative

correlation was found between CBM acceptability and perceived efficacy in instructional

strategies (a subscale of educator self-efficacy), $r(55) = -.24$, $p = .070$. A marginally

significant positive correlation was identified between feelings of personal accomplishment

(a subscale of burnout) and hours of CBM use, $r(55) = .22$, $p = .099$.

Table 6 shows the results of the linear regression that further explored the relationship

between CBM acceptability, efficacy in instructional strategies, and CBM implementation.

This exploratory analysis yielded a marginally significant relationship between variables, $F(2, 56) = 2.65$, $p = .080$ $R = .30$. Specifically, CBM acceptability has a slightly significant positive relationship with the number of ways CBM is used, $b = -.62$, $t(56) = 2.29$, $p = .026$. The results of a second regression analysis that was conducted to examine the extent to which each variable predicted hours of CBM use per week are displayed in Table 7. CBM acceptability and efficacy in instructional strategies did not significantly predict hours of CBM use per week, $F(2, 56) = 1.25$, $p = .294$, $R = .21$.

Discussion

The purpose of the present study was to identify individual educator characteristics that are associated with acceptance and adoption of CBM in schools. Overall, we found that increased educator ratings of self-efficacy in instructional strategies predicted decreased acceptability of CBM, while increased educator ratings of personal accomplishment marginally predicted increased hours of CBM use per week. We also found that teachers of higher grade levels tended to use CBM for less time per week and in fewer ways. Another finding of this study concerned the relationship between CBM acceptability and implementation, a relationship that has already been identified in previous research (Allinder & Oats, 1997). This relationship was corroborated in our participants' responses, with educators who reported higher ratings of CBM acceptability also reporting using CBM in more varied ways.

Our first research question investigated the logistics of CBM implementation at the participating school. Several general findings were apparent from the frequency data. Specifically, 89% of participants used CBM for 2 hours per week or less, with 61% using it for less than 1 hour per week. Participants' responses indicated that CBM was most

frequently used for progress monitoring, which is the easiest and most straightforward use of CBM. Similar findings have been documented in the past by Swain and Allinder (1998), who also found that progress monitoring was the most frequent use of CBM among educators who used it.

Our results indicated that most of the educators that participated in our study used CBM sparingly, even though its use for benchmarking was mandated by the administration and had been woven into the school's logistical infrastructure. That such a large proportion of our participants' responses indicated using CBM in such few ways and for small amounts of time per week could likely indicate that CBM has yet to be fully embraced in the participating school. CBM can be used for other purposes than benchmarking, including progress monitoring, informing instruction, tailoring interventions, and collaborating with other professionals. Those who use CBM in more varied ways have a higher quality of implementation. Overall, the participants in our study implemented some pieces of CBM, but less than 25% of participants utilized CBM for its full purposes, indicating low implementation quality throughout the school. The implications of poor implementation quality have been documented by Allinder and Oats (1997), as teachers who fully implement are likely to see significant gains in student progress, while those who implement with low quality will likely see little improvement in their students' progress. Other research has replicated this finding, with gains in student progress associated with effective implementation, and lack of gains associated with lack of implementation (Stecker, Fuchs, & Fuchs, 2005). Decreased implementation quality of CBM and the associated lack of gains may lead educators to be less likely to fully implement CBM for future students.

In order to glean a complete picture of what CBM implementation looked like at the participating school, our primary research question also explored the relationships between both implementation variables and educator demographic variables. Several significant correlations emerged. Our finding that teachers in lower grades used CBM in a greater number of ways than teachers in higher grades supported our hypothesis. Because CBM measures student acquisition of basic academic skills such as math computation and reading fluency, it is more applicable to the direct screening and monitoring of general education students in the early elementary grades where these skills are taught (Deno, 1985). With the exception of certain special education students, most students have mastered the skills CBM tends to measure by the time they reach the upper grades, and therefore it is possible that those teachers would use it less frequently and primarily for screening purposes. We also found that teachers in lower grades used CBM for significantly more time per week than teachers of higher grades. This is likely due to the increased relevance of standard CBM measures to students in lower grades, as we could expect teachers who find it to be more immediately relevant to spend more time utilizing it as a classroom tool. No significant correlations were found between either of the implementation variables and years of experience.

The second research question investigated the relationships between individual educator variables (burnout and efficacy) and CBM acceptability. Our hypothesis that participants who reported higher levels of efficacy and lower feelings of burnout would provide higher ratings of CBM acceptability was not supported. No significant relationships emerged between the overall scale scores of the TSES, MBI-ED, and CBM-AS. However, a significant correlation between one of the factor scores of the TSES and CBM-AS is worthy

of discussion. Contrary to our prediction, a marginally significant negative correlation was found between educators' perceived efficacy in instructional strategies and CBM acceptability. Efficacy in instructional strategies is defined as an individual educator's perceptions of the effectiveness of their current instructional techniques. Educators who feel that their current instructional techniques are helping their students make strong educational progress have higher ratings of efficacy in instructional strategies, regardless of the actual effectiveness of their instructional practices. Those with lower ratings of efficacy of instructional strategies feel that their current teaching methods do not work as well to help their students succeed (Tschannen-Moran & Woolfolk-Hoy, 2001). Other researchers have found that teachers who reported lower ratings of self-efficacy were less likely to be accepting of new instructional practices (Lortie, 1975); our results differ from that outcome. It is possible that teachers who have higher ratings of self-efficacy in their instructional strategies find less need to implement CBM, as they feel their current practices are good enough. This tendency could lead to lowered ratings of acceptability if those teachers are required to use CBM for any purpose.

No other significant relationships between individual educator variables and CBM acceptability were identified. Evers, Brouwers, and Tomic (2002) also investigated the relationship between educator burnout and acceptability of new programs and found similar results. They proposed that teachers with higher burnout ratings were less likely to implement the new program, thus not having a chance to develop feelings of acceptability. Another alternative explanation for the lack of an overall relationship between burnout and acceptability could be that teachers who experience high levels of burnout have developed a sense of apathy towards their jobs and any associated programs, thus they might not truly

develop any real sense of acceptability, positive or negative, even if they implemented the new program.

Our final research question examined the relationship between CBM acceptability, CBM implementation, educator burnout ratings, and educator self-efficacy ratings. Previous researchers have found that CBM acceptability predicts implementation (Allinder & Oats, 1997); our results supported that research. We found a positive relationship between CBM acceptability and number of CBM uses, supporting our hypothesis. However, no relationship between CBM acceptability and hours of CBM use was identified. One possible explanation for this result is that educators who use CBM in more varied ways, reflecting a higher quality of implementation, view it as more versatile and therefore find it a more acceptable instructional tool. We did not examine student performance in our study, but other studies that have investigated the relationship between these variables have found that increased quality implementation of CBM leads to increases in student performance, while lower quality implementation leads to no changes in student performance (Allinder, 1995; Allinder & Oats, 1997; Stecker, Fuchs, & Fuchs, 2005). If this finding were true for our participants' experiences, it is possible that increased student performance from higher quality implementation may also have increased educators' feelings of CBM acceptability.

Our finding that overall self-efficacy ratings did not relate to CBM implementation contrasts with previous research, which has found that higher ratings of self-efficacy were correlated with increases in measured implementation variables (Allinder, 1995). Allinder (1995) examined the effect of teachers' sense of self-efficacy and teaching efficacy on the rate of goal adjustment, the number of measurement points or CBM tests students took, the ambitiousness of the goal set for the student, the number of times instructional changes were

made, and the timing of changes. This measurement of CBM implementation is markedly

different from our own measurement, which examined educators' varied uses of CBM and

hours of use of CBM through a self-report measure. It is possible that the difference in

results reflects the different operationalized definitions in each study.

The MBI-ED measures burnout by examining the interaction of three subscales:

Depersonalization, Emotional Exhaustion, and Personal Accomplishment. Educator

Depersonalization ratings indicate educators' perceptions of how impersonal or emotionally

callous they feel towards their students. Educator Emotional Exhaustion ratings reflect

educators' perceptions of their own emotional overextension and associated exhaustion.

Educator Personal Accomplishment ratings reflect educators' perceptions of their own

competence and improvements in achievement while working with students (Maslach,

Jackson, & Leiter, 1996). Educators who report high levels of Depersonalization and

Emotional Exhaustion combined with low ratings of Personal Accomplishment are

considered to possess high levels of burnout. Those who report low levels of

Depersonalization and Emotional Exhaustion combined with high ratings of Personal

Accomplishment experience low levels of burnout. Educators who report mixed or moderate

ratings of the three subscales reflect moderate levels of burnout. Although we expected that

educators experiencing a high degree of professional burnout would have lower levels of

implementation, no relationships were found between implementation variables and Educator

Depersonalization or Educator Emotional Exhaustion. A significant positive correlation was

identified between hours of CBM use and scores on the Personal Accomplishment subscale

of the MBI-ED. Our finding that increased ratings of personal accomplishment correlated

with increased hours of CBM use is consistent with Expectancy X Value theory (Wigfield &

Eccles, 2000), which we used to predict increased implementation with decreases in burnout

ratings with burnout as a moderating variable. It is possible that increased effort placed in an

educational program, not just CBM, could lead to increases in an educator's sense of

personal accomplishment. As educators put more time and effort into a program, they are

more likely to feel as if they have accomplished some objective.

Implications for Practice

The introduction of high-stakes summative assessments for accountability purposes

has created an environment in which formative assessment, like CBM, has found an

increasingly important role. The implementation of these programs has often been imposed

by administrators, making educator resistance common. Existing research has established a

link between CBM implementation and student gains (Allinder, 1995; Allinder & Oats, 1997;

Stecker, Fuchs, & Fuchs, 2005), but educators continue to resist implementation in schools.

It is possible that individual educator factors, such as level of burnout, sense of self-efficacy,

grade taught, or years of experience could influence educators' acceptability and

implementation of CBM. If the relationship between individual educator factors is better

understood, school change leaders can use this information to craft professional development

in a way that may eventually foster the acceptance and use of CBM as an instructional tool.

Our study found several results that could have meaningful implications for these leaders.

We found that increased ratings of acceptability correlated with educators using CBM

in more varied ways. This finding was not only consistent with previous research (Allinder

& Oats, 1997), but also emphasized the importance of educator buy-in and acceptability

when attempting to implement CBM. Schools could attempt to increase acceptability of

CBM through staff reinforcement of CBM implementation, possibly offering teachers who

implement CBM with access to higher quality reinforcers that may increase both acceptability and implementation. Exposing educators to previous research regarding the benefits of CBM implementation may also increase ratings of acceptability.

Another finding that has direct implications for school change leaders concerns the unexpected negative correlation between educators' perceived efficacy in instructional strategies and CBM acceptability scores. Professionals who are in charge of implementing change may benefit from knowledge of the characteristics of educators who are likely to harbor resistance so that they can plan strategies to make the implementation process smoother. Our finding that educators with higher ratings of self-efficacy in their instructional strategies had lowered acceptability of CBM could be addressed by providing these educators with targeted training in the uses of CBM and an explicit focus on the established link between CBM implementation and increases in student academic performance (Allinder, 1995; Allinder & Oats, 1997; Stecker, Fuchs, & Fuchs, 2005). If these educators are exposed to this information, they may decide to implement CBM as a more integrated part of their instructional practices. These high self-efficacy educators may be leaders within their schools, and it is possible that if they begin using CBM, others may follow.

Our finding that teachers in upper grades were less likely to implement CBM in varied ways and use it for less time per week could be addressed by training these teachers on the uses of CBM other than screening and progress monitoring, such as targeting instruction and collaborating with other professionals. It is possible that direct training in these other uses may help these teachers find more uses for CBM in their classroom, thereby increasing implementation. Insufficient training could lead to educators viewing CBM as less useful, as they might be unaware of other uses. Even if educators are aware of these

uses, they may not know how to effectively utilize CBM for these purposes unless they are explicitly trained.

In our study, educators who use CBM for more hours per week have higher levels of personal accomplishment. Sharing this result with educators during CBM training could help convince educators that it may help them feel better about their jobs, as opposed to simply being extra work. For educators who may be experiencing symptoms of burnout, using CBM may not only serve to improve their feelings about working in schools, but also to help further improve student outcomes, as this is the ultimate goal of CBM implementation.

Limitations and Directions for Future Research

Our study had several limitations. The study was primarily limited by a smaller sample size than would be optimal, selected out of only one school in a rural southeastern school district. Most of the students and staff at the participating school are of Caucasian descent. These demographic factors make generalizing our findings to broader populations difficult. Our survey was self-report, which can be subject to bias. We also selected from a limited range of individual teacher variables to examine due to logistic and analytic factors. While we did not observe an overall relationship in the variables we chose to assess, it is possible that other individual educator variables may correlate with CBM acceptability and implementation.

Future researchers could replicate our study with a significantly larger sample size, which may yield more significant results among individual teacher variables. Further studies examining individual teacher variables should also take preliminary steps to ensure that CBM implementation quality is high in participants' schools. Previous research has consistently identified a link between low implementation quality and a lack of student gains. If this

result occurred in our participants' responses or in future studies, it would be difficult to

differentiate the effect of individual educator variables on CBM implementation. Future

research could combine investigation of individual teacher variables with longitudinal

examinations of student progress to mitigate this possibility.

Table 1

Frequency Analysis of Number of CBM Uses and Hours of Use

Number of Uses	N	%	Hours of Use	N	%
0	0	0.0	None	8	14.0
1	24	42.1	<1 Hour	27	47.4
2	10	17.5	1-2 Hours	16	28.1
3	9	15.8	2-5 Hours	6	10.5
4	14	24.6	>5 Hours	0	0.0
Total	57		Total	57	

Table 2

Frequency Analysis of Number of CBM Uses by Position Within the School

Number of Uses	Core Instructor		Teaching Assistant		Administrator		2nd Instructor		Support Staff	
	N	%	N	%	N	%	N	%	N	%
1	12	31.6	3	100.0	1	33.3	5	83.3	3	42.9
2	6	15.8	0	0.0	1	33.3	1	16.7	2	28.6
3	9	23.7	0	0.0	0	0.0	0	0.0	0	0.0
4	11	28.9	0	0.0	1	33.3	0	0.0	2	28.6
Total	38		3		3		6		7	

Table 3

Frequency Analysis of Hours of CBM Use by Position Within the School

	Core Instructor		Teaching Assistant		Administrator		2nd Instructor		Support Staff	
Hours	N	%	N	%	N	%	N	%	N	%
0	2	5.3	0	0.0	0	0.0	4	66.7	2	28.6
<1	20	52.6	1	33.3	2	66.7	1	16.7	3	42.9
1-2	13	34.2	1	33.3	1	33.3	1	16.7	0	0.0
2-5	3	7.9	1	33.3	0	33.3	0	0.0	2	28.6
>5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	38		3		3		6		7	

Table 4

Correlations for CBM Implementation, CBM Acceptability, and Teacher Demographics

		1	2	3	4	5
1	Number of CBM Uses	---				
2	Hours of CBM use per Week	.311* .019	---			
3	Grade Taught	-.291* .047	-.389** .007	---		
4	Years of Experience	-.152 .259	.045 .739	-.137 .358	---	
5	CBM Acceptability	.297* .025	.180 .181	-.237 .108	.027 .844	---

Note. Top values represent Pearson's *r*, bottom values represent significance values (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 5

Correlations for CBM Acceptability, CBM Implementation, and Individual Teacher Variables

	CBM Acceptability	Number of CBM Uses	Hours of CBM use per Week
Teacher Emotional Exhaustion	.018 .893	-.090 .503	.124 .359
Teacher Depersonalization	.018 .893	-.100 .457	-.022 .872
Teacher Personal Accomplishment	.104 .441	.189 .158	.221† .099
Efficacy in Student Engagement	-.027 .844	.187 .163	-.091 .502
Efficacy in Instructional Strategies	-.242† .070	-.037 .786	-.150 .266
Efficacy in Classroom Management	-.069 .607	-.061 .651	-.181 .179

Note. Top values represent Pearson's *r*, bottom values represent significance values (2-tailed).
† *Correlation is marginally significant at or below the 0.10 level (2-tailed).*

Table 6

Linear Regression Analysis of Predictor Variables' Relationship to CBM Uses

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1[a]	(Constant)	-.448	2.014		-.222	.825
	CBM Acceptability	.031	.014	.306	2.286	.026
	Efficacy in Instructional Strategies	.058	.209	.037	.277	.783

a. Dependent Variable: Number of CBM uses

Table 7

Linear Regression Analysis of Predictor Variables' Relationship to Hours of CBM Use

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	2.466	1.424		1.732	.089
2[a]	CBM Acceptability	.011	.010	.152	1.112	.271
	Efficacy in Instructional Strategies	-.122	.148	-.113	-.824	.413

a. Dependent Variable: Hours of CBM use per week

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Appendix A

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To: Jamie Fearrington
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From: Robin Tyndall, Institutional Review Board
Date: 9/24/2012
RE: Notice of IRB Exemption
Study #: 13-0049
Sponsors: Society for the Study of School Psychology (SSSP)
Study Title: Educational Reform: What Factors Influence Teacher Acceptance of New Practices?
Exemption Category: (1) Normal Educational Practices and Settings,(2) Anonymous Educational Tests; Surveys, Interviews or Observations

This submission has been reviewed by the IRB Office and was determined to be exempt from further review according to the regulatory category cited above under 45 CFR 46.101(b). Should you change any aspect of the proposal, you must contact the IRB before implementing the changes to make sure the exempt status continues to apply. Otherwise, you do not need to request an annual renewal of IRB approval. Please notify the IRB Office when you have completed the study.

Best wishes with your research!

CC:
Lindsay Masland, Psychology

Appendix B

Teachers' Sense of Efficacy Scale[1] (long form)

Teacher Beliefs	How much can you do?					
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal	
1. How much can you do to get through to the most difficult students?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
2. How much can you do to help your students think critically?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
3. How much can you do to control disruptive behavior in the classroom?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
4. How much can you do to motivate students who show low interest in school work?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
5. To what extent can you make your expectations clear about student behavior?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
6. How much can you do to get students to believe they can do well in school work?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
7. How well can you respond to difficult questions from your students ?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
8. How well can you establish routines to keep activities running smoothly?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
9. How much can you do to help your students value learning?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
10. How much can you gauge student comprehension of what you have taught?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
11. To what extent can you craft good questions for your students?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
12. How much can you do to foster student creativity?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
13. How much can you do to get children to follow classroom rules?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
14. How much can you do to improve the understanding of a student who is failing?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
15. How much can you do to calm a student who is disruptive or noisy?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
16. How well can you establish a classroom management system with each group of students?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
17. How much can you do to adjust your lessons to the proper level for individual students?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
18. How much can you use a variety of assessment strategies?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
19. How well can you keep a few problem students form ruining an entire lesson?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
20. To what extent can you provide an alternative explanation or example when students are confused?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
21. How well can you respond to defiant students?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
22. How much can you assist families in helping their children do well in school?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
23. How well can you implement alternative strategies in your classroom?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	
24. How well can you provide appropriate challenges for very capable students?	(1) (2)	(3) (4)	(5) (6)	(7) (8)	(9)	

Sample Items from Maslach Burnout Inventory, Educator Edition

The purpose of this survey is to discover how educators view their job and the people with whom they work closely. There are 22 (3 sample) statements of job-related feelings listed below. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write a "0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

7. ____ I deal very effectively with the problems of my students.

9. ____ I feel I'm positively influencing other people's lives through my work.

19. ____ I have accomplished many worthwhile things in this job.

Modified Curriculum-Based Measurement Acceptability Scale

Please read the following statements and rate your feelings about each using the scale pictured below.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

1. Teachers are likely to use AIMSweb because it requires little or no technical skill.

2. Teachers are likely to use AIMSweb because it requires little training to implement effectively.

3. Most teachers would find the use of AIMSweb suitable for the academic problems of a struggling child.

4. Most teacher would find the use of AIMSweb appropriate for the academic problems of at-risk learners.

5. I would suggest the use of AIMSweb to other teachers.

6. Many children's academic problems are severe enough to warrant the use of AIMSweb.

7. Use of AIMSweb would be appropriate for a variety of children.

8. My use of AIMSweb is consistent with procedure I have used in classroom settings.

9. AIMSweb would be appropriate for use before making a referral.

10. AIMSweb would not be difficult to implement in a classroom with 30 other students.

11. AIMSweb is practical in the amount of time required for record keeping.

12. AIMSweb is practical in the amount of out-of-school time required for implementation.

13. It would not be difficult to use AIMSweb and still meet the needs of other children in the classroom.

14. I like the procedures used in AIMSweb.

15. My use of AIMSweb proves effective in changing my students' academic performance.

16. AIMSweb did not result in negative side effects for my students.

17. My use of AIMSweb was an acceptable process for my student's academic performance.

18. AIMSweb would not be considered a "last resort."

19. Overall, AIMSweb is beneficial.

20. I would be willing to use AIMSweb in the classroom setting.

Teacher Demographics

1. What is your position within the school?
   a. Core Instructor b. Teaching Assistant c. Administration
   d. Secondary Instructor (P.E., Music, Art, etc.) e. Support Staff

2. How many years have you spent as an educator?
   a. First year b. 2-4 years c. 5-8 years d. 8-14 years e. 15-20 years f. >20 years

3. If applicable, which grade do you currently teach?
   a. Pre-K b. Kindergarten c. 1st d. 2nd e. 3rd f. 4th g. 5th h. 6th i. 7th j. 8th

4. How many hours per week do you use AIMSweb?
   a. None b. <1 hour c. 1-2 hours d. 2-5 hours e. >5 hours

5. If you use AIMSweb, what do you use it for? Choose all that apply.
   [ ] Progress Monitoring   [ ] Inform Instruction
   [ ] Tailoring interventions to specific needs [ ] Collaboration w/ other professionals

Vita

Matthew Austin Gonsiewski was born in Anchorage, Alaska to James and Robin Gonsiewski. He graduated from Grimsley High School in North Carolina in June 2002. The following autumn, he entered The University of South Carolina at Columbia to study Experimental Psychology, and in December 2006 he was awarded the Bachelor of Arts degree. He worked for one year as a behavioral therapist at a group home specializing in the treatment of youth and adolescents with severe autism spectrum disorders and one year as a hands-on science instructor before working for three years as a teaching assistant in a self-contained classroom for students with learning disabilities. In the fall of 2011, he accepted a position in School Psychology at Appalachian State University and began study toward a Master of Arts degree. The M.A. was awarded in May 2014. He then began working as a full-time school psychologist at Tacoma Public Schools in Tacoma, Washington.